

S. E. FLICHTNER.
 ADJUSTABLE SUPPORT FOR VAPOR LAMPS.
 APPLICATION FILED JAN. 9, 1905.

990,853.

Patented May 2, 1911.

Fig. 1

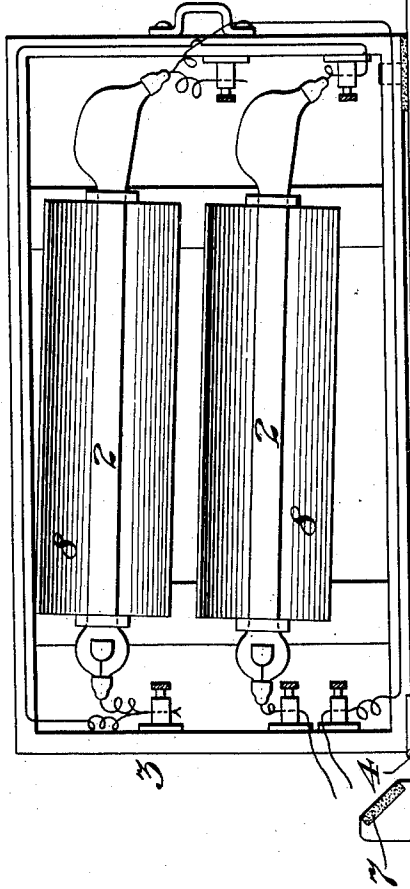
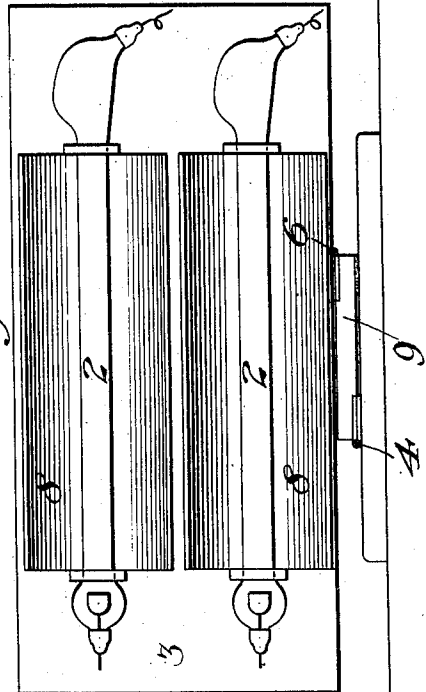


Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

STANWOOD E. FLICHTNER, OF ENGLEWOOD, NEW JERSEY, ASSIGNOR TO COOPER HEWITT ELECTRIC COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

ADJUSTABLE SUPPORT FOR VAPOR-LAMPS.

990,853.

Specification of Letters Patent.

Patented May 2, 1911.

Original application filed July 28, 1904, Serial No. 218,473. Divided and this application filed January 9, 1905. Serial No. 240,271.

To all whom it may concern:

Be it known that I, STANWOOD E. FLICHTNER, a citizen of the United States, and resident of Englewood, county of Bergen, State of New Jersey, have invented certain new and useful Improvements in Adjustable Supports for Vapor-Lamps, of which the following is a specification.

The present invention relates to frames for vapor electric lamps such as are represented by the well-known mercury vapor lamps now in common use.

The special object of the invention is to provide means whereby the starting of such lamps may be readily accomplished either singly or in groups by means of tilting apparatus in which connection is first made between the negative and positive electrodes through a stream or column of mercury, and afterward such connection is broken by a proper manipulation of the apparatus, so that the current which originally flowed through the vapor column or stream shall pass through the vapor path between the main positive and the main negative electrodes. It has been found in practice that a variety of tilting frames is required for various purposes, whether for photographing by means of mercury vapor lamps, or for printing, enlarging or copying, as the case may be.

This application is a division of my application filed July 28, 1904, Serial Number 218,473, and relates to a special application of the invention therein described and shown.

In the drawings, Figure 1 is a front elevation of an apparatus such as is commonly used for printing or enlarging; and Fig. 2 is a front elevation of a device particularly adapted for printing in portrait work.

Referring to Fig. 1, I show two lamps, 2, 2, mounted on a frame, 3, the said frame being hinged at 4 to a support, 5. The lamps 2, 2, as will be observed are at a slight angle from the horizontal. To start the lamps into operation, it is only necessary to tilt the frame on the hinge 4 so as to carry a stream or column of mercury from the electrodes at the right hand ends of the lamps into contact with the electrodes at the opposite ends thereof, whereupon current will flow through the two lamps by way of the mercury in the paths. On re-

storing the apparatus to the position shown in the drawing, the mercury columns or paths will be divided, causing a starting of the lamps by the shunting of the current through the vapor in the several lamps. In this description it is assumed that the main current is turned on before the operation of shifting the apparatus takes place.

The apparatus shown in Fig. 2 differs from that last described, in that the lamps 2, 2, in their operative position are assumed to be horizontal. In order to accomplish the formation and subsequent separation of the mercury columns or streams in this construction, a double hinge is provided, one hinge being shown at 4, as before, and the other at 6. Between the support 5 and the frame 3 in Fig. 2 is placed a plate, 9. The two flaps of the hinge 4 are connected with the support 5 and the plate 9 while the two flaps of the hinge 6 are connected with the said plate 9 and the frame 3. By tilting the apparatus through the medium of the hinge 4, a flow of mercury may be established from the electrodes at the right hand ends of the apparatus to the others at the left hand ends thereof, and in case such a column or stream of mercury is established, the said stream or column will be interrupted by the same action. However, should there be any failure in this respect the tilting of the apparatus through the medium of the hinge 6 will cause a making and breaking of contact between the several electrodes by means of the mercury columns or streams, whereupon the lamps will be set into operation in a manner now well-known. At the same time, the mercury which properly belongs to the first named electrode at the right hand end of the apparatus, will be carried back to its appropriate position and the lamps will be in proper condition for operation.

It will be understood that instead of the two lamps shown in Figs. 1 and 2, I may employ either a single lamp or a larger number of lamps than two.

A rest, 7, may be provided for limiting the motion of the frame 3 upon its hinge 4.

It will be understood that any suitable reflector may be placed behind the lamps 2, 2, either in common or singly. Such reflectors are shown in the drawings at 8, 8.

One view of the construction illustrated herein is that when the frame supporting

the lamps is tilted there is no interference with any photographic or printing surfaces which may be placed in their normal position in front of the lamps.

5 I claim as my invention:—

1. The combination with a vapor electric lamp, of a frame within which the lamp is mounted, a reflector whereby the luminous radiation of the lamp is thrown in one pre-
10 determined general direction, said reflector being mounted on the frame, and means whereby the frame may be moved for starting purposes in a plane at right angles to the said direction of radiation.

2. The combination with a vapor electric lamp, of a support therefor, a base below the support, and a device intermediate between the said base and the said support, the said device being secured to the base at one end by a hinge and being secured at the
15 other end, also by a hinge, to the support. 20

Signed at New York, in the county of New York, and State of New York, this
3rd day of January A. D. 1905.

STANWOOD E. FLICHTNER.

Witnesses:

WM. H. CAPEL,

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
