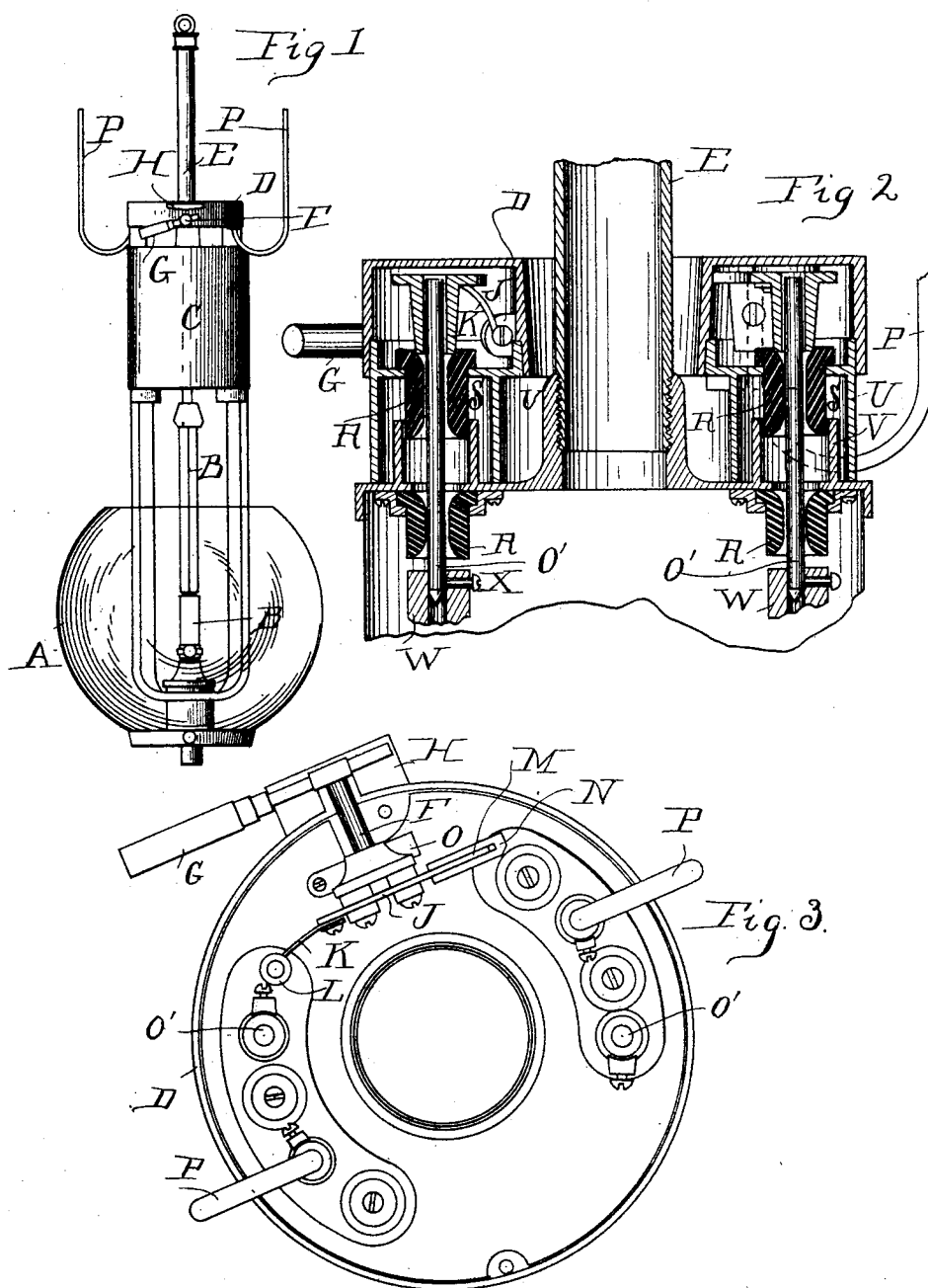


(No Model.)

C. A. PFLUGER.
HANGING DEVICE FOR ELECTRIC ARC LAMPS.

No. 500,421.

Patented June 27, 1893.



WITNESSES

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CHARLES A. PFLUGER, OF CHICAGO, ILLINOIS.

