(No Model.)

A. W. FRANCE.

CARBON HOLDER FOR ARC LIGHTS.

No. 535,692. Patented Mar. 12, 1895.

Fig. 5.

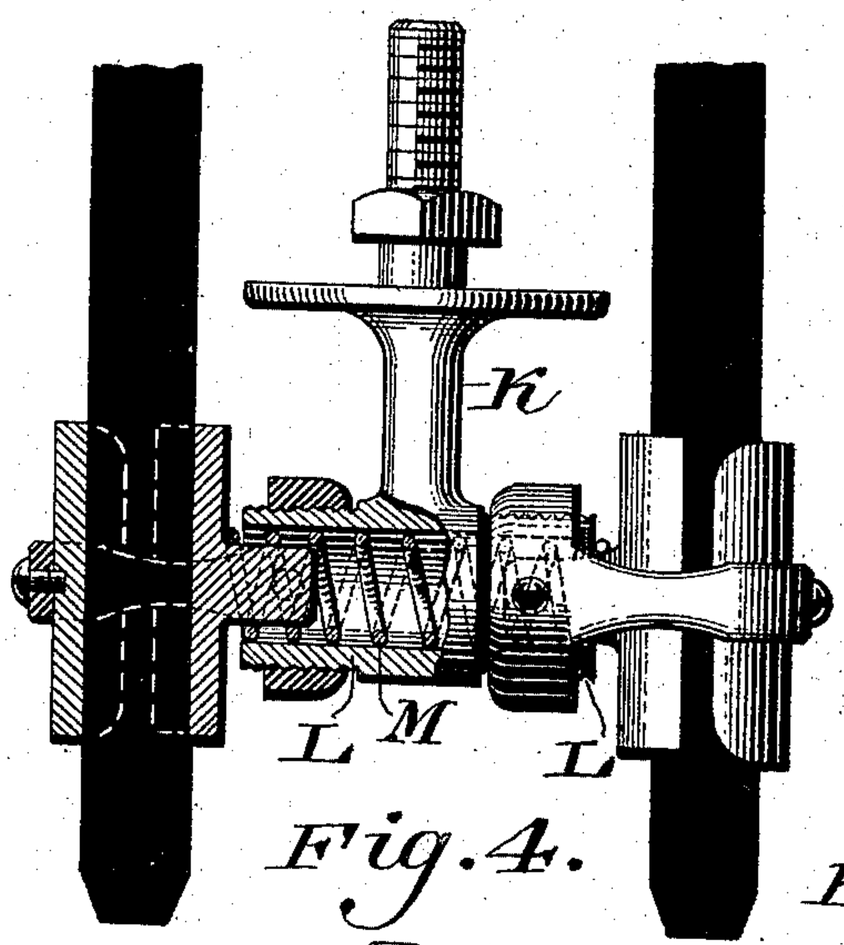


Fig. 1.

