

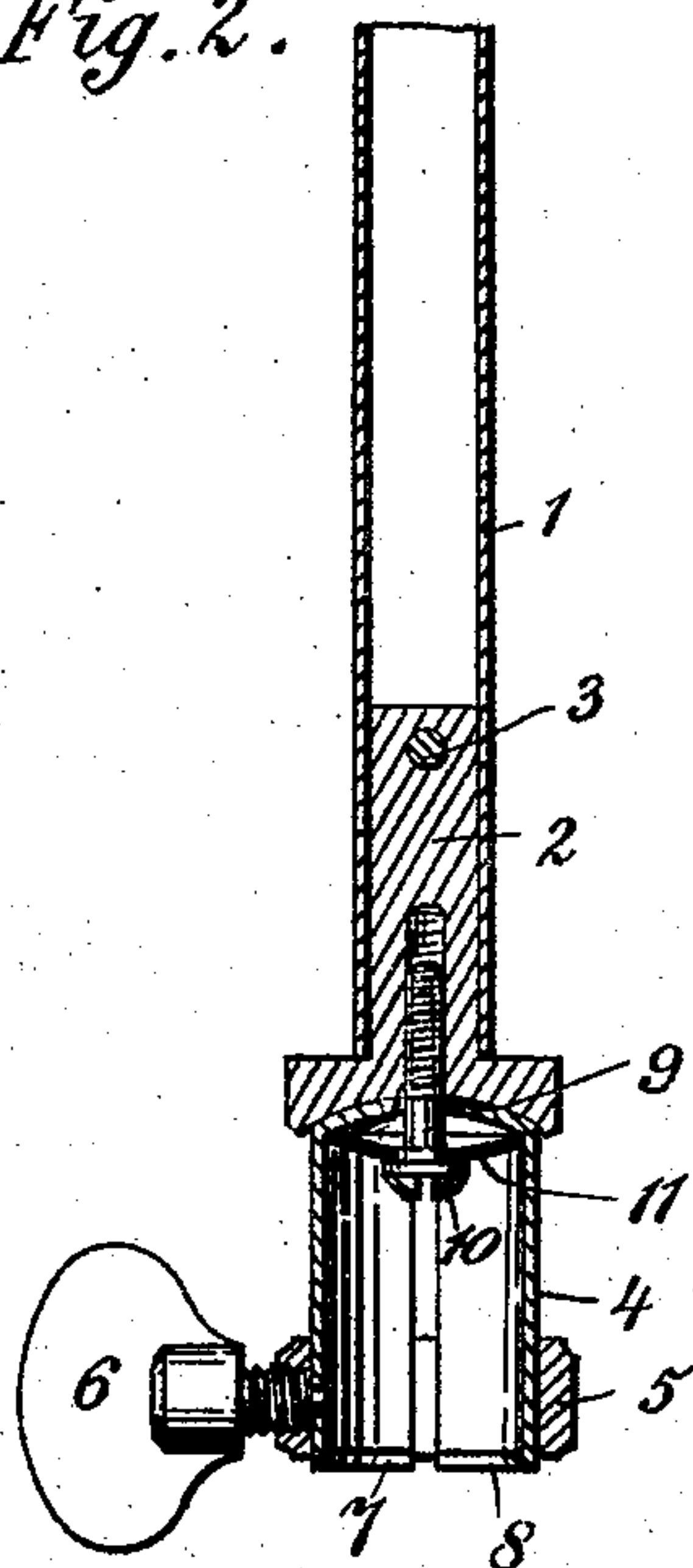
(No Model.)

