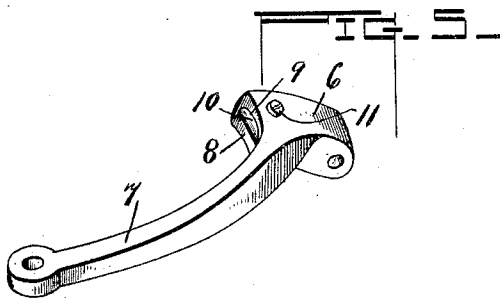
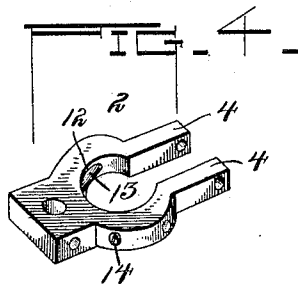
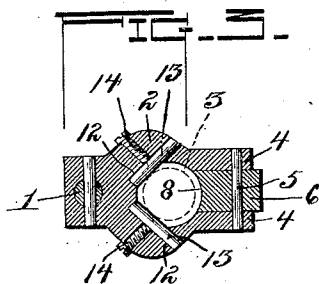
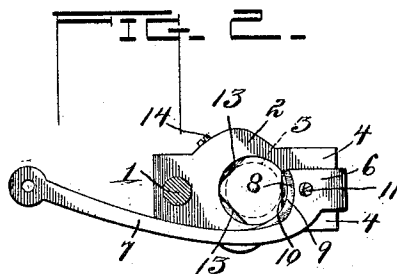
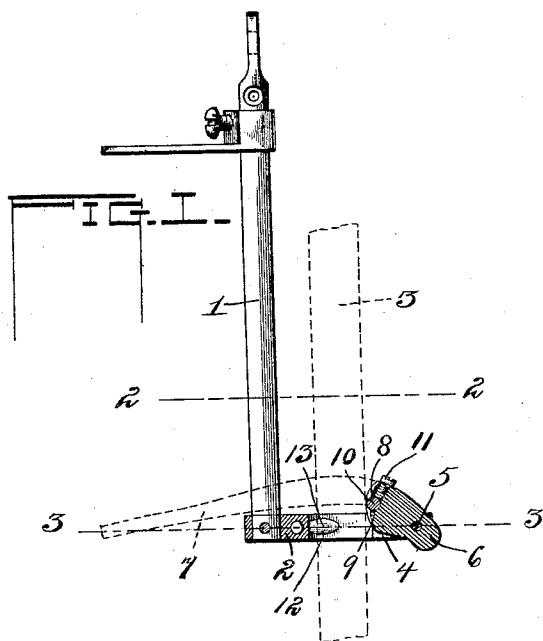


(No Model.)

A. C. DOBRICK.
ELECTRIC ARC LAMP.

No. 573,398.

Patented Dec. 15, 1896.



Inventor

Witnesses

Milton O'Connell,
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By his Attorneys,

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UNITED STATES PATENT OFFICE.

AUGUST C. DOBRICK, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE TURNER
BRASS WORKS, OF SAME PLACE.

ELECTRIC-ARC LAMP.

SPECIFICATION forming part of Letters Patent No. 573,398, dated December 15, 1896.

Application filed June 13, 1896. Serial No. 595,427. (No model.)

To all whom it may concern:

Be it known that I, AUGUST C. DOBRICK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Clutch for Electric-Arc Lamps, of which the following is a specification.

This invention relates to clutches for electric-arc lamps; and it has for its object to effect a new and useful improvement in clutches of this character to provide a more effective and durable clutch bearing or contact with the carbon-rod held and adjusted by the clutch.

To this end the main and primary object of the present invention is to provide a new and useful bearing for the clutches of electric-arc lamps to insure a firm and positive gripping of the clutch-rod and at the same time a bearing susceptible of being readily repaired and entirely replaced when unfit for use without affecting or destroying the usefulness of the clutch proper.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the drawings, Figure 1 is a side elevation, partly in section, of an electric-arc-lamp clutch provided with the improvement contemplated by this invention. Fig. 2 is a detail sectional view on the line 2 2 of Fig. 1. Fig. 3 is a similar view on the line 3 3 of Fig. 1. Fig. 4 is a detail in perspective of the clutch-collar. Fig. 5 is a similar view of the clutch-lever and cam-head thereof.

