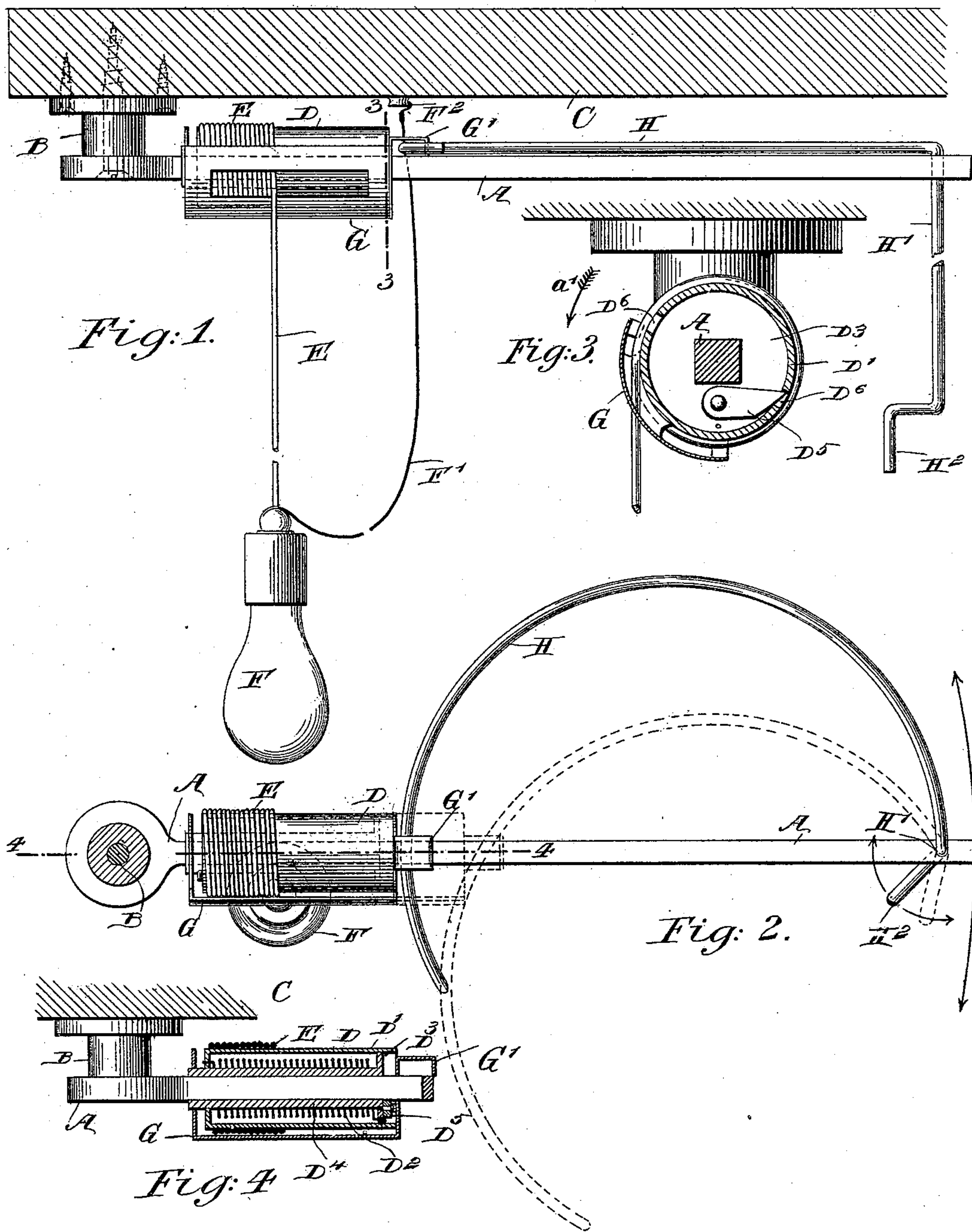


(No Model.)

D. AITCHISON.  
LAMP HANGER.

No. 538,095.

Patented Apr. 23, 1895.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

DAVID AITCHISON, OF EASTON, PENNSYLVANIA.

## LAMP-HANGER.

SPECIFICATION forming part of Letters Patent No. 538,095, dated April 23, 1895.

Application filed May 31, 1894. Serial No. 513,024. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID AITCHISON, of Easton, in the county of Northampton and State of Pennsylvania, have invented a new and Improved Lamp-Hanger, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved lamp hanger, which is simple and durable in construction, more especially designed for supporting incandescent electric lamps, and arranged to permit of conveniently raising or lowering the lamp, or moving it sidewise to the desired position.