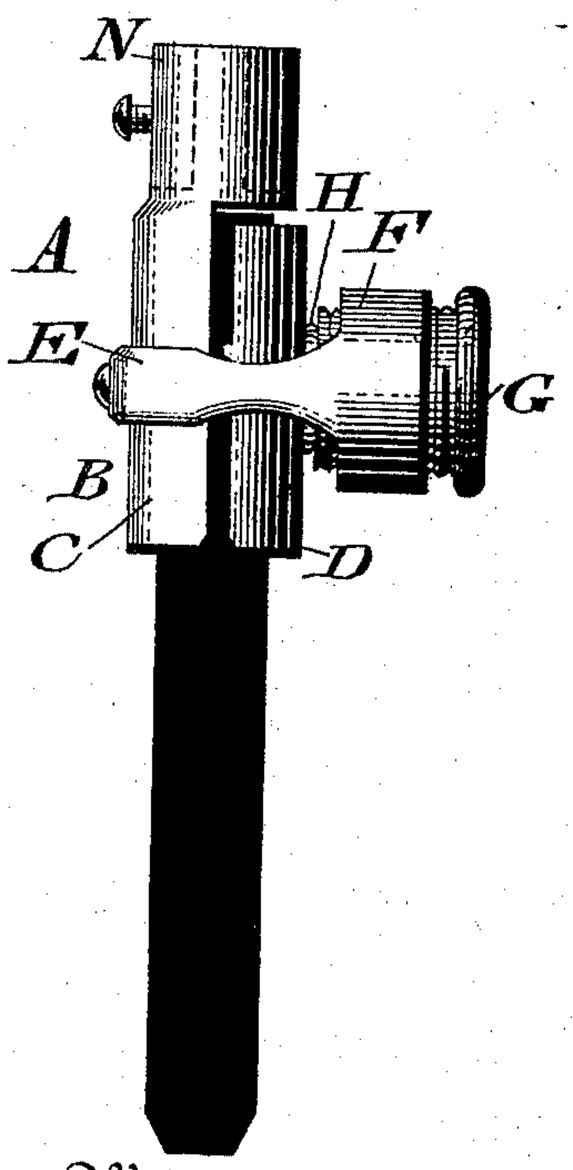


Fig. 4.

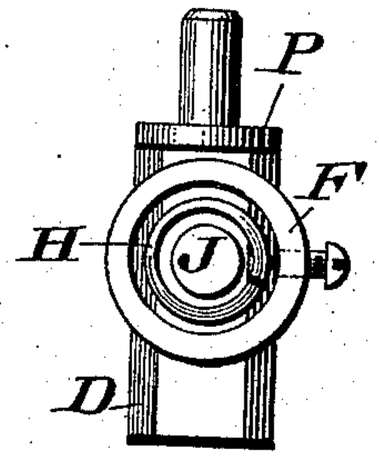


Fig. 3.

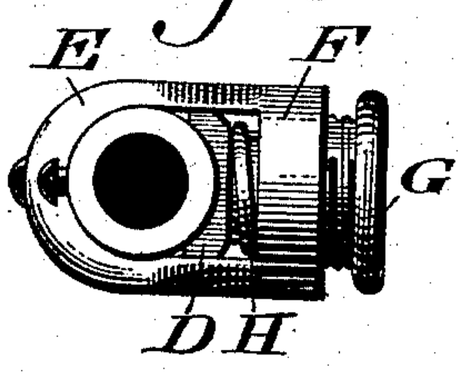
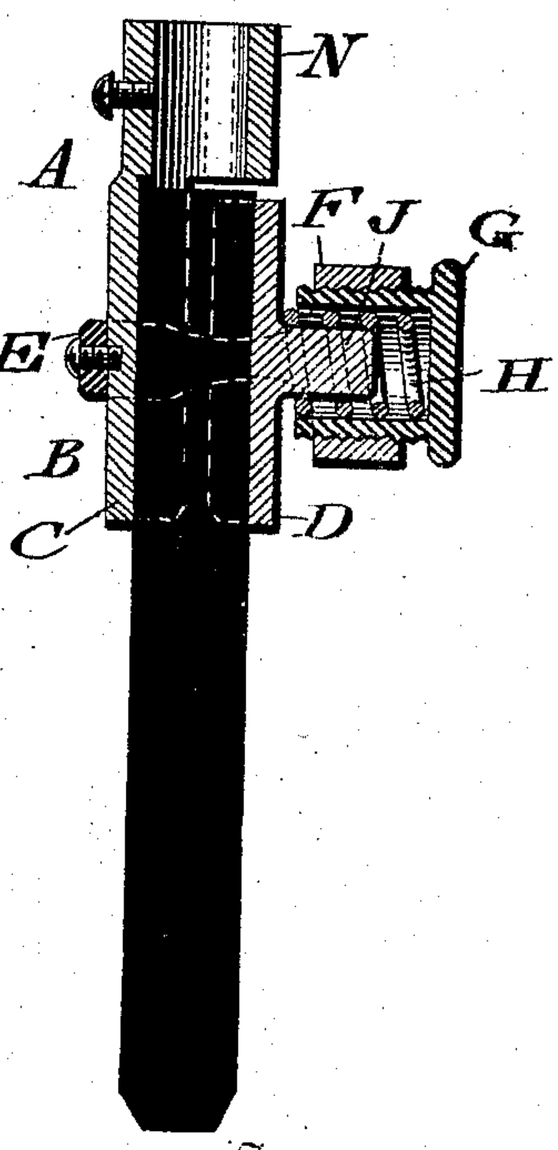


Fig. 2.



