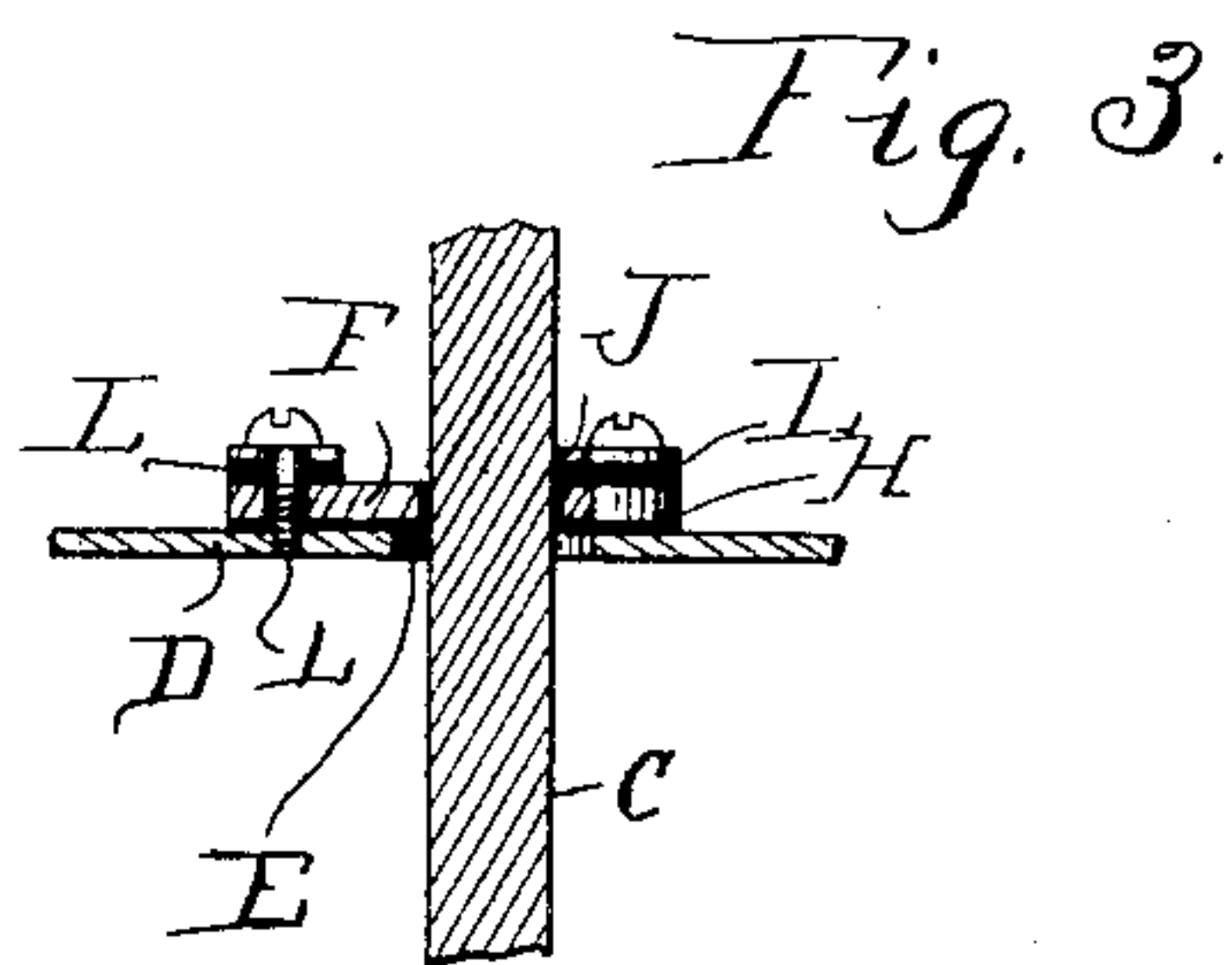
