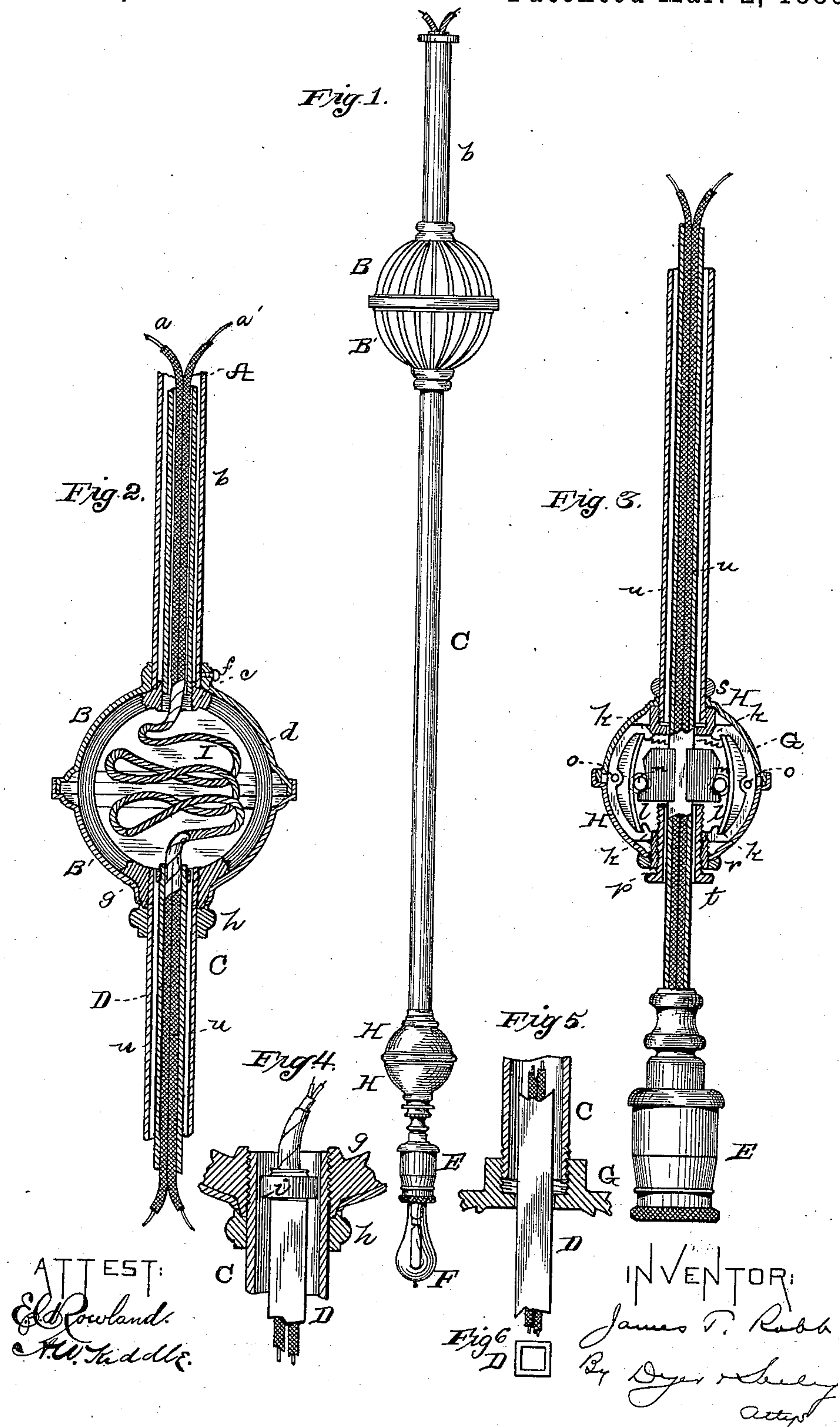


(No Model.)

J. T. ROBB.
EXTENSION ELECTROLIER.

No. 337,199.

Patented Mar. 2, 1886.



ATTEST:
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UNITED STATES PATENT OFFICE.

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EXTENSION-ELECTROLIER.

SPECIFICATION forming part of Letters Patent No. 337,199, dated March 2, 1886.

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To all whom it may concern:

Be it known that I, JAMES T. ROBB, of New York, in the county and State of New York, have invented a certain new and useful Improvement in Extension-Electroliers, of which the following is a specification.

