No. 669,283. Patented Mar. 5, 1901.

T. LINDSAY.

LAMP HANGER.

(Application filed Aug. 6, 1900.)

(No Model.)

Fig. 3.



Fig. 2.

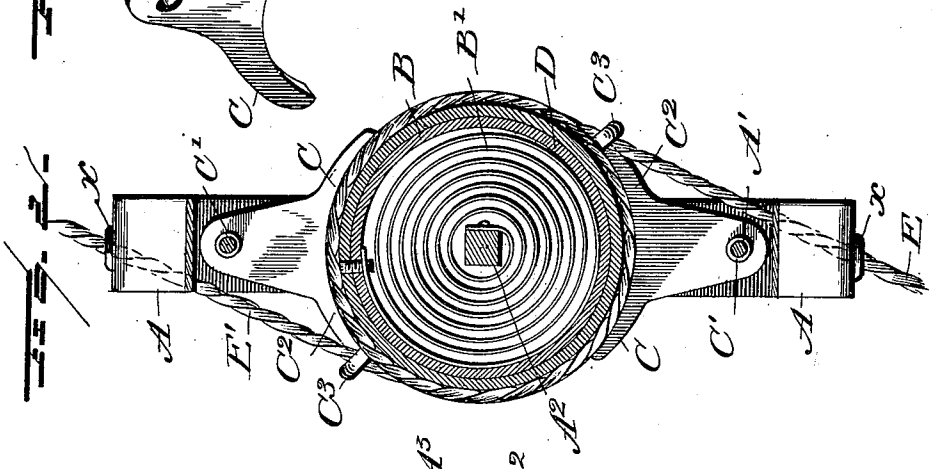
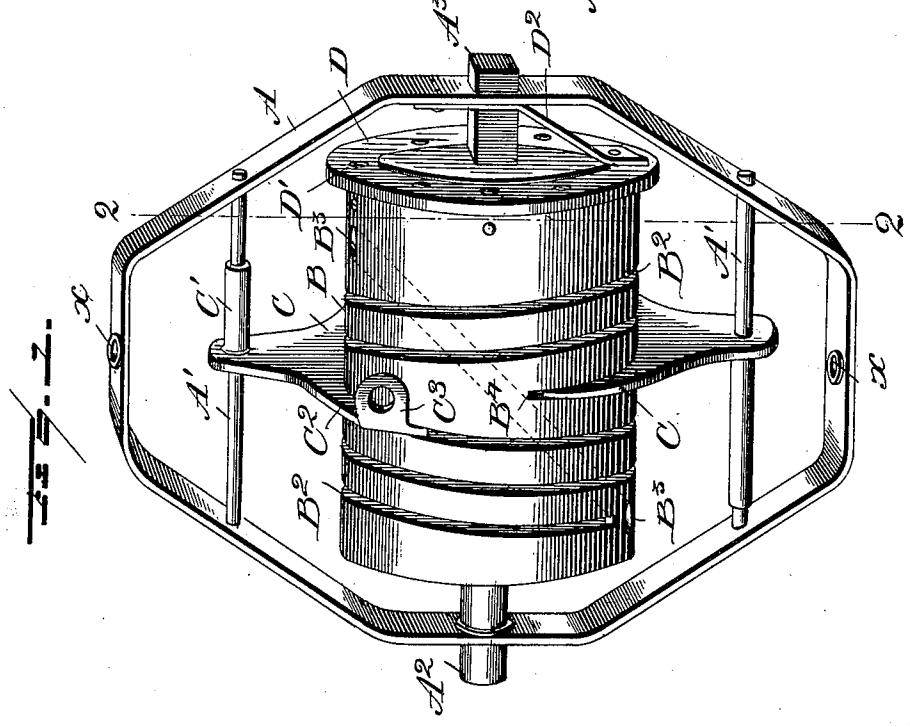


Fig. 1.



WITNESSES:

L. C. Gills

Alfred T. Stage.

INVENTOR:

Thomas Lindsay,

BY E. B. Stocking

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS LINDSAY, OF WILMERDING, PENNSYLVANIA.

LAMP-HANGER.

SPECIFICATION forming part of Letters Patent No. 669,283, dated March 5, 1901.