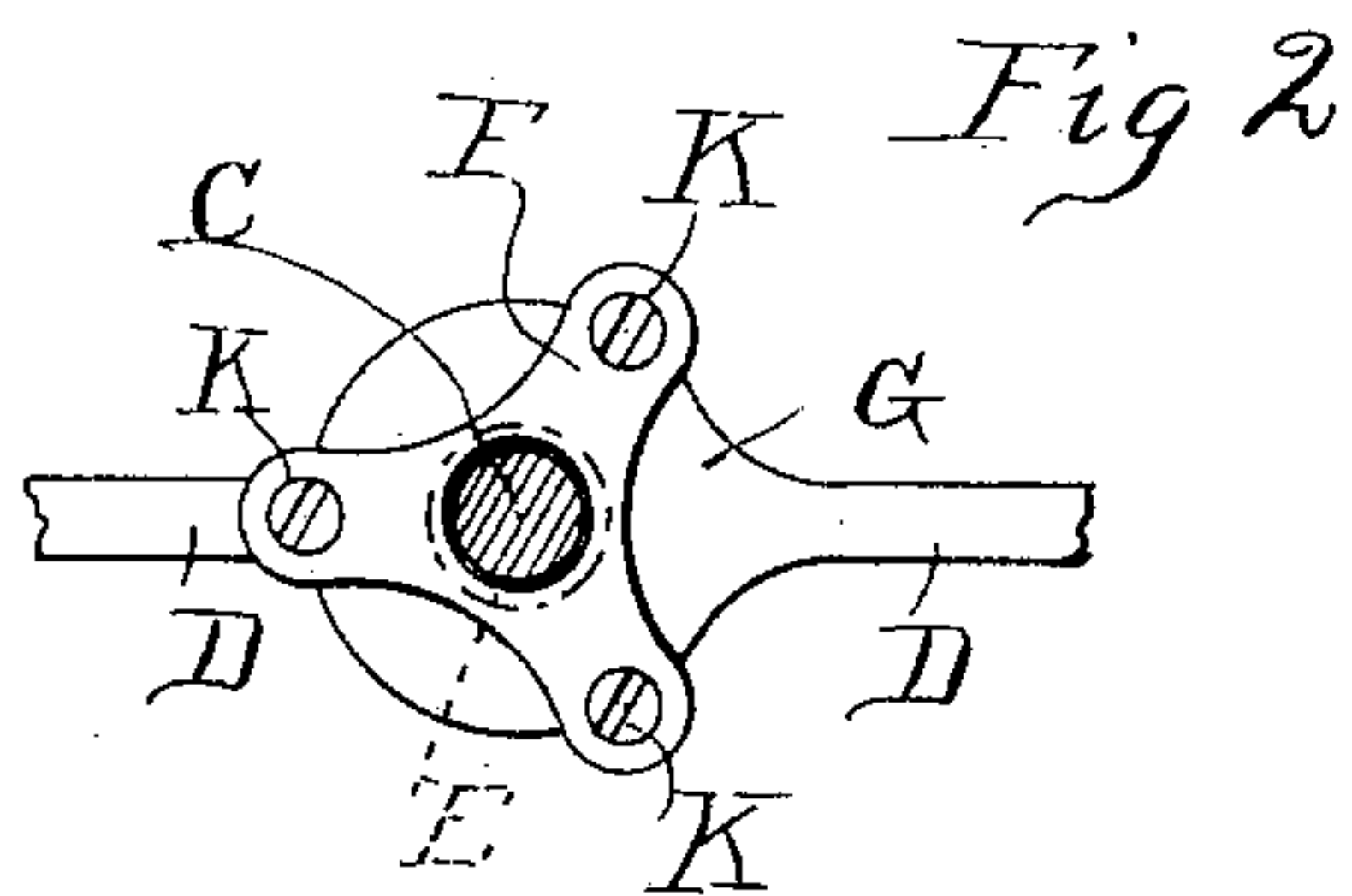