HANGING DEVICE FOR ELECTRIC-ARC LAMPS.

SPECIFICATION forming part of Letters Patent No. 500,421, dated June 27, 1893.

Application filed October 14, 1892, Serial No. 448,842. (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, Cook county, Illinois, have invented a new and useful Improvement in Weatherproof Arc Lamps, of which the following is a specification.

My invention relates to weather proof arc lamps, and has for its object to provide means whereby the lamp may be connected and disconnected from the main line and yet have such connecting parts thoroughly insulated and protected from the weather so as to make the lamp efficient for out-door use. It is illustrated in the accompanying drawings, wherein—

Figure 1, is a side view of a lamp with my improvement attached. Fig. 2, is a vertical section through the same. Fig. 3, is an interior view of the connecting devices.

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

A is an arc lamp proper with the usual carbons B B and hood C for the regulating mechanism.

D is a case which in this instance is in the shape of an annulus, and encircles the upwardly projecting cylindrical portion E of the lamp. Its upper side is unbroken, but it is provided at one side with an aperture through which projects the switch rod F, having the handle G. Over the switch rod and portion of the handle is the projecting flange H. On the inner end of the switch rod is the insulated strip J, provided with the connecting wire K at one end to connect with the terminal block L and with the projecting point M at the other end to make sliding contact with the end of the terminal block N.

O is the spring beneath the switch rod, which tends to give it quick action when moving. Each terminal block has a downwardly projecting conductor wire O' and also an insulated conducting wire P P. These several wires are preferably surrounded by insulation blocks R R which are adapted to pass through holes of proper size in the bottom S of the case. Each of the insulated wires is provided with a terminal, whereby it may be connected with the main line conductors and each of the short conductor wires passes down centrally

through the thimbles U U on the bottom of the case. These thimbles receive similar but smaller upwardly projecting thimbles V V on the top of the lamp case and the short conductors pass centrally down through the two thimbles and into the contact blocks W W on the end surface of the top of the lamp. X X are screws, whereby firm contact is made with these blocks. Quite considerable alterations could be made in this lamp, and the construction of these several parts, without departing from the spirit of my invention.

The use and operation of my invention are as follows: A lamp as ordinarily constructed requires only to be equipped with the contact blocks instead of the usual terminals and means whereby short conductors may be inserted into such contact blocks and be secured thereto. If, now, the ring-shaped case and contents be placed upon the top of the lamp case so as to bring the short projecting contact wires into such blocks, these wires may be securely attached to the blocks and the whole will be held rigidly in position. The main line conductors are themselves connected within the case with the short conductors and they issue from the bottom of the case and may be turned up over the edge thereof and carried out, or otherwise carried out to the main line. The switch arm, when rocked in its bearings by the handle makes or breaks connection between the terminal blocks in the case and thus switches the lamp in or out of the main circuit. No moisture of any consequence can get into the case for the reason that all its openings are downward, except the tight opening through which the switch rod projects, and even this is protected by the overhanging flange. At the same time the interior of the lamp is thoroughly protected by means of the trap which is made from the two thimbles associated as shown.

I claim—

1. In an arc lamp the combination of a lamp case containing the regulating mechanism with a case containing the switching mechanism, and connections between the two which embrace a water trap, and a conductor passing therethrough.

2. In an arc lamp the combination of a case containing the regulating mechanism, with a

case containing the switching mechanism, conductors connecting the interior devices of the two cases, and main line conductors which pass out through the bottom of the switch case and thence to the main line.

5 3. In an arc lamp the combination of a case containing the regulating mechanism with a case containing the switching mechanism, and two sets of thimbles, one incasing the other, 10 and conductors which pass through such thimbles and connect the interior devices of both cases together.

4. In an arc lamp the combination of a case containing the regulating mechanism with a 15 case thereabove, two terminal blocks in such case from each of which passes downwardly, conductors, one to the regulating mechanism,

the other to the main line, and a switching device controlled from without and adapted to connect the two terminals. 20

5. In an arc lamp the combination of a case containing the regulating mechanism with a case thereabove, two terminal blocks in such case from each of which passes a downwardly projecting conductor, one to the regulating 25 mechanism, the other to the main line, and a switching device controlled from without and adapted to connect the two terminals, said switching device projecting at one side and protected by a flange.

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