

967,323.

Patented Aug. 16, 1910.

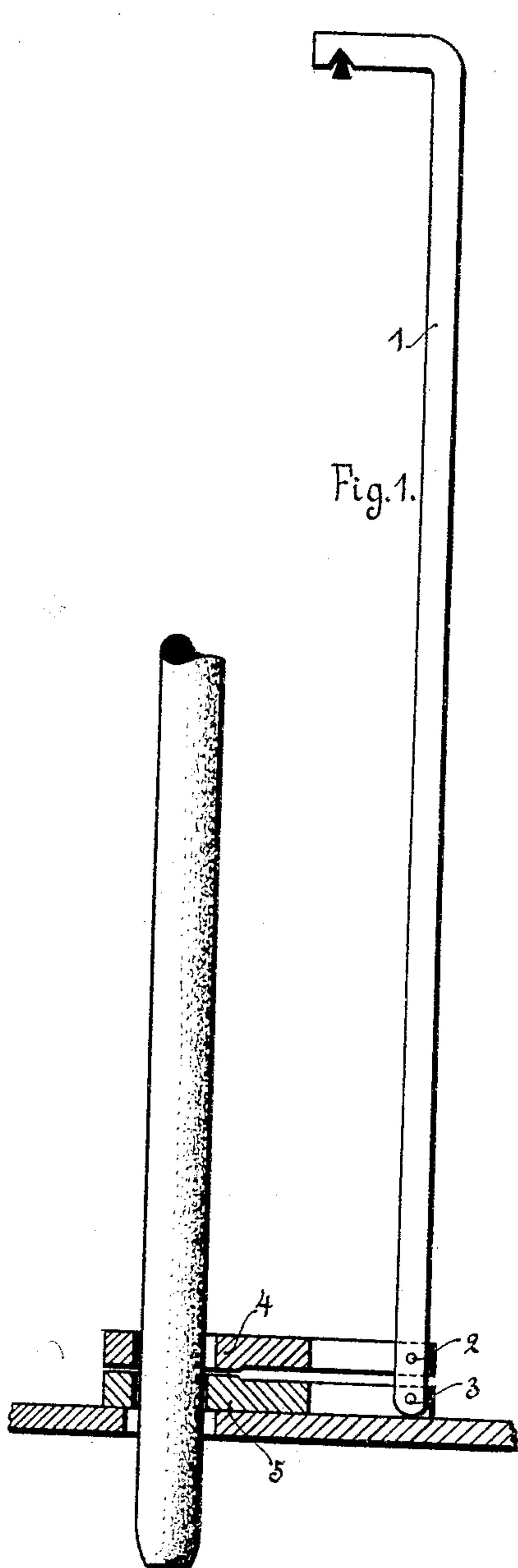


Fig. 1.

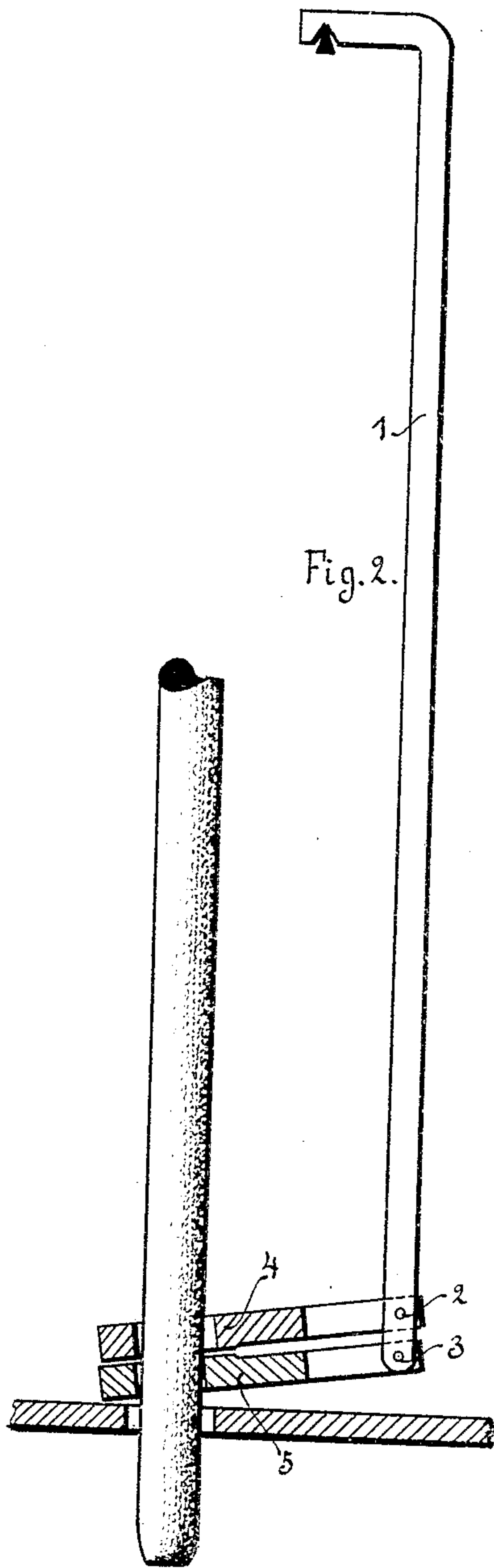


Fig. 2.

