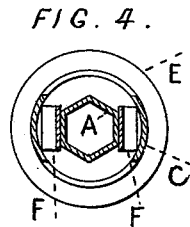
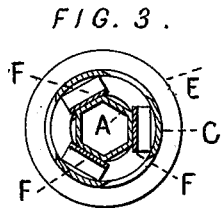
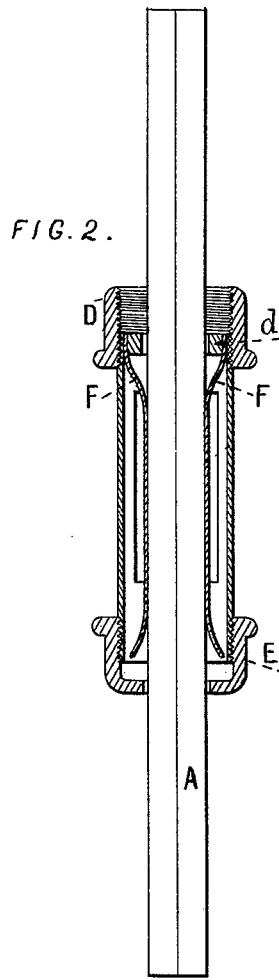
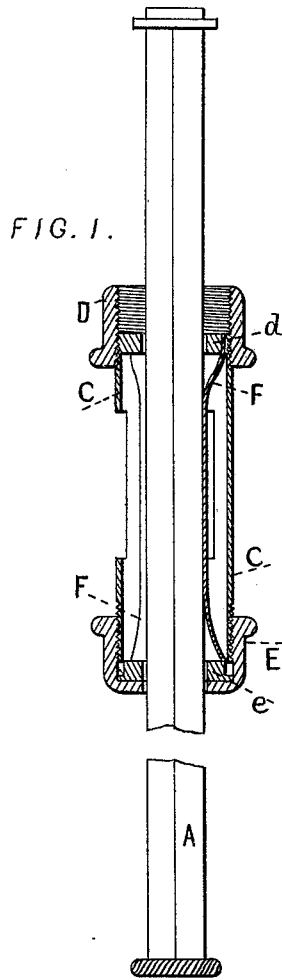


J. C. CASSIDY.

RETAINERS FOR EXTENSION-TUBES FOR GASALIERS.

No. 181,140.

Patented Aug. 15, 1876



WITNESSES.

George Gray
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INVENTOR.

UNITED STATES PATENT OFFICE.

JOHN C. CASSIDY, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN RETAINERS FOR EXTENSION-TUBES FOR GASALIERS.

Specification forming part of Letters Patent No. 181,140, dated August 15, 1876; application filed March 17, 1876.

To all whom it may concern:

Be it known that I, JOHN C. CASSIDY, of Brooklyn, Kings county, New York, have invented, made, and applied to use Improvements in the Construction of Retainers for Extension-Tubes of Gasaliers; and that the following is a full, clear, and correct description of the same, 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 when three springs are used. Fig. 2 is a sectional view of my improvement in retainers when two springs are used. Fig. 3 is a top view of Fig. 1. Fig. 4 is a top view of Fig. 2.

In the drawing, like parts of the invention are pointed out by the same letters of reference.

The nature of the present invention consists in improvements, as more fully herein-after set forth, in the construction of retainers for extension-tubes of gasaliers, and relates to ready and efficient means for holding the extension-tubes of gasaliers in position at any point desired.

To enable those skilled in the arts to make and use my invention, I will describe the construction and operation of the same.

A shows a tube or pipe, which may be provided at its lower end with the basket supporting the shade and burner of a drop-light. In the tube A is inserted a tube of smaller diameter to supply gas to the drop-light when the tube A is drawn down, and forms, as it were, a continuation of the inner tube. A stuffing-box may be attached to the upper end of the tube A, and be passed over the inner tube to make both tubes gas-tight. Over the tube A is passed a short tube or pipe, C, provided with a coupling, D, at its upper end; or a cap may be used instead of the coupling, the coupling being employed when it is desired to connect a pipe with the chandelier-stem, and a supply of gas is to be passed through rods for the outside arms. Upon the lower end of the pipe or tube C is secured a threaded cap, E, within which cap is inserted a washer, e, made a little smaller in diameter

than the interior of the tube C, and made so that it may enter the tube C and have its bearing, when requisite, upon the lower end of the springs F. The cap E is provided with a circular opening, so that it may be passed over the tube A, and fit the same snugly, but not too tightly, to prevent the tube A moving in the same. F show semi-elliptic springs, two or more of which may be employed, inserted in the tube or pipe C, having their upper ends confined in a collar, d, properly slotted to receive them, which collar d is held in the upper end of the tube or pipe C, and their lower ends free and bearing upon the interior of the tube or pipe C. The curved portions of the springs F bear upon the outer surface of the tube A, and retain the same in any desired position when drawn down or thrown up. Should the springs at any time become weak the washer e can be brought to bear upon the lower ends of the springs, and cause the central portions of the same to bear upon the tube A by screwing up the cap-piece E. Both the collar d and cap-piece E form guides for the tube A when drawn down or thrown up.

Such being the construction, the operation is as follows: When desired that the tube A shall form, as it were, a continuation of the tube inserted in it, and that gas shall be supplied to the drop-light, the tube A is drawn down the proper distance by the hand of the operator, and is held in this position by the pressure of the springs bearing upon it, and when thrown up after use this pressure of the springs continues holding the tube A in position. As the tube A is moved up or down it is guided to a certain extent by the collar d and threaded cap E.

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

The combination, with the tube C, of the slotted collar d, cap E, washer e, and two or more springs, F, constructed and operating substantially as and for the purposes set forth.

JOHN C. CASSIDY.

Witnesses:

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J. V. LUFF.