

(No Model.)

L. K. BÖHM.
ELECTRIC LAMP.

No. 250,193.

Patented Nov. 29, 1881.

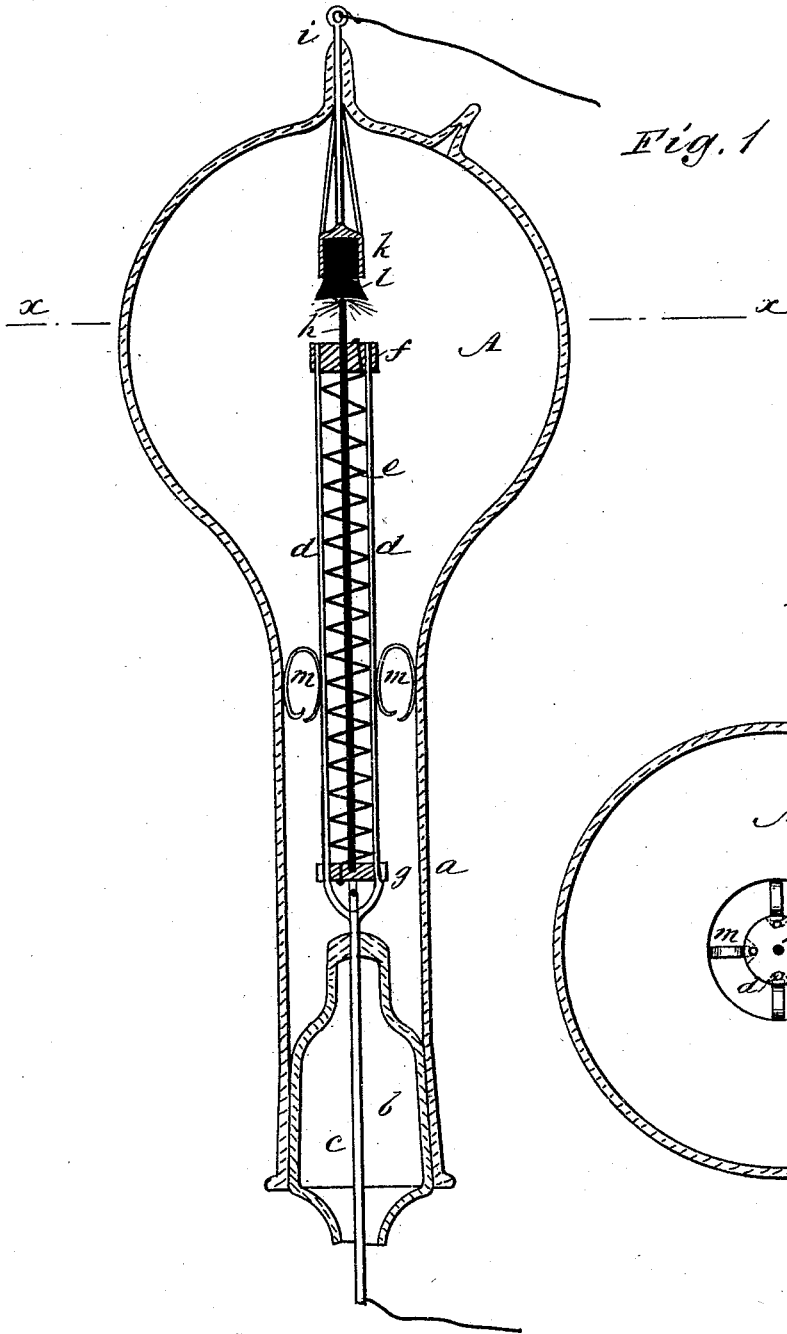
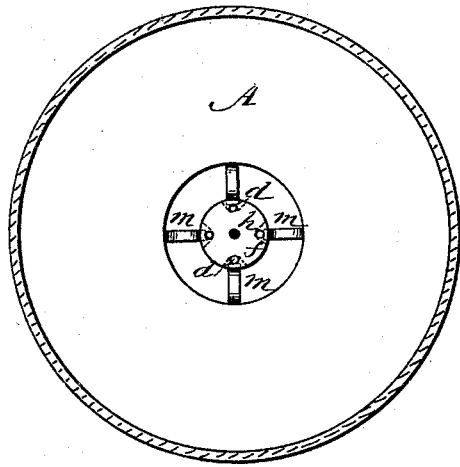


Fig. 1

Fig. 2



WITNESSES:

C. Neveu
C. Sedgwick

INVENTOR:

L. K. Böhm
BY *Munn Ho*
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. 250,193, 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 improvements relate to electric lamps of the arc type, in which the carbons are contained in vacuum-chambers of glass.

The object of my invention is to provide for convenient renewal of the carbon and insure uniform feed of the positive carbon to compensate for waste, to which ends the invention consists in a carbon-holder of novel construction, combined with a separable vacuum-chamber, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a vertical section of a lamp of my improved construction, and Fig. 2 is a cross-section on line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the glass vacuum-chamber, of globular form, provided with a tubular neck, *a*, that is fitted at its lower end with or upon the glass plug *b*, by which the neck is closed tightly. One conducting-wire, *c*, passes through the plug *b*. The other wire, *i*, enters the top of chamber A, and the glass is sealed around the wires to render the joints air-tight. The wire *c* supports rods *d*, which are preferably four in number, to form a cage for the spiral spring *e*, that is suspended from a cap-piece, *f*, fixed on the upper ends of the rods.

Upon the lower end of the spring a slide or follower, *g*, is attached, and the follower is apertured to fit the rods *d*, and so as to slide thereon. The slide *g* receives the lower end of a carbon pencil, *h*, that extends through the spring and loosely through an aperture in the fixed cap *f*.

The wire *i* carries a cup or socket, *k*, which contains a block, *l*, of carbon directly above the carbon *h*. On the rods *d* are spring-arms *m*, which take against the inner surface of neck *a* and retain the cage in a central position. By this construction the slide can be drawn to

the lower ends of rods *d*, and the pencil *h* will be held against the carbon *k* and moved upward as the carbon wastes by the action of the spring. The spring being comparatively long, a gentle and uniform pressure is obtained and a long pencil can be made use of.

In case the carbons require renewal, the chamber can be readily separated from the plug, and as readily replaced, after which the chamber can be exhausted, as at first.

By entering the conductors at opposite points opportunity and space are given to apply the carbon-carrier in the neck of the chamber, and the rods carry the current without risk of contact with the other wire of the circuit.

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

1. In an electric lamp, the combination, with the vacuum-chamber having neck *a* and a fixed carbon arranged within the said chamber, of a ground-joint stopper provided with a conducting-wire, and carrying an automatically-feeding carbon-holder carrying a carbon, substantially as described.

2. In an electric lamp, the combination, with the vacuum-chamber having a fixed carbon and neck *a*, of a ground-joint stopper provided with a conducting-wire, an adjustable carbon, and carrying an automatically-feeding carbon-holder composed of rods *d d*, follower *g*, spring *e*, and cap *f*, substantially as shown and described.

3. In an electric lamp, the combination, with the vacuum-chamber having a fixed carbon and neck *a*, of a ground-joint stopper provided with a conducting-wire, an adjustable carbon, and carrying an automatically-feeding carbon-holder, and the springs *m*, interposed between this carbon-holder and the sides of the neck to hold the said carbon-holder in central position, substantially as shown and described.

LUDWIG K. BÖHM.

Witnesses:

GEO. D. WALKER,
C. SEDGWICK.