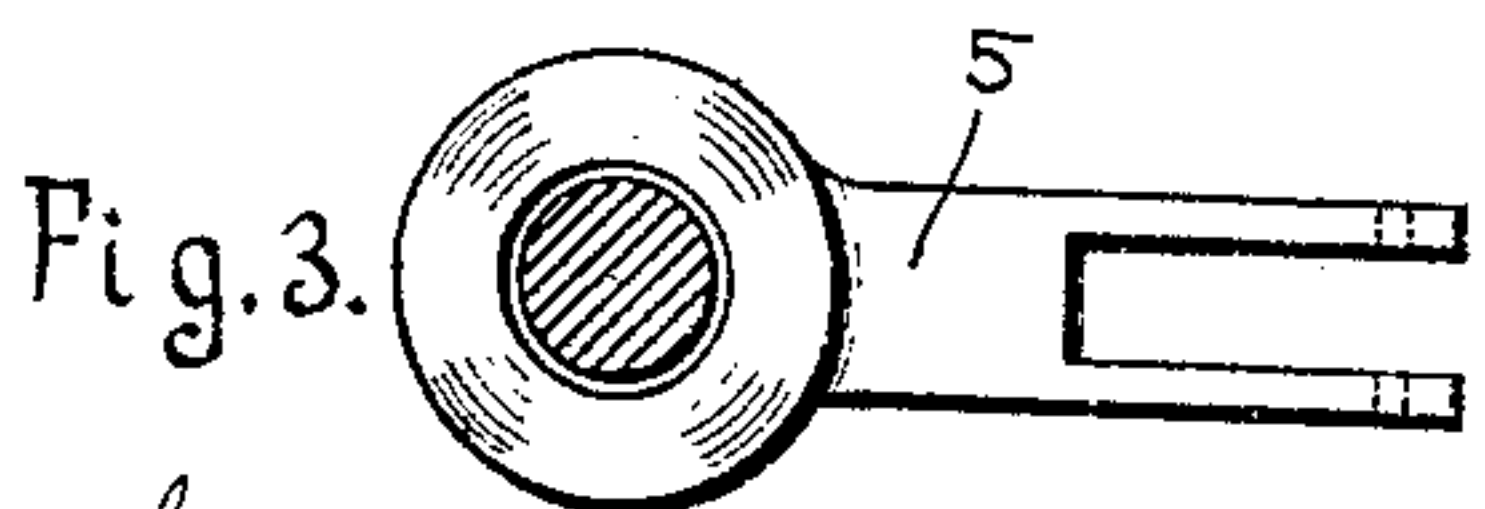


Fig. 3.

D. Levinson
Sept. 11, 1910
Witnesses

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per
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UNITED STATES PATENT OFFICE.

TITO LIVIO CARBONE, OF BERLIN, GERMANY, ASSIGNOR TO THE FIRM OF CARBONE-LICHT-GESELLSCHAFT M. B. H., OF BERLIN, GERMANY.

CLUTCH ARRANGEMENT FOR ARC-LAMPS.

967,323.

Specification of Letters Patent. Patented Aug. 16, 1910.

Application filed March 5, 1907. Serial No. 360,760.

To all whom it may concern:

Be it known that I, TITO LIVIO CARBONE, a citizen of the Republic of Switzerland, and a resident of Berlin, Kingdom of Prussia, German Empire, having invented certain new and useful Improvements in Clutch Arrangements for Arc-Lamps, do hereby declare that the following is a full, clear, and exact description of the same.

10 The object of the present invention is a new form of clutch for arc lamps with axially alined carbons. The clutch is operated by means of a rod at one side of the lamp, and upon seizing the carbon or carbons, 15 maintain the same in a perfectly vertical position, and tipping of the carbon to one side or the other is entirely prevented. The hereinafter described arrangement, however, insures that the carbons, upon being seized 20 and lifted by the clutch, naturally assume and remain in a perfectly vertical position. This constitutes a means for insuring the exact regulation of the lamp, and one wherein the guide or bearing on the side, together 25 with all friction arising therefrom, is done away with.

Figure 1 is a view (partly sectional) showing the clutch arrangement free of a carbon; Fig. 2 is a like view, showing such arrangement engaged with and lifting the carbon; 30 Fig. 3 is a top view of the lower member 5 of the clutch.

The clutch consists (Figs. 1 and 2) of a rod 1, to whose lower extremity two pieces 35 or plates 4, 5, of metal or other material are pivoted by the pins 2 and 3. The upper plate 4 has an opening of such shape that the carbon has a perfectly free passage, in order that the carbon may have a tendency 40 to fall or sink down when the parts assume

the position shown in Fig. 2. The lower plate (5) has a smaller opening, which, in the normal position, of the parts (that shown in Fig. 1), when the current is off, leaves an entirely free passage for the carbon. 45 When, however, the current flows, the rod 1 is raised (as more fully hereinafter described) and carries with it the two plates 4 and 5 as shown in Fig. 2, and this, by causing a slight horizontal displacement of the 50 two plates against one another, causes the carbon to be seized at three points by the inner surfaces or edges of the parts 4 and 5, raising the carbon by the continued upward motion of the rod 1, meanwhile maintaining 55 the carbon in a perfectly vertical position. In this manner, the whole apparatus works under the influence of the electric current in the lamp, undisturbed by any friction on the carbon. 60

What I claim is:

An electric arc lamp clutch comprising a vertically oscillating rod, a pair of plates loosely pivoted by one end to the lower part of the rod, the end of the plates farthest 65 from the rod being provided with holes for the passage of the light-giving carbon, the hole in the upper plate being somewhat larger than that in the lower, the two plates when raised holding the carbon by two inner 70 edges of the lower plate and one inner edge of the upper plate, substantially as set forth.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

TITO LIVIO CARBONE.

Witnesses:

A. BRUSTLEIN,
AUGUST FÜGGER.