Application filed August 6, 1900. Serial No. 26,087. (No model.)

To all whom it may concern:

Be it known that I, THOMAS LINDSAY, a citizen of the United States, residing at Wilmerding, in the county of Allegheny, State of Pennsylvania, have invented certain new and useful Improvements in Lamp-Hangers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to lamp-hangers, and particularly to a spring-drum adapted to be used with a drop-light, so that the same may be adjusted vertically to any desired degree.

The invention has for one object to provide means whereby the cord or supporting device may be guided in its winding upon the drum, so as to prevent overlapping or entanglement of the cords leading to and from the drum.

A further object is to provide a drum having a track to control the movement of said guiding device, so that the same will always wind in a regular and predetermined path upon the drum.

Other objects and advantages of the invention will hereinafter appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 represents a perspective of the invention with the inclosing case removed. Fig. 2 is a vertical section on line 2 2 of Fig. 1, and Fig. 3 is a detail perspective of the guiding device.

Like letters of reference indicate like parts throughout the several figures of the drawings.

The letter A represents a frame which may be of any suitable configuration and in the finished condition of the article may be inclosed by any desired form of casing. This frame has guide-apertures x and is provided at its opposite ends with cross-bars A′ and centrally with a spindle A^2, upon which a winding-drum B is mounted. One end A^3 of this spindle is rectangular in shape and fits a corresponding opening in the frame, thus holding the spindle against rotation and permitting the rotative movement of the drum thereon. This drum is provided with a spring B′, connected at one end to the spindle A^2 and at the opposite end to the drum, so that the rotative movement of the drum in one direction places this spring under tension, which provides means to restore the drum to its initial position. The periphery of the drum B is provided with a series of tracks B^2, which may be of any desired character and are adapted to engage with guide-arm C, supported in any desired manner from the cross-bars A′. As illustrating one form of such support, I have shown the arm C as provided with a sleeve C′, fitting upon a cross-bar A′, and with an opposite arm C^2, having at its end a loop or eye C^3, through which the supporting-cord for the lamp passes. The tracks or grooves B^2 upon the periphery of the drum B extend from the ends thereof toward the center in oppositely-disposed spiral paths, so that the winding movement of the supporting cord or device begins at the end of the drum and extends toward the center thereof, thus obviating any possibility of the cord passing over the end of the drum. The drum B is also provided with a diagonally-disposed aperture B^3, extending from one side to the other, through which the supporting-cord is passed before being wound upon the drum. Attention is here called to the fact that in this invention the cord, which in the incandescent lamp will contain the conducting-wires, is wound upon the periphery of the drum and not in the tracks thereof, whereby all danger of injuring the insulating covering to the wires is removed, as no frictional wear is placed upon the same. This aperture B^3 is so disposed as to bring the supporting-cord at the opposite ends of the drum, so that the winding in opposite directions may extend from the ends inward toward the center, which is accomplished by the use of the guide-arms C, having the eyes C^3, through which the cord passes.

For the purpose of holding the drum in any of its adjusted positions a head D is provided at one end having therein sockets D′ adapted to coöperate with a spring-pawl D^2, which by seating in the sockets D′ will retain the drum in the desired position. This pawl D^2 is suitably affixed to the frame A to coöperate with the head D. It will also be noted that the grooves B^2 are provided at their ends with stop portions B^4, against which the guide-arms C will abut in their movement, and thus

limit the extent of the winding movement of the drum, while the eyes C^3, extending from these arms, are disposed inwardly, so as to act as a positive guard against the accidental displacement of the cord from the surface of the drum at the ends thereof. In the illustration of the invention given herewith the drum is applied to a conducting-cord for an incandescent lamp through which the proper wires extend.

In the operation of the invention it will be seen that when it is desired to lower the lamp from its elevated position it is only necessary to place a downward pressure or draft upon the cord E thereof, while the opposite end E′ of the conducting-cord is suitably secured at a fixed point, which causes the conducting-cord to unwind from the drum, and the latter is also fed downward for a part of the extent of movement obtained by the lamp. By holding the cord at the proper point the spring-pawl D^2 may be engaged with a socket D′ and the parts thus held in position. When it is desired to rewind the lamp and elevate the same, the pressure upon the cord will disengage the pawl from the socket and permit the winding of the opposite ends E and E′ of the conducting-cord upon the drum from the ends thereof toward the center. In order to positively assure this winding upon the surface of the drum in a regular path and prevent overlapping or entanglement of the cord, the guides are provided, which by means of their positive travel, imparted by the ways or tracks upon the drum, carry the cord in the proper path until it reaches the center of the drum and is wound upon the same to any desired extent.