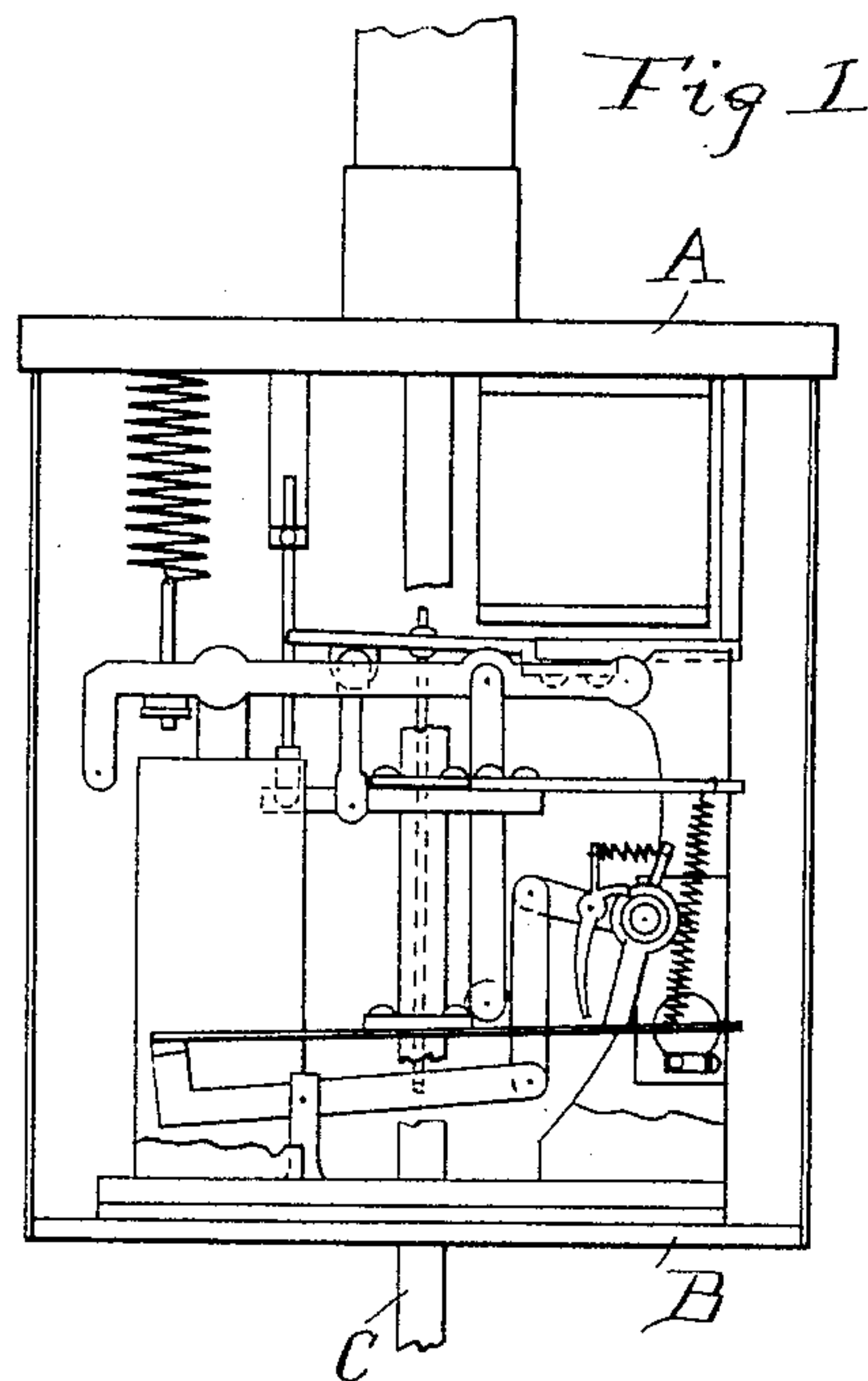


