

(No Model.)

A. P. SEYMOUR.
CARBON CLAMP FOR ELECTRIC ARC LAMPS.

No. 458,718.

Patented Sept. 1, 1891.

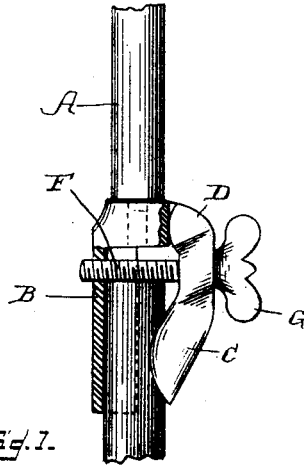


Fig. 1.

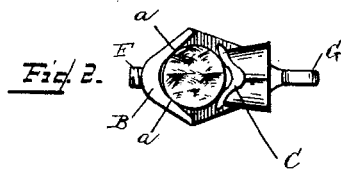


Fig. 2.

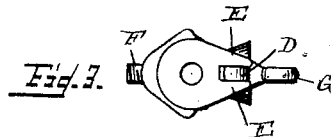


Fig. 3.

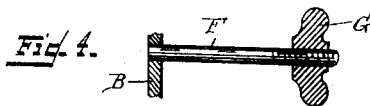


Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

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CARBON-CLAMP FOR ELECTRIC-ARC LAMPS.

SPECIFICATION forming part of Letters Patent No. 458,718, dated September 1, 1891.

Application filed January 3, 1889. Serial No. 295,319. (No model.)

To all whom it may concern:

Be it known that I, ALBERT P. SEYMOUR, a citizen of the United States, and a resident of Syracuse, in the county of Onondago and State of New York, have invented a certain new and useful Carbon-Clamp for Electric-Arc Lamps, of which the following is a specification.

My invention relates to the construction of the clamps for fastening the carbons of electric-arc lamps, the object being to simplify and cheapen the construction, reduce the lateral dimensions of the clamping devices, attain good contact with the carbon, and to secure adaptability to carbons of various sizes, as well as capacity for attachment to rods of any size without detriment to the action of the clamp.

My invention consists in the novel construction of clamp hereinafter more particularly described in connection with the accompanying drawings, and specified in the claim.

In the accompanying drawings, Figure 1 is a side elevation and partial vertical section of a clamp embodying my invention. Fig. 2 is an end view of the clamp, looking upward. Fig. 3 is a top view of the clamp detached from the metallic rod which engages with the feed mechanism. Fig. 4 shows a modification in a detail of construction.

A indicates the usual rod or carrier for the upper carbon of an electric-arc lamp, such carrier being plain or racked, according to the construction of the feed mechanism. Attached to said rod at its lower end is the clamp, the body of which has a downward extension B, forming the fixed or rigid side of the clamping device, between which and an opposite movable piece the carbon is fastened. The side B of the clamp is formed at its inner surface with a flaring contact-seat, as shown more plainly in Fig. 2, thereby adapting the clamp to receive carbons varying in size and to make firm and solid contact with the carbon at two points *a a*, which is preferable to a number of light and indefinite contact-points such as exist where the attempt is made to have the contact-seat

of the clamp conform to the circular outline of the carbon.

C is the movable clamp piece or block, formed on its inner or contact side with a flaring surface adapted to take against the carbon at two points in a similar manner to the clamp-body. Passing loosely through said clamp-block is the clamp rod or bolt F, whose opposite end rests in or on the rigid portion B of the clamp. The screw-thread on the rod may be formed at the end engaging with the rigid portion B of the clamp, as shown in Fig. 1, so that on turning the thumb-piece G at the opposite end forming the head of the rod said head will press upon the movable clamp-block; or the rod may be fixed in the rigid portion B of the clamp and have the screw-thread formed on its opposite end outside the loose clamp-block, as shown in Fig. 4, the thumb-piece being in such case formed as a nut to screw upon the rod.

The movable clamping-block is provided with a heel D, which rests loosely on the clamp-body between the two ears or projections E, extending from the clamp-body on the same side with said block. By this device the block is kept in proper position both when clamped and when the screw is loosened for the purpose of inserting a new carbon. The whole construction is also specially suited to carbons of different size, the clamp-block by reason of its loose bearing on the clamp-body and the loose passage of the screw-rod through it readily adapting itself to any size of carbon. The loose bearing on the body evidently permits the block to shift bodily downward as its lower end swings inward to grasp a smaller rigid carbon, and no binding of the block in the screw can then take place, as might be the case under similar conditions if the pivotal point of connection with the clamp-body were fixed.

What I claim as my invention is—

In a clamp for an electric-arc-light carbon, a clamp-body having on one side a V-shaped extension B, forming the rigid side of the clamp, in combination with a loose perforated V-shaped clamp-block, the heel of which bears loosely on the opposite side of

the clamp-body and held against lateral displacement thereon by suitable lugs or projections, but free to slide vertically on the body, and a clamp screw or bolt passing
5 loosely through the perforation in the loose clamp-block and seated in the extension B from the opposite side of the clamp-body.

Signed at Syracuse, in the county of Onondaga and State of New York, this 31st day of December, A. D. 1888.

ALBERT P. SEYMOUR.

Witnesses:

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