Witnesses
P. H. Eagle.
L. Douville.

Inventor
Adam Warren France
By Joshua Wiedersheim,
Attorney

UNITED STATES PATENT OFFICE.

ADAM WARREN FRANCE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO ARTHUR H. JONES, OF SAME PLACE.

CARBON-HOLDER FOR ARC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 535,692, dated March 12, 1895.

Application filed November 10, 1894. Serial No. 528,376. (No model.)

To all whom it may concern:

Be it known that I, ADAM WARREN FRANCE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Holders for Carbons of Electric Lights, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a holder for the carbon of an electric light, the same being adapted to hold the carbon in a firm and reliable manner, and is adjustable relative to the pressure required on the carbon, and to different sizes of the latter.

Figure 1 represents a side elevation of a single carbon holder embodying my invention. Fig. 2 represents a longitudinal section thereof. Fig. 3 represents a top or plan view thereof. Fig. 4 represents a side elevation thereof, the screw cap of the device having been removed. Fig. 5 represents a partial side elevation and partial vertical section of a double carbon holder embodying my invention.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings: A designates a carbon holder consisting of the socket B, formed of the stationary portion C, and opposite movable portion D, which together form jaws within which the end of the carbon is received.

E designates arms which are secured to the jaw C and disconnected from the jaw D, said arms in the present case being of the form of a yoke, which is screwed to the jaw C, and freely encircles the jaw D. The ends of the arms terminate in or are formed with a screw-threaded boss F, to which is fitted the nut or cap G, and interposed between the movable section D and said cap is a coiled spring H, said section having projecting from its side a stud J, which enters the spring and serves to steady the same in position. It will now be seen that the jaws may be separated a proper distance to receive the carbon, after which the cap G is tightened sufficiently to cause the pressure of the spring to be exerted on the jaw D, and consequently upon the carbon, thus holding the latter firmly in position without injurious strain thereon, and admitting of the removal of the carbon when expended, and the insertion of a fresh carbon by simply pressing the same into the socket, when the movable jaw yields, permitting such insertion as is evident.

In Figs. 1 and 2, I show a collar N, and in Fig. 4 I show a stem P, either being employed for attaching purposes.

In Fig. 5 I show a holder for two carbons, in which case I employ a bracket K, which has oppositely-projecting nipples L thereon. Each of the jaws, yokes and bosses is similar to those shown in the other figures, but the bosses are secured to the nipples, so as to connect the holder with said bracket, and a single spring M may be employed, the same bearing against the movable jaw of the socket, so that by turning the boss, the tension of said spring may be adjusted, the pressure of the same being exerted on the movable jaw, so that the action on the carbon will be the same as that hereinbefore described. In this case, either nipple L takes the place of the screw cap G, and as the boss may turn or rotate on the nipple, the carbon shown may be readily adjusted to the carbon above it, and provision is also made for centering said carbon in both transverse and vertical directions.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A carbon holder consisting of a jaw, a yoke connected therewith, a threaded boss on the ends of said yoke, a loose jaw within said yoke, a cap on said boss, and a spring interposed between the loose jaw and said cap, the parts being combined substantially as described.

2. A carbon holder consisting of a jaw, a yoke connected therewith, a threaded boss on the ends of said yoke, a loose jaw within said yoke, a cap on said boss, and a spring interposed between the loose jaw and said cap, said spring receiving a stud which projects from the loose jaw, and the parts are combined substantially as described.

3. A socket having a movable jaw, a threaded boss connected with said socket, a screw cap fitted to said boss, a spring interposed be-

tween the movable jaw and said cap, and a stud projecting from the movable jaw and entering said spring for steadying the same, substantially as described.

4. A bracket provided with nipples, and an adjustable socket having a threaded boss thereon, and a spring bearing against the movable jaw of said socket, said boss being fitted to said nipple, and serving to connect the holder with the bracket and adjust the pressure of the spring, substantially as described.

ADAM WARREN FRANCE.

Witnesses:
JOHN A. WIEDERSHEIM,
A. P. JENNINGS.