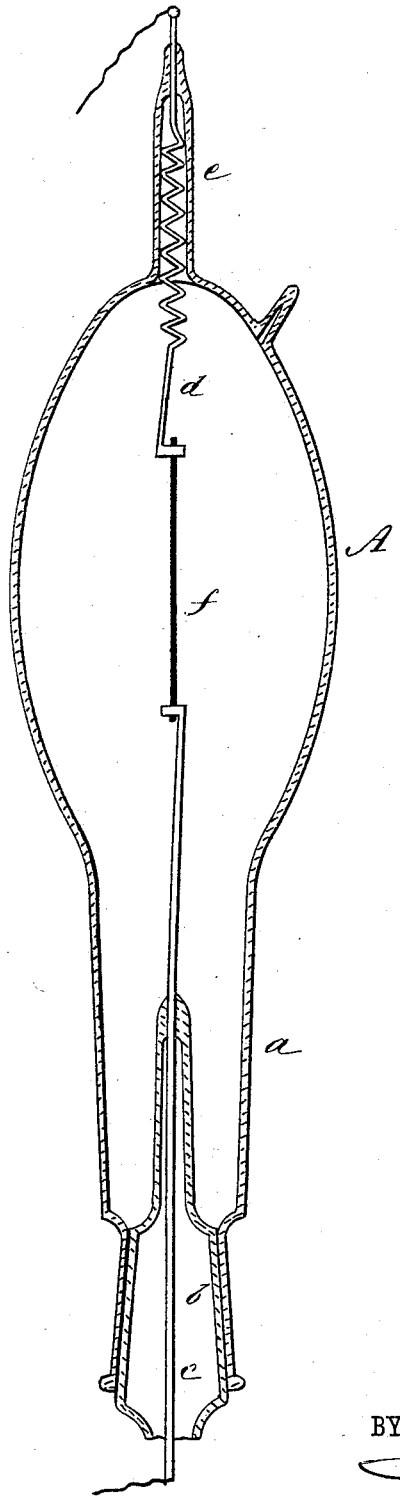
(No Model.)

L. K. BÖHM.

ELECTRIC LAMP.

No. 250,192. Patented Nov. 29, 1881.



WITNESSES:

C. Neveux

C. Sedgwick

INVENTOR:

L. K. Böhm

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

LUDWIG K. BÖHM, OF NEW YORK, N. Y., ASSIGNOR TO THE AMERICAN ELECTRIC LIGHT COMPANY, OF SAME PLACE.

ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 250,192, dated November 29, 1881.

Application filed July 15, 1881. (No model.)

To all whom it may concern:

Be it known that I, LUDWIG K. BÖHM, of the city, county, and State of New York, have invented certain new and useful Improvements in Electric Lamps, of which the following is a specification.

My invention relates to electric lamps of the class in which an incandescing carbon is employed in a vacuum-chamber, and has for its object to allow the use of straight carbons and to facilitate the introduction of the carbons and sealing of the wires.

In the accompanying drawings a lamp of the improved construction is shown by a longitudinal section.

A is the glass globe or vacuum-chamber, formed with a tubular neck, *a*. The outer end of the neck is closed by a sealing pin or plug, *b*, in the manner similar to that shown in applications for Letters Patent heretofore made by me.

c is one conducting-wire, entering the vacuum-chamber through the plug *b*, and *d* is the other wire, entering the side or end of the chamber opposite to the plug A through a tube, *e*, that is formed on the chamber.

f is the carbon pencil, held by suitable clamps on the ends of wires *c d*. The conducting-wire *d* is coiled in its portion within the tube *e*, so that while the carbon is held rigidly the conductors may expand and contract without straining or breaking the carbon.

In fitting the lamp the conductor *c* is sealed in the plug *b* and conductor *d* left unsealed until after the chamber is fitted on the pin. Wire *d* is then drawn outward until the tension of the coil is sufficient, and tube *e* then sealed around the wire. The air is then to be drawn from the chamber in the usual manner.

I am aware that an electric lamp has been heretofore constructed in which the incandescent body was connected with the top and bottom of the lamp, and had at one end a spiral spring located within an inwardly-projecting socket, which spiral spring pressed against a contact-piece in the socket, and which contact-piece transmitted the tension of the spring to the incandescent body. My invention is distinctive, first, in forming the tube *e* externally upon the globe and of the same material therewith; secondly, fitting the spiral carbon-holder *d* partly within this tube, with its coils tangential to the sides thereof and partly extending into the lamp, so that a single piece forms both a flexible spring, a conductor, and a holder against lateral displacement; and, thirdly, in combining these features with the detachable plug *b*, to permit the insertion of the carbon, as hereinbefore described.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The vacuum-chamber having an external tube *e* formed thereupon and of the same material, in combination with the single holder and conductor *d*, formed with spirals and arranged partly within the tube and partly projecting from the same into the vacuum-chamber, the carbon *f*, and means for holding the opposite end of the same, as described.

2 The vacuum-chamber having at one end an external tube, *e*, formed thereupon, and of the same material, and a neck, *a*, at the other, in combination, with the spiral holder *d*, arranged partly within said tube, as described, the carbon *f*, and the plug or stopper *b*, having conducting-wire *c* sustaining the other end of the carbon, substantially as and for the purpose described.

LUDWIG K. BÖHM.

Witnesses:
GEO. D. WALKER,
C. SEDGWICK.