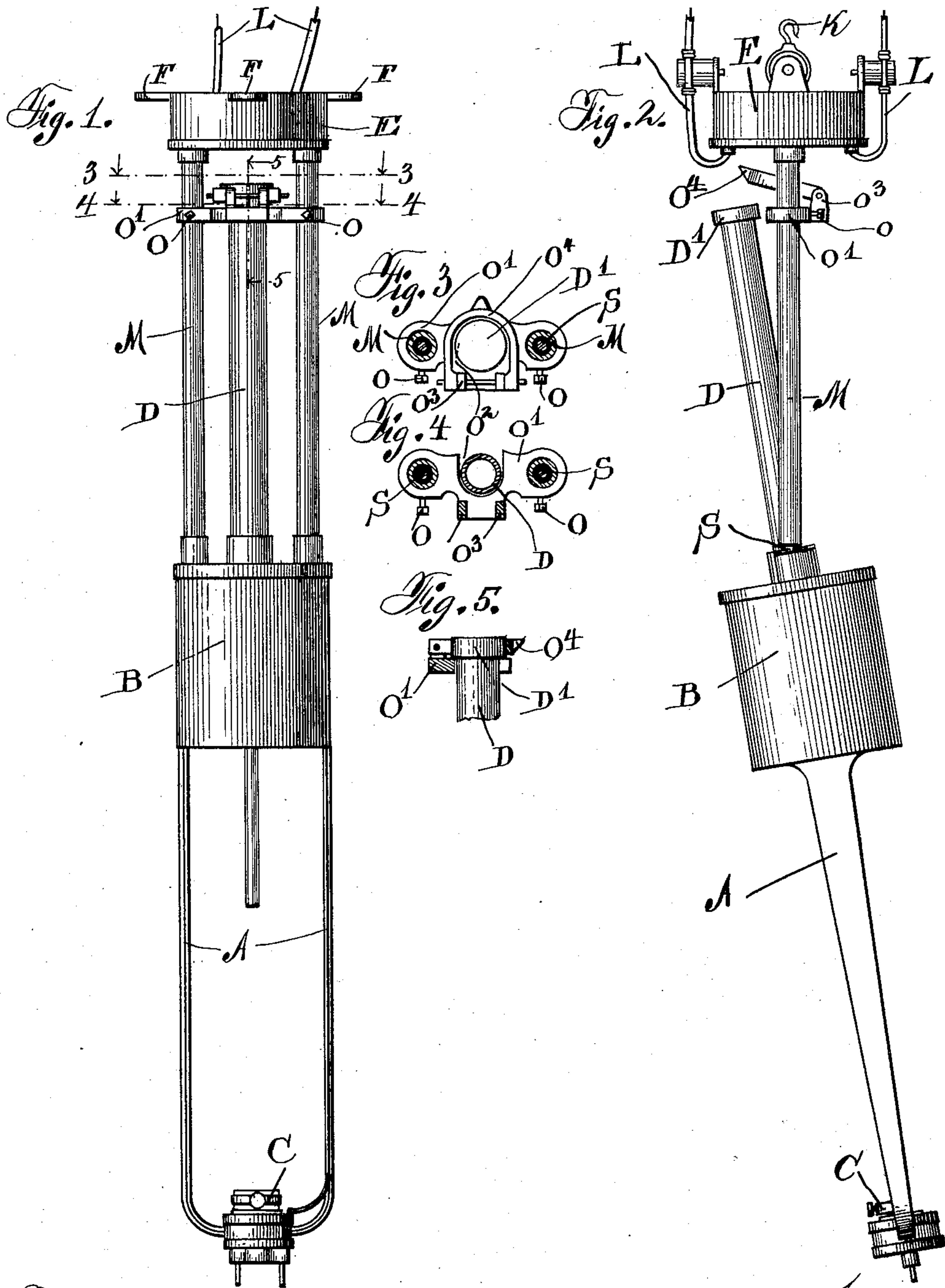


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Patented Aug. 2, 1898.

C. A. PFLUGER.
ELECTRIC ARC LAMP.
(Application filed Aug. 7, 1895.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES A. PFLUGER, OF CHICAGO, ILLINOIS.

ELECTRIC-ARC LAMP.

SPECIFICATION forming part of Letters Patent No. 608,269, dated August 2, 1898.

Application filed August 7, 1895. Serial No. 558,564. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. PFLUGER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hangers for Arc-Lamps, of which the following is a specification.

My invention relates to arc-lamp hangers, and has for its object to provide simple and convenient means whereby an arc-lamp may be hung or suspended removably from a proper support, so that the lamp can be easily taken down without disturbing any of the operative parts.

My invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a side view of an arc-lamp with my invention applied. Fig. 2 is a similar view, the lamp being in process of removal. Fig. 3 is a cross-section on the line 3 3 of Fig. 1. Fig. 4 is a cross-section on the line 4 4 of Fig. 1. Fig. 5 is a detail of the stirrup.

Like parts are indicated by the same letter in all the figures.

A A are the lower side bars of the lamp proper; B, the case, which contains the lamp mechanism; C, the lower carbon-holder, and D the upper tubular part, in which the upper carbon-rod reciprocates.

