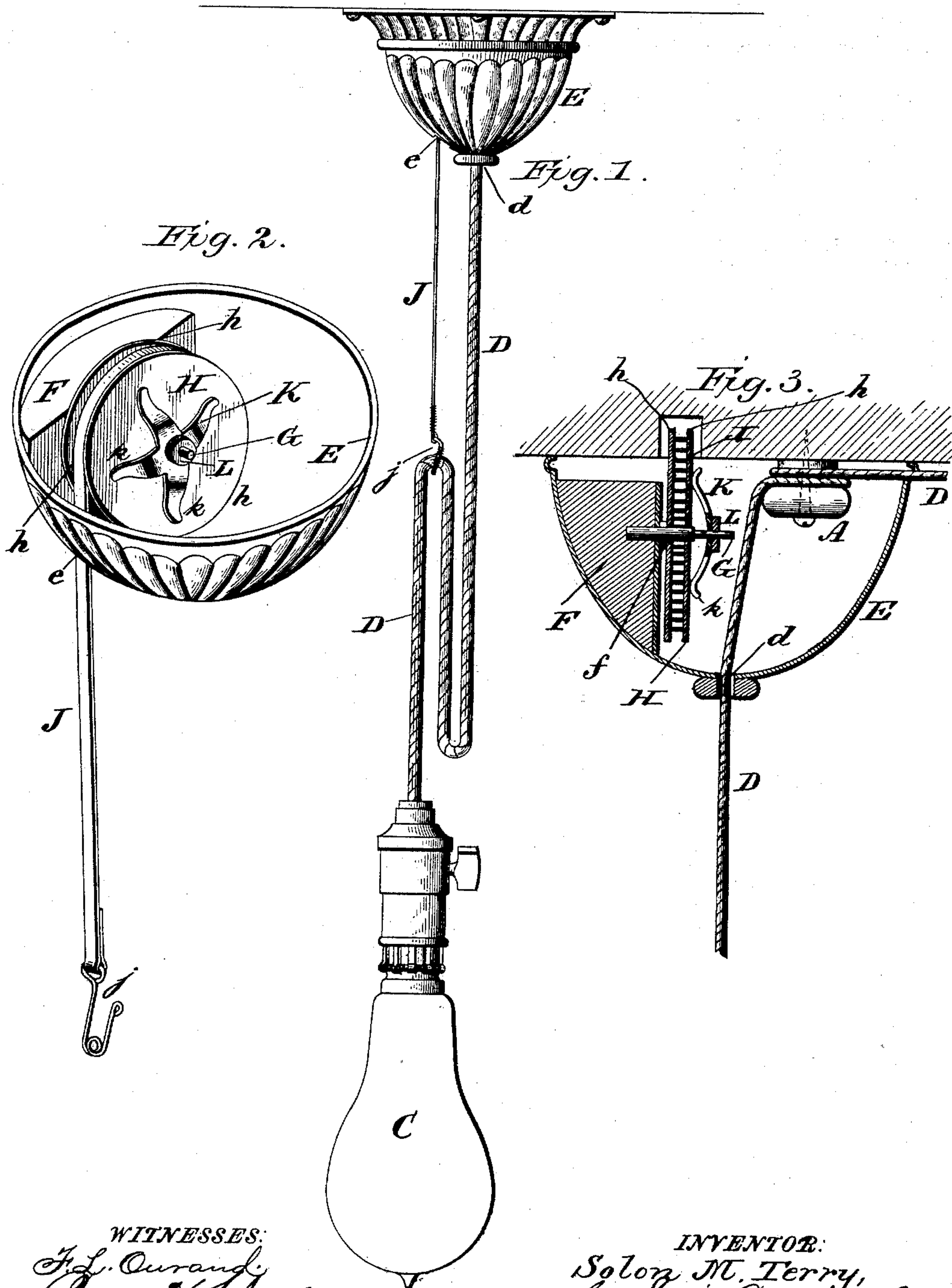


(No Model.)

S. M. TERRY.  
DEVICE FOR RAISING AND LOWERING SUSPENDED ELECTRIC LIGHTS.  
No. 468,159.

Patented Feb. 2, 1892.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

SOLON M. TERRY, OF PITTSFIELD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO CORNELIUS E. TERRY, OF SAME PLACE.

DEVICE FOR RAISING AND LOWERING SUSPENDED ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 468,159, dated February 2, 1892.

Application filed May 4, 1891. Serial No. 391,450. (No model.)