(No Model.)

C. A. PFLUGER.
ELECTRIC ARC LAMP.

No. 500,422.

Patented June 27, 1893.



Witnesses

Walter J. Smith
Edith Black

Inventor

Charles A. Pfleger

Francis W. Parker

Attorney

UNITED STATES PATENT OFFICE.

CHARLES A. PFLUGER, OF CHICAGO, ILLINOIS.

ELECTRIC-ARC LAMP.

SPECIFICATION forming part of Letters Patent No. 500,422, dated June 27, 1893.

[Application filed October 31, 1892. Serial No. 450,468 (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 Arc Lamps, of which the following is a specification.

My invention relates to arc lamps, and has for its object to provide an arc lamp in which an insulated clutch is employed.

My invention relates particularly to the use and construction of such clutch, as illustrated in the accompanying drawings, wherein—

Figure 1. is a broken side view portion of the interior of an arc lamp showing the position of the clutch. Fig. 2. is a plan view of the clutch, and Fig. 3. is a vertical section.

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

I have not described or shown the lamp proper very fully, as my invention is applicable to various kinds of lamps, provided only an insulating clutch is desired.

A is the top, B the base of the lamp, and C is the carbon rod.

D is the lever or clutch bar proper, having a large aperture E through which the carbon rod passes.

F is a clutch block, preferably triangular, and resting upon the enlarged central portion G of the bar D. Interposed between the two is the insulation plate H, which is preferably of mica. The plate F has a small aperture J through which the carbon rod passes, and which is adapted to engage the carbon rod and serve as the clutch connection with the same.

K K are screws which pass through both the plates F and D, the latter having outwardly extending portions of similar size and shape as the ends of the triangle. These screws are insulated from the plate F by the insulation L, which is preferably of mica. In this manner the plate F, which forms the contact between the carbon rod and the clutch, is insulated from the supporting plate and bar or lever G D, which makes contact with the metallic portions of the lamp.

The use and operation of my invention are as follows:—The device, substantially as shown, may of course be applied to any of the lamps commonly known as clutch lamps, and I do not wish to be limited as to its applica-

tion by the character of the lamps with which it is used. When the carbon rod is in position and not in use it is free, or may be free, from contact with the clutch block, but when the metallic portion of the ordinary clutch is in working engagement with the carbon rod, it will of course form contact therewith, and make a circuit through the clutch from the carbon rod to the rest of the lamp. This is frequently very undesirable and leads to more or less injury of the carbon rod itself. To insulate the clutch at the point where it is connected with the mechanism is often difficult and usually unsatisfactory. By the device herein illustrated, a perfectly satisfactory contact for the purpose of controlling the rod is between the clutch and the rod, but no circuit can be completed by such engagement. The portion of the clutch which engages the rod is entirely insulated from the supporting part of the clutch, and the latter has so large an aperture that the rod is free from engagement with the sides thereof.

The form and proportions of the parts might be considerably altered without departing from the spirit of my invention.

I claim—

1. As an arc lamp clutch, a lever or clutch support, with a large aperture or the equivalent thereof through which the carbon rod passes, and an insulated clutch proper associated therewith, and provided with a small aperture through which the rod passes, the rod adapted to be engaged by the walls of the small aperture but not by those of the large aperture.

2. In an arc lamp, a carbon clutch consisting of a supporting bar or lever with an enlarged portion, having a large aperture through which the carbon passes, and a second portion with a small aperture through which the rod passes, and an insulation interposed between the two portions and connecting parts to rigidly hold the two portions together, so that their apertures are substantially concentric, the rod adapted to be engaged by the walls of the small aperture but not by those of the large aperture.

CHARLES A. PFLUGER.

In presence of—

FRANCIS W. PARKER,
WALTER J. GUNTHERP.