S. BERGMANN.  
CARBON HOLDER FOR ELECTRIC ARC LAMPS.

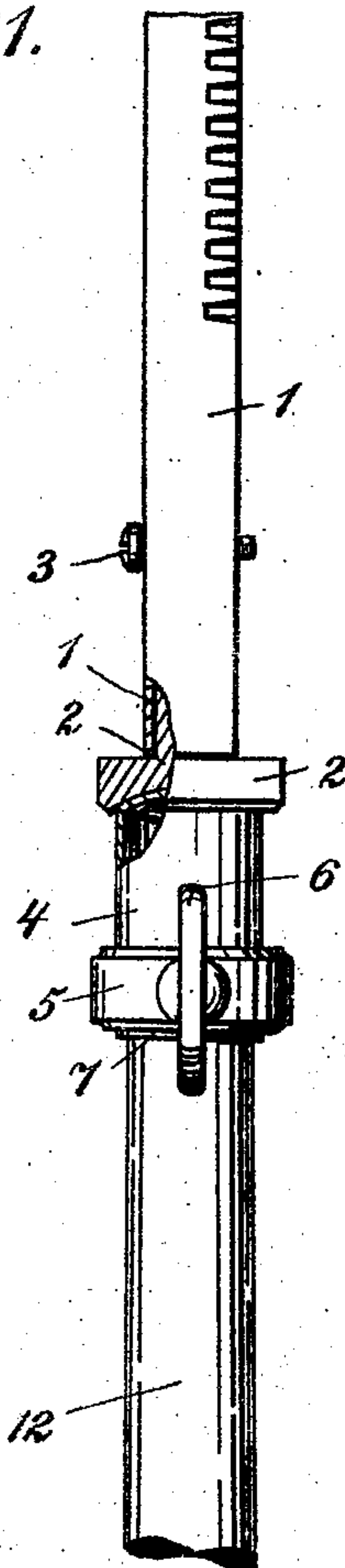
No. 501,911.

Patented July 25, 1893.