*To all whom it may concern:*

Be it known that I, SOLON M. TERRY, a citizen of the United States, and a resident of Pittsfield, in the county of Berkshire and State of Massachusetts, have invented certain new and useful Improvements in Devices for Raising and Lowering Suspended Electric Lights; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation illustrating the arrangement and operation of my device for raising and lowering electric lamps. Fig. 2 is a perspective view of the inside of the ceiling box or casing containing the adjusting-drum and its attachments, and Fig. 3 is a transverse sectional view of the same on a vertical plane through the middle.

Like letters of reference denote corresponding parts in all the figures.

This invention relates to devices for adjusting the elevation of suspended electric lights—such, for example, as incandescent lamps; and it consists in the combination, with the lamp and its suspension and conducting cords or wires, of an adjustable spring-actuated tape, cord, or wire wound upon a spring-barrel and adapted to maintain the weight of the lamp at any given point, substantially as hereinafter more fully described and claimed.

Incandescent electric lamps, as is well known, are usually suspended from the ceiling by means of their conducting-wires, which also act as suspension-cords and are of a given length; but it frequently becomes desirable to either raise or lower the lamp, and this, in the absence of any means or mechanism for that purpose, is not readily affected.

The object of my invention is, therefore, to provide means for the easy and convenient raising or lowering of the lamp without having to resort to the awkward and inconvenient expedient of knotting or tying up the insulated conducting-wires in order to shorten them and thus raise the lamp, and then un-

tying them again when it is desired to lower the lamp to its normal position or elevation.

Referring to the accompanying drawings, the letter A designates the usual ceiling-rosette, from which the lamp C is suspended by the conducting and suspension cords D. Inclosing this rosette is a box E, preferably of thin sheet metal and of any suitable ornamental shape, having an aperture *d* at its bottom for the passage of the cords or wires D, and also provided on one of its inner sides with a block or bearing F, into the flat inner side of which is inserted a pin or journal G, upon which the spring-actuated drum or barrel H revolves. A metallic anti-friction washer *f* is placed upon the pin G between the flat side of block F and the adjacent side of the drum H, which latter is of the usual construction, consisting of a circular hollow drum or barrel containing a coiled spring I and provided with a central aperture for the insertion of the pin G, upon which it revolves. Both sides of the drum are extended to form circular flanges *h*, between which the tape J is wound around the periphery of the drum. This tape is preferably a flexible flat steel band of suitable length, which is fastened at one end to the periphery of the drum, while its other or free end projects out through a narrow slot *e* in box E, and is provided with a hook *j* wound with silk or covered with rubber or other soft insulating material to prevent abrasion of the cords or wires D.

It is obvious that instead of a flat tape a cord or wire may be substituted and used in the same manner, although I prefer to use a flat steel tape as taking up less room and being very strong and durable.

If desired and in order to regulate the tension of the spring drum or barrel, the latter may be provided with a brake K, placed upon the pin or journal G on the outside of the drum. This brake may be of any approved construction, and in the present instance I have shown it as consisting of a convex plate having four arms bent inwardly, so as to press against the side of the drum, the extreme outer ends of said arms being bent outwardly again, as shown at *h*, to prevent the arms from binding against the sides of the drum



as the latter revolves. The projecting outer end of the journal G is screw-threaded to receive a milled nut L, bearing against the convex middle part of plate K, so that by adjusting this nut as against the plate the degree of pressure of the arms against the drum may be regulated at will. I desire it to be understood, however, that I do not confine myself to any particular construction of this brake, and this may even be dispensed with altogether, if desired.

From the foregoing description, taken in connection with the drawings, the operation of this device will readily be understood. The suspension-cords D are hooked into hook j at any convenient point, forming an elongated loop, so that the lamp may be raised or lowered without interfering with the cords. When a brake is used, the regulating-nut L is adjusted so as to cause sufficient pressure of the said brake K against the drum to balance the weight of the lamp, so that the latter will stay in its adjusted position without any other fastenings or adjusting devices.

While I prefer to locate the spring-barrel inside of a box inclosing, also, the ceiling-rosette, yet it will be obvious that, if desired,

the spring-barrel may be used without the inclosing box E by fastening it simply to the under side of the ceiling in proximity to the rosette.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination of the lamp C, flexible suspension-cord D, spring-barrel H, and flexible connection J, constructed to be attached to a bight of the suspension-cord, substantially as and for the purpose shown and set forth.

2. The combination of the rosette-box E, suspension-cords D, lamp C, spring-barrel H, having flanges h, tape J, projecting through a slot in the box and having a hook at its free end, convex brake-plate K, and regulating-nut L, all constructed and combined to operate substantially in the manner and for the purpose herein shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

SOLON M. TERRY.

Witnesses:

ROBT. W. ADAM,

WILLIAM L. ADAM.