Referring to the accompanying drawings, 1 designates an upright clutch-rod adapted to be attached in the usual way to the automatic clutch-adjusting mechanism of an electric-arc lamp, and said clutch-rod 1 carries at its lower end a right-angularly-disposed offstanding clutch-collar 2, adapted to loosely receive in the opening thereof the ordinary carbon-rod 3, adapted to be adjusted up and down by the movements of the clutch in the usual way. The offstanding clutch-collar 2 at the lower end of the clutch-rod 1 is provided at the side opposite its connection with the rod with a pair of offstanding pivot-lugs 4, between which is pivotally mounted on the

short pivot-pin 5 connecting said lugs the pivoted cam-head 6, offset from one end of the clutch-lever 7. The clutch-lever 7 is bent or curved at one side of the cam-head 6 thereof, so as to be disposed at one side of the opening through the collar 2 and thereby not interfere with the movement of the carbon-rod 3, and said clutch-lever 7 is designed to be adjusted up and down by the usual mechanism of the lamp to provide for the clutching and unclutching of the carbon-rod 3 in the ordinary manner, and since the use and manner of adjusting the lever 7 are quite common it is unnecessary to illustrate or describe the connections therewith.

The offset pivoted cam-head 6 at one end of the clutch-lever 7 is provided at its inner side with an inner segmental concaved clutch-face 8, which is disposed directly at one side of the opening in the collar 2 and practically forms a part of the peripheral side of said opening. The said cam-head 6 is further provided therein with a socket or opening 9, which is arranged transversely of the concaved clutch-face 8 and intersects such clutch-face. The said socket or opening 9 is designed to removably receive therein a short bearing wire or pin 10, removably held within the socket-opening by a set-screw 11, mounted in the upper side of the cam-head 6 and impinging on the short wire or pin 10, and by reason of the socket-opening 9 intersecting the clutch-face 8 the said wire or pin 10 projects at one side beyond the surface of the clutch-face 8, so as to have a direct contact on the carbon-rod 3 at one side thereof.

The clutch-collar 2 is provided in opposite side portions thereof, directly opposite the clutch-face 8 of the cam-head 6, with oppositely-located convergently-disposed wire-receiving sockets or openings 12, which intersect the inner sides or periphery of the opening through the collar 2, and are designed to removably receive therein the short bearing wires or pins 13, which are detachably held in place by means of the set-screw 14, mounted in the outer sides of the collar 2 and impinging on the short wires or pins 13. By reason of the arrangement of the sockets or openings 12 the short bearing wires or pins 13 intersect with the opening through the collar 2 at opposite points, so as to project within the open-

ing, and have a direct contact with the side of the carbon-rod 3 opposite the side engaged by the bearing wire or pin 10, carried by the cam-head 6.

- 5 The short bearing wires or pins 12, mounted within the collar 2, are convergently disposed so as to form therebetween a crotch, within which rests the carbon-rod 3, so that when the cam-head is carried down against the carbon-rod the latter will have a three-point bearing or contact, respectively, on the two wires or pins 13 and the wire or pin 10. The bearing wires or pins 10 and 13 form the bearing or contacting surfaces of the clutch, and while insuring the best possible grip on the carbon-rod 3 at the same time are readily removable and replaceable, so as to at all times preserve the usefulness of the clutch, as will be readily understood by those skilled in the art, and the use of the wires or pins is also important, because the same present no sharp edges to the carbon-rod.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent is—

- 30 1. In an electric-arc-lamp clutch, the combination with the clutch-rod, of the clutch-collar, a pair of spaced convergently-disposed bearing wires or pins fitted within the collar

at opposite points, and the clutch-lever having a clutch-face disposed opposite the convergently-disposed bearing wires or pins, substantially as set forth. 35

2. In an electric-arc-lamp clutch, the combination with the clutch-rod; of the clutch-collar mounted at the lower end of said rod and provided in opposite side portions with convergently-disposed sockets or openings, spaced bearing wires or pins detachably fitted in said sockets or openings of the collar and intersecting with the opening through the collar so as to project into said opening to form contact-bearings for the carbon-rod, the clutch-lever having a cam-head pivotally mounted at one side of the clutch-collar and provided with a transverse socket or opening intersecting the inner clutch-face of the head, and a short bearing wire or pin detachably fitted in said socket or opening of the cam-head and intersecting the clutch-face thereof so as to project beyond the surface of said clutch-face and form a third bearing-point of contact for the carbon-rod received in the opening through the clutch-collar, substantially as set forth. 40 45 50 55 60

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

AUGUST C. DOBRICK.

Witnesses:

MERRILL B. CHASE,
A. GERBUSH.