The object of this invention is to provide a fixture for supporting one or more electric lamps in which the position of the lamp can be raised or lowered, the lamp being thus placed at any desired elevation; and the invention consists in the novel devices and combinations of devices employed by me in accomplishing this object, as hereinafter set forth and claimed.

My invention is illustrated in the annexed drawings, in which Figure 1 is a view in elevation of a fixture embodying said invention; Fig. 2, an enlarged vertical section of the upper portion of the same; Fig. 3, a similar view of the lower portion of the fixture. Figs. 4 and 5 are detail views of parts of the fixture, and Fig. 6 is an end view of the sliding tube.

A is the main supporting-stem of the fixture containing the insulated conducting-wires $a a'$ and inclosed by the shell or casing b . Stem A at its lower end is screwed into a collar, c , on the upper side of ring d . The external casing, b , enters the upper end of the two-part shell B B', the parts of which fit together at e , and the upper half, B, of the shell is held against b by one or more set-screws, f . At the lower side of the shell or chamber B B' the tube C is screwed into the collar g of ring d . Part B' of the shell surrounds the collar g , and is held in position by a nut, h , on tube C, which is screwed up against the bottom of the shell.

Within the tube C is the square sliding tube D, which has a ring or collar, i , at its upper end, to guide it in C. The square tube D extends continuously down to the lamp-socket E, which it supports, and which carries the incandescing electric lamp F.

The frictional device for holding the sliding tube in the desired position may be any one of those used in extension gas-fixtures. That shown is constructed as follows: To the lower end of tube C is attached a metal box, G, having curved sides. Within the box, held by projections $k k$, are two curved spring-pieces, $l l$. The tube C slides between friction-blocks $m m$, shaped as shown, and between each block

m and a spring, l , is a roller, n . The friction-surfaces of the blocks are covered with felt or rubber. Screw-holes $o o$ are shown, by which the cover of the box (not shown) is screwed on. The box C is inclosed by the two-part shell H H. At the lower end of the box is the internally and externally screw-threaded collar p , upon which the nut r is screwed to hold the shell. A ring, s , is provided for the same purpose at the top of the shell.

The externally screw-threaded sleeve t screws up through the collar p , and its position is adjusted relative to the blocks $m m$, to regulate the friction.

The conductors $a a'$, which preferably are stiff or rigid wires, extend to the top of the chamber formed by the shell B B', and are there connected with the two insulated conductors of the flexible conducting-cord I. This cord is of suitable length to permit the movement of the sliding tube D, and its other end is secured within the end of said tube to two rigid insulated wires, $u u$, which extend the whole length of the tube D, and are connected within the socket to the terminals thereof in the usual manner.

When the lamp is to be lowered, the tube D is drawn down and the flexible cord is drawn into the tube C. The friction-blocks are forced in by their springs and rollers against tube D, so that said tube is drawn down against this frictional pressure, and is held thereby at any desired point.

To raise the lamp, tube D is pushed up again, whereupon the flexible cord is pushed back into the chamber B B' and coils itself up within such chamber. The friction-blocks do not press upon the tube in its upward movement, but as soon as this ceases at any point the first slight downward movement causes the blocks to grip the tube and hold it where it is placed.

The sliding tube may evidently carry two or more lamps upon branching arms, if desired.

The fixture described is one very simple in its construction and operation, and by the use of the flexible cord does away with the objectionable sliding contacts, which have heretofore been employed in extension-electroliers.

What I claim is—

1. In an electric-light fixture, the combination of a stationary tube or body, a tube slid-

ing therein and carrying the lamp-conductors within said sliding tube connected with the lamp, flexible conductors attached to said sliding tube and connected with the conduct-
5 ors inclosed thereby, a chamber above said sliding tube for concealing said flexible conductors, and a frictional device for holding said sliding tube at any desired point in the stationary tube or body, substantially as set
10 forth.

2. In an electric-light fixture, the combination of the main supporting-stem, the ring at the lower end thereof, the shell surrounding said ring, the stationary tube carried by said

ring, the sliding tube within said stationary 15 tube carrying a lamp and inclosing electrical conductors, and flexible conductors connected electrically with said inclosed conductors and adapted to be placed in or withdrawn from the said shell as the sliding tube is raised or low- 20 ered, substantially as set forth.

This specification signed and witnessed this 24th day of July, 1885.

JAMES T. ROBB.

Witnesses:

P. H. KLEIN, Jr.,
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