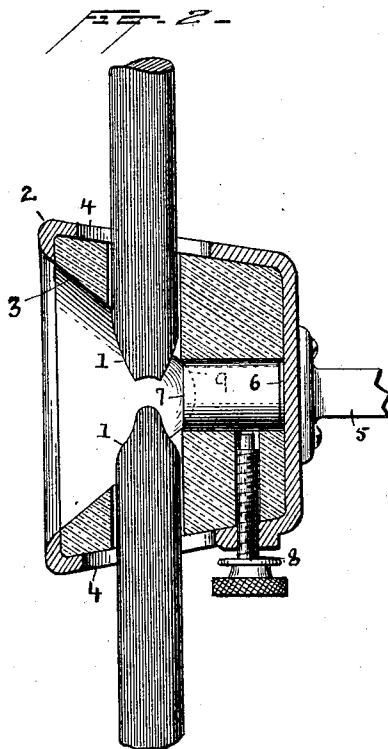
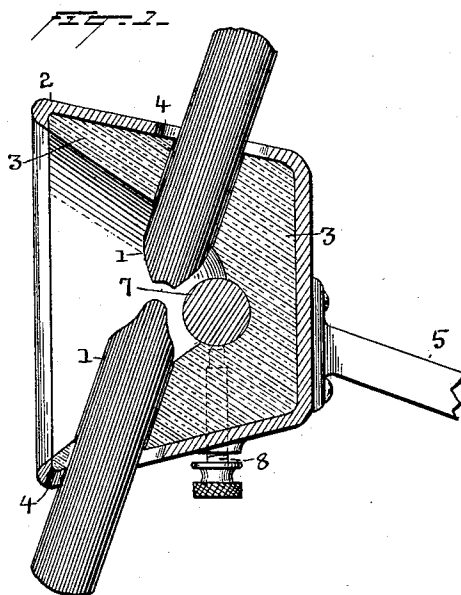


(No Model.)

R. S. DOBBIE.
REFLECTOR FOR ARC LIGHTS.

No. 479,183.

Patented July 19, 1892.



Witnesses
Norris A. Clark.
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UNITED STATES PATENT OFFICE.

ROBERT S. DOBBIE, OF BROOKLYN, ASSIGNOR TO THE EDISON GENERAL ELECTRIC COMPANY, OF NEW YORK, N. Y.

REFLECTOR FOR ARC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 479,183, dated July 19, 1892.

Application filed April 8, 1891. Serial No. 388,104. (No model.)

To all whom it may concern:

Be it known that I, ROBERT S. DOBBIE, a citizen of the United States, residing at the city of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Reflectors or Intensifiers for Arc Lights, of which the following is a specification.

The invention relates to arc lamps of that class in which an arc is formed between carbons placed end to end and in which a refractory material is placed near the arc and is rendered incandescent thereby.

The object of the invention is to provide an improved form and arrangement of apparatus of the character indicated; and the invention consists in the features of construction and in the combinations hereinafter set forth and claimed.

Figure 1 is a central section of a portion of arc lamp embodying my improvement, and Fig. 2 is a similar view of a slightly-modified form.

1 1 are portions of two arc-light carbons. The feeding mechanism is not shown, since any suitable mechanism for this purpose may be employed, it only being necessary that the arc should be maintained at the focus of the reflector.

2 is a cast-iron or other metal casing, and within it is a hollow insulating body or lining 3 of fire-clay, porcelain, or other suitable material capable of resisting a considerable degree of heat and which serves to localize the heat around the terminals of the carbons. Through the casing and through the porcelain body are openings 4 for the carbons, the opening in the casing being larger than the opening in the porcelain, so that the carbons cannot come in contact with the metal casing to form a short circuit.

5 is a bracket for supporting the device. In the body 3, directly behind the arc, is a socket or recess, within which is held a cylinder, sphere, or block 7 of lime or other refractory material capable of becoming incan-

descent. This block has a surface in proximity to the arc, but does not interfere with the feeding of the carbons.

8 is a screw having a milled head for holding block 7 in place and for allowing adjustment thereof. When the arc is established between 1 1, the heat of the arc is communicated to 7, rendering that portion of it behind the arc incandescent and greatly adding to the brilliancy of the light. The porcelain or similar body closely surrounding the arc and the cylinder 7 conserves the heat and adds to the brilliancy of the light.

The several parts of the apparatus in Fig. 2 are lettered to correspond with Fig. 1; the main difference between the two forms consisting in the arrangement of the block 7.

In Fig. 2 the cylinder is shown with an end facing the arc and resting in the opening 6, which extends entirely through the refractory body or lining, instead of being placed with a rounded side toward the arc. The cylinder 7 (shown in Fig. 2) may, if desired, have the end facing the arc curved, as indicated by the dotted line 9.

Having thus described the invention, what I claim is—

1. The combination, with a hollow refractory body, of lamp-carbons forming an arc within said body, a socket therein, and a refractory block adapted to become incandescent supported in said socket, substantially as described.

2. The combination, with a hollow refractory body having a socket, of lamp-carbons forming an arc within said body, a refractory block in the socket and near the arc, adapted to become incandescent, and means for securing said block and for adjusting the same, substantially as described.

This specification signed and witnessed this 3d day of April, 1891.

ROBERT S. DOBBIE.

Witnesses:

CHARLES M. CATLIN,
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