The invention consists in certain parts and details, and combinations of the same, as will be hereinafter fully described and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement as applied. Fig. 2 is a plan view of the same, with the pivot for the rod in section. Fig. 3 is an enlarged transverse section of the same, on the line 3—3 of Fig. 1; and Fig. 4 is a sectional side elevation of the improvement, on the line 4—4 of Fig. 2.

The improved lamp hanger is provided with a square arm A, extending horizontally, and held at one end on a vertically disposed pivot B, secured to a ceiling C or other support. On this arm A is held to slide a spring actuated drum D, on which winds a cord or rope E, having one end extending downward to support a lamp F, supplied by a wire F' leading from the insulator F<sup>2</sup> attached to the ceiling C.

The drum D is provided with an exterior shell D', on the peripheral surface of which the cord E winds, and this shell D' has attached at one end a spring D<sup>2</sup> coiled within the shell D', and fastened with its outer end on a flange D<sup>3</sup> of a sleeve D<sup>4</sup> arranged within the shell D', and fitted to slide longitudinally on the arm A. The shell D' is mounted to rotate at one end on the annular flange D<sup>3</sup>, and its other end is mounted to turn on the exterior surface of the sleeve D<sup>4</sup>, as will be readily understood by reference to Fig. 4. On the face of the annular flange D<sup>3</sup> of the sleeve D<sup>4</sup> is pivoted the pawl D<sup>5</sup>, see Fig. 3, adapted

to engage one of a series of apertures D<sup>6</sup> formed in the shell D' at its open end, as indicated in the said Fig. 3. Now, it will be seen, that when the operator pulls on the lamp F, the cord E unwinds from the shell D', and consequently rotates the latter in the direction of the arrow a', see Fig. 3, so that the shell D' winds up the spring D<sup>2</sup>, and when the lamp F has been lowered to the desired position, and the operator releases the pull on the lamp, then the pawl D<sup>5</sup> engages one of the apertures D<sup>6</sup>, to lock the shell D' and the wound-up spring in place on the sleeve D<sup>4</sup>, which latter is prevented from rotating on account of being fitted on the square arm A.

When it is desired to raise the lamp F, the operator slightly pulls the lamp downward so as to disengage the pawl D<sup>5</sup> from the corresponding aperture D<sup>6</sup>, and then releasing the lamp F suddenly, the spring D<sup>2</sup> will rotate the shell D' to wind up the cord E, it being understood that the rapid revolving of the shell D' prevents the pawl D<sup>5</sup> from engaging one of the apertures D<sup>6</sup> until the speed of the said shell slackens.

The downwardly-extending part of the cord E passes through a guide G, attached at one end to the sleeve D<sup>4</sup>, and at its other end fitted loosely on the arm A. The guide G is formed with a longitudinal slot and extends throughout the length of the shell D', as plainly illustrated in the drawings. The outer end of the guide G serves to close the open end of the shell D', and is also formed with a loop G' engaged loosely by a segmental arm H provided at its outer end with a downwardly extending shaft H', mounted to turn in the outer end of the arm A. On the lower end of the shaft H' is formed a crank arm H<sup>2</sup> under the control of the operator, to permit the latter to turn the said shaft H' to swing the segmental rod H to move the spring-actuated drum D longitudinally on the arm A. Thus by the arrangement described, the lamp can be raised or lowered at will as desired and can be moved sidewise to the desired position, by the operator turning the crank arm H<sup>2</sup>.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A lamp hanger, comprising a horizontal arm, a drum fitted to slide on said arm and



carrying a cord for supporting a lamp, and means for adjusting the drum on the arm, substantially as described.

2. A lamp hanger, comprising an arm 5 mounted to swing horizontally, a spring-actuated drum held to slide on the said arm and carrying a cord for supporting a lamp, and means for imparting a sliding motion to the said drum on the said arm, substantially as 10 shown and described.

3. A lamp hanger, comprising an arm mounted to swing, a spring-actuated drum held to slide on the said arm, a guide moving with the said drum and adapted to guide the 15 lamp-supporting cord winding on the said drum, a segmental arm engaging a loop on

the said drum, and a shaft having a crank and journaled in the said arm and carrying the said segmental arm, substantially as shown and described. 20

4. In a lamp hanger, the combination with a pivoted arm, of a shaft journaled in the free end of the said arm and carrying a crank and a segmental arm, and a spring-actuated drum 25 mounted to slide on the pivoted arm and engaged by the said segmental arm, substantially as shown and described.

DAVID AITCHISON.

Witnesses:

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