J. ROBERTS.

EXTENSION DEVICE FOR CHANDELIERS.

No. 187,673. Patented Feb. 20, 1877.

Fig. 1.

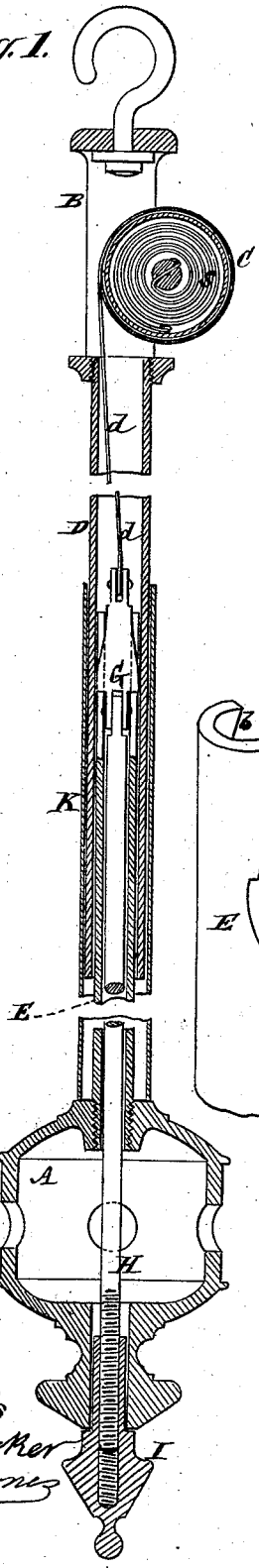


Fig. 3.

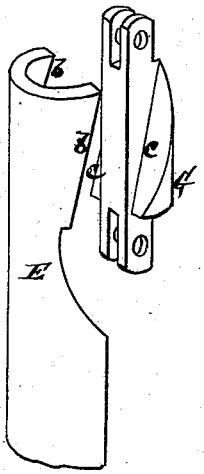
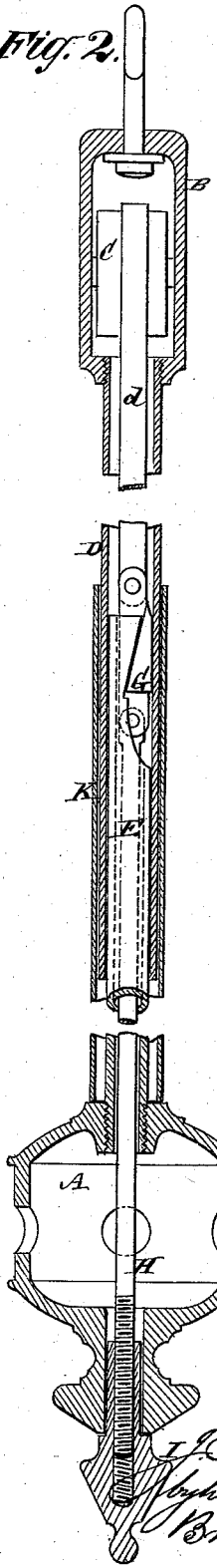


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JACOB ROBERTS, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN EXTENSION DEVICES FOR CHANDELIERS.

Specification forming part of Letters Patent No. **187,673**, dated February 20, 1877; application filed January 17, 1877.

To all whom it may concern:

Be it known that I, JACOB ROBERTS, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Extension Device for Chandeliers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

This invention, which is more especially designed for chandeliers carrying oil or other lamps, consists in a combination of an outer tube, an inner tube or slide having inclined faces, and an incline-faced dog controlled by a counterbalance weight or spring, and having an attached rod or handle, said dog operating to secure the inner tube or slide in any suitable position within the outer tube, against any movement either in an upward or downward direction.

In the accompanying drawing, Figures 1 and 2 are vertical sections, in planes at right angles with each other, of the stem and body portion of a chandelier having my improved extension devices applied. Figs. 3 are views, in perspective, of the inner tube, in part, having inclined faces and the incline-faced dog which locks therewith.

A is the center portion or body of the chandelier, from which the arms that carry the lamps or lights project. B is the pendent or other head of the chandelier, carrying a spring-drum, C, which serves to counterbalance, or approximately so, the extension portion of the chandelier; or one or more counterbalance-weights may be substituted for the spring-drum. D is an outer tube, attached at its upper end to the under side of the head B. E is an inner tube, secured at its lower end to the center portion or body A, and fitting freely but snugly within the outer tube D. This inner tube is reduced on one side at its upper end, to form inclined faces *b b*. G is a dog, also arranged to freely fit within the outer tube D, and constructed with inclined faces *c c*, which taper upward and in a reverse direction to the inclined faces *b b*, against which they are brought to bear when holding the sliding or extension portion of the chandelier in position. This incline-faced dog is attached at its upper end, by cord, chain, or strap *d*, with the spring-drum C, and has secured to its lower end a rod or handle, H, which passes loosely down within the inner tube E, and through the center piece or body A, beneath which it is secured in an adjustable manner by a regulating screw-nut, I. K is an outer casing or covering-tube, which may either rest loosely on or be rigidly attached at its lower end to the top of the center portion or body A.

The operation is as follows: The body A, or rising-and-falling portion of the chandelier, is kept raised at any desired elevation which may be given to it by the binding or bearing of the tube E in rear of its inclined faces *b b*, and the binding or bearing of the back of the dog G against the inner surface of the outer tube D, as the weight of the sliding portion of the chandelier and counterbalancing action of the spring-drum C bring the inclined faces *b b* and *c c* in close contact, or lock with each other. To lower the chandelier, it is only necessary to draw down by the nut I on the rod H, so as to release the dog G from its binding or bearing action against the inclined faces *b b* of the tube E, when the latter, with its attachments, will descend by their own weight, or may be readily drawn down. Upon releasing hold of the nut I, the spring-drum C draws on the dog G, to lock the tube E again within or against the outer tube D. To raise the chandelier, first liberate the dog G, by pressing with the finger down on the nut I, and then, and while continuing the downward pressure on the nut, pressing slightly upward on the center portion or body A, when the dog G will follow up the inclined faces *b b* of the tube E, and on ceasing to lift on the body A the lock is again established of the inner tube E with the outer tube D, by the action of the inclined faces *b b* and *c c* of said inner tube and the dog G

The screw adjustment of the nut I on the rod H provides for taking up slack in the devices which serve to lift from above the dog G, as wear or other circumstances may require.

The suspending-strap *d* may be, and is represented as, made of a flat band of spring-steel, which, in its normal condition, is coiled, and so exerts a constant tendency to draw up

the dog G and lock the chandelier, said strap or coiled spring *d* operating in conjunction with the spring *s* of the mainspring-drum C.

I claim—

1. The combination of the outer tube D, the inner slide or tube E, having one or more inclined faces, *b b*, the incline-faced dog G, controlled by a counterbalance weight or spring, and the rod H, substantially as and for the purpose or purposes herein set forth.

2. The combination of the coiled spring *d* with the mainspring-drum C, the incline-faced dog G, the inner slide or tube E, having one or more inclined faces, *b b*, and the outer tube D, substantially as specified.

JACOB ROBERTS.

Witnesses:
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