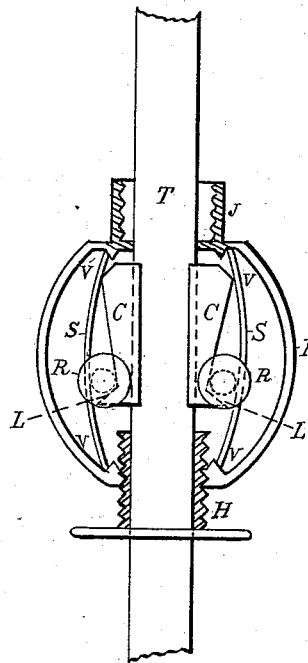


J. F. BROWN.  
Retainer for Extension-Tubes of Chandeliers.

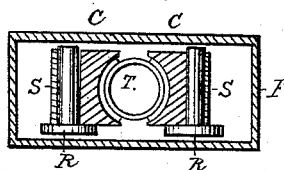
No. 215,318.

Patented May 13, 1879.

*Fig 1.*



*Fig 2.*



*Witnesses.*  
*John C. Cassidy*  
*Amo R. Douai.*

*Inventor.*  
*John F. Brown*

# UNITED STATES PATENT OFFICE.

JOHN F. BROWN, OF BROOKLYN, N. Y.

## IMPROVEMENT IN RETAINERS FOR EXTENSION-TUBES OF CHANDELIERS.

Specification forming part of Letters Patent No. **215,318**, dated May 13, 1879; application filed February 24, 1879.

*To all whom it may concern:*

Be it known that I, JOHN F. BROWN, of Brooklyn, county of Kings, and State of New York, have invented, made, and applied to use Improvements in the Construction of Retainers for Extension-Tubes of Chandeliers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a sectional view of my improvement in retainers, showing clutches, rollers, and metal springs. Fig. 2 represents a cross-section.

My invention consists in improvements, as more fully hereinafter set forth, in the construction of retainers for extension-tubes for chandeliers, and relates to ready and efficient means for holding the extension-tubes of chandeliers in position at any point required.

T, Fig. 1, shows a brass tube, which may be provided at its lower end with a harp containing a shade and burner of a drop-light. A smaller-sized brass tube is inserted in tube T, which supplies gas to the drop-light when the tube T is drawn down, forming, as it were, a continuation of the inner tube. Over the tube T is passed a metal casing, F, being so shaped as to contain the clutches C C, rollers R R, and springs S S, and holding the same together in their proper places. The upper end of the casing F is provided with a coupling, J, being employed to connect a tube with the chandelier-stem. Upon the lower end of the casing F is secured a set-screw or regulator, H, which regulates the tension by screwing up or unscrewing.

The regulator H and the coupling J have a

circular opening large enough for the slide-rod T to pass through, thereby steadying the same.

The clutches C C are lined with felt or any other friction material. The clutches C C, tapering downward, have shoulders L L at the lower end, to prevent rollers R R, in combination with the springs S S, from dropping below the clutches C C. The springs S S are inserted in grooves V V in the upper and lower ends of the casing F.

When the slide-rod T is drawn down, the clutches C C, being tapered downward, bear on the rollers R R. The latter revolve downward upon the springs S S until the lower ends of the clutches C C come in contact with the regulator H, causing the slide-rod T to be retained in any desired position, the coupling J and regulator R steadying the slide-rod when drawn down or pushed up.

Such being the construction, the operation is as follows: When it is desired that the slide-rod T should be drawn down and gas be supplied to the drop-light, it is held in position by the pressure of the clutches, rollers, and springs bearing upon it. When the rod T is thrown up, the clutches are raised from the roller, thereby relieving them of friction.

Having set forth my invention, what I claim as new is—

The combination, with the casing F, of springs S S, rollers R R, clutches C C, and regulator H, constructed and operating substantially as and for the purpose herein set forth.

JOHN F. BROWN.

Witnesses:

J. C. DAVIS,  
ARNO R. DOUAI.