(No Model.)

H. W. SANDER.

ELECTRIC ARC LAMP.

No. 458,500. Patented Aug. 25, 1891.

Fig. I.

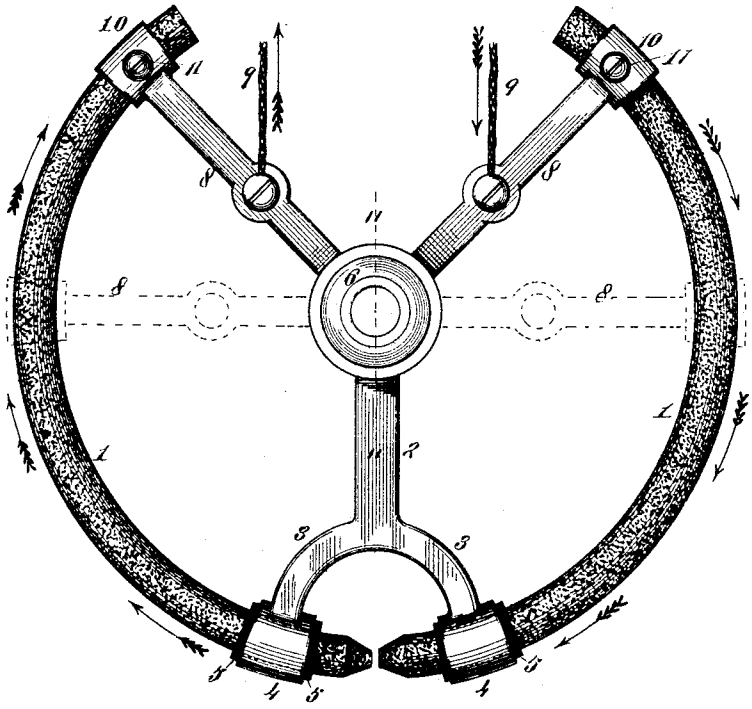
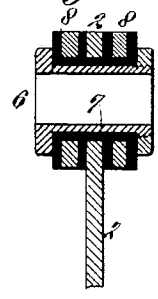


Fig. II.



Attest;
George E. Crure.
S. Cotton

Inventor;
Hermann W. Sander.
By Knight Bros.
Atty's

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HERMANN W. SANDER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO MARTIN D. MEMMEL, OF SAME PLACE.

ELECTRIC-ARC LAMP.

SPECIFICATION forming part of Letters Patent No. 458,500, dated August 25, 1891.

Application filed May 4, 1891. Serial No. 391,499. (No model.)

To all whom it may concern:

Be it known that I. HERMANN W. SANDER, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Arc Lights, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention has for its object to produce an electric-arc light in which the arc will always remain at a given point and not shift as the carbons or pencils are consumed; and it further relates to a lamp in which a larger amount of carbon is available than with the ordinary form of arc light.

To this end my invention, broadly stated, consists in certain features of novelty, as more fully described hereinafter, and pointed out in the claims.

Figure I is an elevation illustrative of my invention. Fig. II is a detail section taken on line II II, Fig. I.

Referring to the drawings, 1 represents the carbons or pencils, which are made in the arc of a circle, as shown.

2 represents a stationary arm having branches 3, each provided with a socket 4 to receive one of the carbons or pencils. This arm is either composed of some non-conductor or else is provided with an insulator, and I have shown its branches provided with non-conducting sleeves 5, through which the carbons pass. The arm is supported on a sleeve 6, with a non-conductor 7 between it and the sleeve.

8 represents pivoted arms, with which the wires 9 are connected. On the outer end of each arm is a socket 10, receiving one of the carbons, and the carbons are firmly held in the sockets by set-screws 11. The inner ends of the arms 8 are mounted on the sleeve 6, from which they are insulated by the non-conductor 7. When the lamp is in use, the arms 8 are automatically moved by any well-known means to feed the points of the carbons together as they burn away.

In Fig. I, I have shown the arms in dotted lines, to which position they move and continue to move until they come against the branches 3 of the stationary arm 2.

In a lamp thus constructed the arc will always remain at one point, and a larger amount of carbon is available than can be had where the carbons are straight.

I claim as my invention—

1. In an arc light, the combination, with the circular carbons pivoted to swing together, of the guide-arm 2, having branches 3, provided with insulating or non-conducting sleeves through which the said carbons pass, substantially as set forth.

2. In an arc light, the combination of the sleeve 6, the arms 8, pivoted on said sleeve and being insulated therefrom and from each other, the fixed arm 2, secured to said sleeve and being insulated therefrom and from the arms 8, the arms 8 being provided with sockets 10 and the arm 2 being provided with rigid branch arms 3, each having a socket 4, an insulating-sleeve 5 in each socket 4, and the circular carbons secured in the sockets 10 and projecting through said insulating-sleeves 5, substantially as set forth.

H. W. SANDER.

In presence of—
E. S. KNIGHT,
THOS. KNIGHT.