E is in the lamp here illustrated a case containing the switching or current-controlling mechanism, and it is provided with the ears F F, by which it may be rigidly secured to an upper portion, or with the hook K, by which it may be loosely suspended.

L L are the main conductors, which lead into the switch-box.

M M are downwardly-projecting rods which are rigidly associated with such switch-box. These rods may be connected to the lamp in any desirable manner. For example, the top of the lamp may be provided with short upwardly-projecting tubes, and the rods M M may either fit over these short tubes or into them, as desired. Adjustably secured on these rods by the set-screws O O is the cross-piece O', which is provided with the aperture O² to admit laterally the tubular projection D of the arc-lamp. The cross-piece O' is provided with the upwardly-turned lugs O³, to which is pivoted the stirrup O⁴, shaped as

shown, with an inclined outer end or lip. The rod D is provided with a head D', which may be contained by the stirrup O⁴, but is larger than the aperture in the cross-piece O' and the aperture O² in the cross-piece O'. Within the tubes M M are the conductors S S, suitably insulated. It will be quite evident that these parts may be varied somewhat in construction without departing from the spirit of my invention, and I do not wish, therefore, to be limited to the precise forms and details shown, but I desire to have these drawings taken as generally illustrative rather than as descriptive of the whole invention or all its possible uses.

The use and operation of my invention are as follows: The lamp as illustrated in Fig. 1 is supposed to be suspended in a position where it is to be used—as, for example, from the ceiling of a room to which the upper support, preferably containing the switch, is rigidly secured. In Fig. 2 the same thing is illustrated, except that it is supposed to be suspended from a rope or hook. The action in either case is the same and is illustrated in Fig. 2. By raising the stirrup O⁴, so as to free therefrom the head D' on the tube D, the lamp may be swung laterally, as indicated, until the head escapes from the aperture in the cross-piece O', whereupon the lamp may be removed, the hanger proper, the switch, and all the connections being entirely undisturbed. The conductors S S project down into the lamp mechanism and may be caused to establish a circuit in any desired manner, and of course they may be set by screws, clamps, or the like, if desired. These details form no part of my invention. When the lamp is to be restored to its position after having been cleaned or when a new lamp is supplied, it is brought up into the position shown in Fig. 2 and then swung so that the head D' moves toward the right, whereupon it will engage the outer beveled edge of the stirrup and lift the same, so that the head D' passes thereunder, and the head will then pass into the stirrup and rest upon the top of the cross-piece, and the stirrup will drop into the position shown in Figs. 1, 3, and 5, the lamp being thus securely attached and firmly held in position. The cross-piece O'

is adjustable along the tube M M to accommodate itself to the varying lengths of the tubes D.

I claim—

5 1. In an arc-lamp the combination of a lamp having an upwardly-projecting portion provided with an enlarged end with a fixed hanger, having downwardly-projecting tubes and means for interlocking said tubes, each
10 at its extremity to its opposed part and a fixed part associated with said tubes and provided with a recess or aperture of such size as to receive the upwardly-projecting portion of the lamp, but not to permit the passage of
15 the enlarged end, the lamp being supported by the engagement of such enlarged end with said fixed part.

2. In an arc-lamp the combination of the lamp proper with an upwardly-projecting carbon-rod tube, a fixed upper portion, downwardly-projecting conductor-carrying tubes, and apertures in the top of the lamp proper to receive the conductors projecting from such carrier-tubes, and devices connected
20 with the fixed portion to receive and removably hold the upper end of the carbon-rod tube so as to support and hold the lamp in place.

3. In an arc-lamp hanger the combination
30 of a fixed box or case with current-controlling devices therein, tubes downwardly projecting therefrom and carrying each one conductor, and means associated with such fixed box and adapted to engage the carbon-rod
35 tube of the lamp so as to hold such lamp in position.

4. In an arc-lamp hanger the combination of a fixed box or case with current-controlling devices therein, tubes downwardly pro-

jecting therefrom and carrying each one conductor, and means associated with said tubes which engage the carbon-rod tube so as to support and hold the lamp in operative relation to said current-controlling devices, and apertures in the top of the lamp to receive
45 such projecting conductors.

5. In an arc-lamp hanger, the combination of a lamp with an upwardly-projecting carbon-rod tube, a fixed portion with downwardly-projecting tubes having opposed
50 parts on the top of the lamp which are engaged thereby, a recessed part thereon of such size as to receive the carbon-rod tube but not to permit the passage of its head, and a hinged stirrup associated with said fixed portion, said hinged stirrup so constructed that it is lifted by engagement with said carbon-rod tube so as to allow the carbon-rod tube to enter the recess in said fixed portion and then drops down from said tube when in po-
60 sition and prevents its removal.

6. In an arc-lamp hanger the combination of a fixed portion with a recessed or apertured part thereon of such size as to receive the carbon-rod tube but not to permit the
65 passage of its head, and a hinged stirrup to surround the head and hold the parts in position, said fixed portion having downwardly-projecting tubes containing the conductors, said tubes adapted to engage opposed parts
70 on the lamp when said lamp is in position, said opposed parts provided with holes in which the conductors extend substantially as described.

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