It will be obvious that changes may be made in the details of construction and configuration without departing from the spirit of the invention as defined by the appended claims.

Having described my invention and set forth its merits, what I claim as new, and desire to secure by Letters Patent, is—

1. A lamp-hanger comprising a spring-actuated drum provided with tracks or ways upon its periphery, a supporting-cord wound thereon, a guide adapted to move longitudinally of the drum and provided with an arm engaging said tracks or ways, and an eye carried by said arm adapted to guide said cord in its winding movement; substantially as specified.

2. A lamp-hanger comprising a spring-actuated drum provided with tracks or ways upon its periphery, a supporting-cord wound thereon, a guide adapted to move longitudinally of the drum and provided with an arm engaging said tracks or ways, an eye carried by said arm adapted to guide said cord in its winding movement, and a frictional device for holding said drum in its adjusted position; substantially as specified.

3. In a lamp-hanger, a drum provided with tracks or ways upon its periphery, a supporting-cord secured to said drum and adapted to wind in opposite directions thereon, a cross-bar at opposite sides of said drum, a guide adapted to move upon said cross-bar and provided with an arm to engage said tracks or ways, and a guide-eye to engage a supporting device to be wound upon said drum; substantially as specified.

4. In a lamp-hanger, a drum provided with tracks or ways upon its periphery, a supporting-cord secured to said drum and adapted to wind in opposite directions thereon, a cross-bar at opposite sides of said drum, a guide adapted to move upon said cross-bar and provided with an arm to engage said tracks or ways, a guide-eye to engage a supporting device to be wound upon said drum, a head at one end of said drum having sockets thereon, and a spring-pawl supported by the frame of said drum and adapted to engage said sockets; substantially as specified.

5. In a lamp-hanger, a frame having a central spindle secured against rotation therein, a drum rotatable upon said spindle, a spring connected to said spindle and drum, a series of tracks or ways upon the periphery of said drum, a guiding device carrying a guide-eye and adapted to travel in said tracks or ways, and a supporting device adapted to pass through said eye and to be wound upon said drum; substantially as specified.

6. A lamp-hanger comprising a frame, a spindle secured therein, a drum rotatable upon said spindle and provided with a diagonal aperture extending between the opposite end portions of said drum, tracks or ways upon the periphery of said drum, a restoring-spring connected to said drum and spindle, cross-bars at the opposite sides of said drum, guiding devices slidably mounted upon said bars and adapted to engage said tracks or ways, guide-eyes extending from said guides, and a supporting-cord adapted to pass through said eyes and the aperture in said spindle; substantially as specified.

7. A lamp-hanger comprising a frame, a spindle secured therein, a drum rotatably mounted upon said spindle and provided with an aperture extending to the opposite end portions thereof, tracks or ways upon the periphery of said drum extending spirally inward from the opposite ends thereof, cross-bars extending parallel to the drum at opposite sides thereof, a guide provided with a sleeve to move on said bar, an arm to engage the tracks or ways upon said drum, a guide-eye upon said guide adapted to embrace a supporting-cord; substantially as specified.

8. A lamp-hanger comprising a frame, a spindle secured therein, a drum rotatably mounted upon said spindle and provided with an aperture extending to the opposite end portions thereof, tracks or ways upon the periphery of said drum extending spirally inward from the opposite ends thereof, cross-bars extending parallel to the drum at opposite sides thereof, a guide provided with a sleeve to move on said bar, an arm to engage

the tracks or ways upon said drum, a guide-eye upon said guide adapted to embrace a supporting-cord, a spring secured to said spindle and drum, a head at one end of said drum provided with recesses, and a spring-pawl carried by the frame and adapted to engage said recesses; substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS LINDSAY.

Witnesses:
H. C. MITCHELL,
THOS. MCBRATNEY.