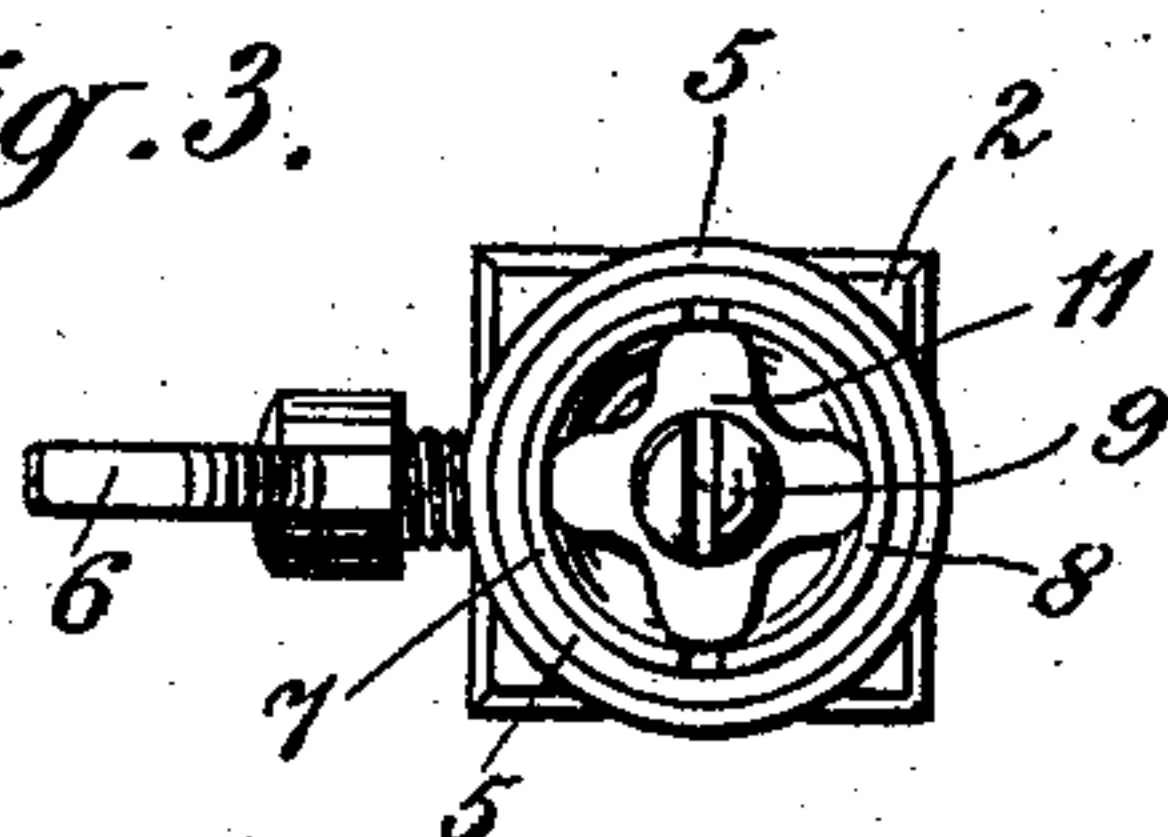
*Fig. 2.*



*Fig. 1.*



*Fig. 3.*



Witnesses:  
Chas. L. Horack  
W. A. Cunningham

Inventor:  
Sigmund Bergmann  
by J. M. Schreud.  
att'y.

# UNITED STATES PATENT OFFICE.

SIGMUND BERGMANN, OF NEW YORK, N. Y.

## CARBON-HOLDER FOR ELECTRIC-ARC LAMPS.

SPECIFICATION forming part of Letters Patent No. 501,911, dated July 25, 1893.

Application filed October 22, 1892. Serial No. 449,646. (No model.)

*To all whom it may concern:*

Be it known that I, SIGMUND BERGMANN, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Carbon-Holders for Electric-Arc Lamps, of which the following is a specification.

My invention relates to carbon holders for electric arc lamps and the object of my invention is to construct a holder that is simple in construction, easily and quickly adjustable, that will remain in its adjusted position and can be economically constructed.

To that end my invention consists of the combination of parts hereinafter described and claimed.

In the accompanying drawings forming part of this specification, Figure 1 represents an elevation of a carbon holder embodying my invention. Fig. 2 is a vertical cross-section thereof, and Fig. 3 is an end view of Fig. 2.

Referring to the drawings 1 represents the toothed rod or rack of an electric arc lamp. I make the same hollow throughout, or only at its lower portion, and insert into said lower portion the socket plug 2 fastened in place by a pin or screw 3. The head of this socket plug is hollowed out or made concave as shown. The carbon holder 4 consists of a slotted shell, the bottom of which is made convex to correspond with the concavity of the socket plug. Said carbon holder is encircled at its lower end by a ring 5 which carries a clamping screw 6, the diminished end of which engages an aperture in the jaw 7 of the carbon holder while the offset thereof presses on the outside of said jaw and, when said clamping screw is screwed in, forces said jaw 7 against jaw 8 thus clamping the carbon 12 between them. The convex head of the carbon holder has an enlarged aperture 9 through which a screw 10 passes into the socket plug to fasten the holder to said plug. The aperture 9 is larger in di-

ameter than the diameter of the screw to allow for the required movement of the carbon holder. In order that said carbon holder may be retained in any position to which it is adjusted I provide a spring in the form of a washer 11 having an enlarged opening through which the screw 10 passes and upon which washer the head of said screw bears, whereby the head of the holder can be made to bear with greater or less pressure against the head of the socket plug according to the degree of pressure exercised by the screw through the medium of the spring. By taking hold of the holder, when fixed in place under proper pressure, it can be quickly adjusted to any other desired position and will not accidentally shift therefrom.

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

1. A rack bar of an electric arc lamp provided with a concave end, in combination with a convex headed carbon holder a spring and a screw for securing said parts together, substantially as described.

2. A rack bar of an electric arc lamp having a socket plug secured to its lower end, of a convex headed carbon holder a spring and a screw for securing said parts together.

3. A rack bar of an electric arc lamp provided with a concave end in combination with a convex headed carbon holder having an enlarged opening in its head, a spring washer having an enlarged opening and arranged in the cavity of the holder and a screw for securing the several parts together, substantially as described.

Signed at New York, in the county of New York and State of New York, this 17th day of October, A. D. 1892.

SIGMUND BERGMANN.

Witnesses:

P. M. MOWREY,  
J. WERT LEIMER.