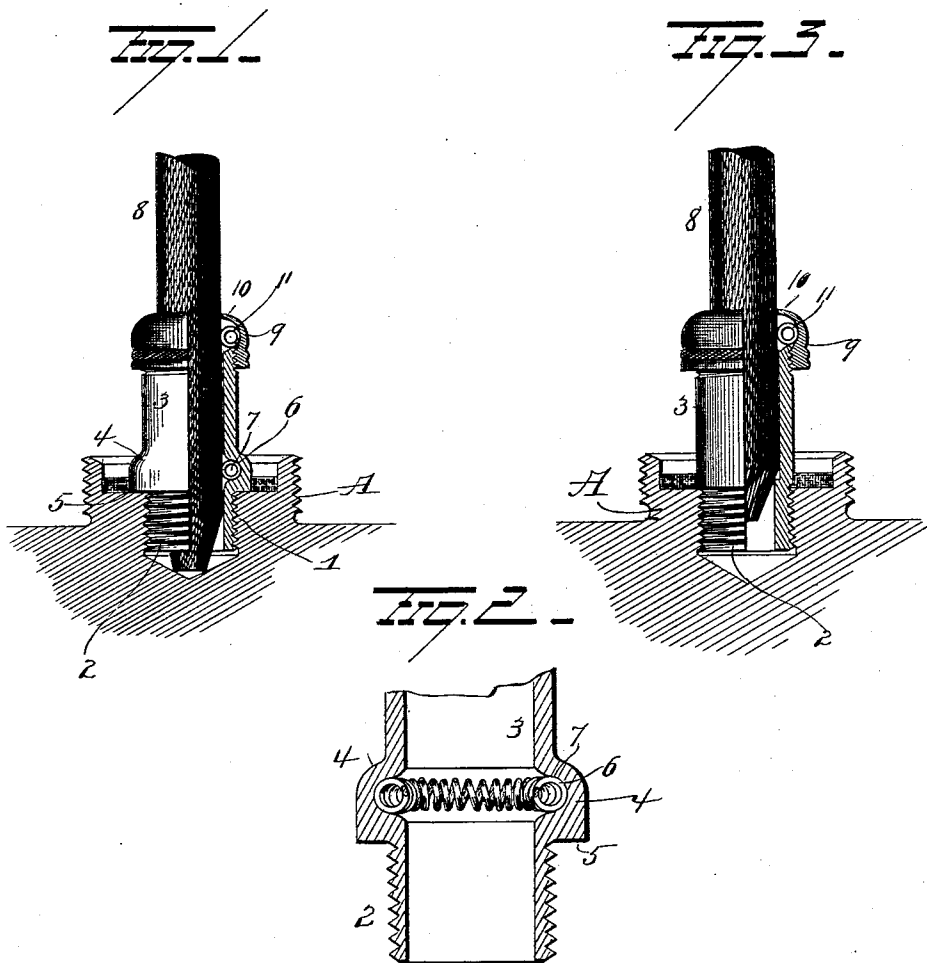


(No Model.)

G. R. LEAN.
CARBON HOLDER.

No. 571,975.

Patented Nov. 24, 1896.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE R. LEAN, OF CLEVELAND, OHIO, ASSIGNOR TO THE JANDUS
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CARBON-HOLDER.

SPECIFICATION forming part of Letters Patent No. 571,975, dated November 24, 1896.

Application filed May 23, 1896. Serial No. 592,788. (No model.)

To all whom it may concern:

Be it known that I, GEORGE R. LEAN, a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Carbon-Holders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in carbon-holders for electric-arc lamps, and more particularly to a holder for the lower carbon, the object of the invention being to produce a carbon-holder which shall be simple in construction, which will firmly hold the carbon in proper position, which can be easily and quickly operated for inserting or removing the carbon, and which shall be effectual in all respects in the performance of its functions.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view, partly in section, illustrating my improvements. Fig. 2 is a detail view. Fig. 3 is a view illustrating a slight modification.

A represents a base, and B shows a portion, of a globe-holder, the details of which latter, however, form no part of the invention embodied in this application.

The base A is made with a screw-threaded socket 1 for the reception of the screw-threaded lower end 2 of a sleeve 3. Immediately above the screw-threaded shank 2 the sleeve 3 is made with an enlargement 4, which forms a shoulder 5, adapted to rest on the base A. The enlarged portion of the sleeve is provided internally with an annular groove 6, in which an annular coiled spring 7 is located, said spring being adapted, when expanded by the carbon-rod 8 passing through it, to bear against outer wall of the groove 6 and thus prevent any lateral movement of the carbon-rod. The upper end of the sleeve 3 is screw-threaded externally for the reception of an internally-screw-threaded cap 9. The cap 9 is provided with a curved inwardly-projecting annular

flange or lip 10, the free edge of which terminates in close proximity to the carbon-rod 8. Above the upper end of the sleeve 3 and between the curved flange or lip 10 and the carbon-rod 8 an annular coiled spring 11 is disposed.

From this construction and arrangement of parts it will be seen that when the carbon has been inserted in the sleeve 3 and the cap 9 screwed down the annular coiled spring will be forced tightly against the carbon-rod and the latter will be thus tightly clamped in the sleeve.

The construction shown in Fig. 3 is similar to that shown in Fig. 1, except that the enlargement 4 and spring-ring 7 are omitted.

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

1. A carbon-holder comprising a sleeve, an adjustable cap on the end of said sleeve and an annular coiled spring within said cap and adapted to be forced against the carbon, substantially as set forth.

2. A carbon-holder comprising a sleeve, a cap adapted to screw on the end of said sleeve, said cap having a curved flange or lip adapted to terminate in proximity to a carbon-rod inserted in the sleeve, and an annular coiled spring within said curved flange or lip, substantially as set forth.

3. A carbon-holder comprising a sleeve having an interior annular groove near one end, a flexible ring in said groove and a clamp at the free end of the sleeve, substantially as set forth.

4. A carbon-holder comprising a sleeve having a groove near its base, an annular coiled spring in said groove, an adjustable cap at the free end of the sleeve, said cap having a curved flange or lip and an annular coiled spring within said flange or lip, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

GEORGE R. LEAN.

Witnesses:

D. W. ROCKWELL,
J. M. SEE.