

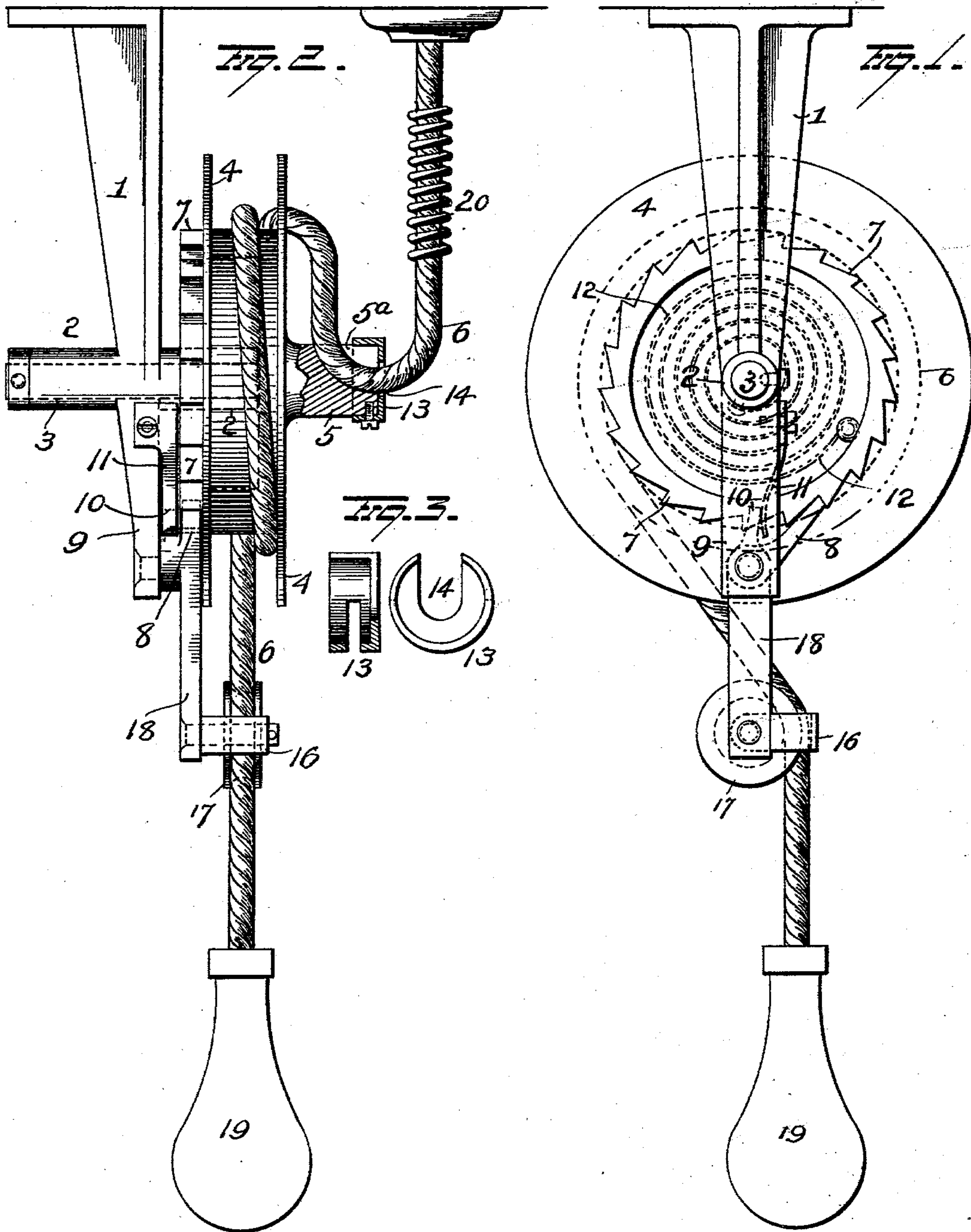
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C. W. RILEY.  
SUPPORTING DRUM FOR ELECTRIC LIGHTS.

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NO MODEL.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

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## SUPPORTING-DRUM FOR ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 745,670, dated December 1, 1903.

Application filed January 16, 1903. Serial No. 139,303. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES WILLIAM RILEY, a resident of Lynchburg, in the county of Campbell and State of Virginia, have invented certain new and useful Improvements in Supporting - Drums for Electric Lights; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in supporting-drums for electric lights, the object of the invention being to provide an improved device of this character which can be secured to the ceiling or other fixed support and permit the raising and lowering of an incandescent or other lamp and hold it at any height desired.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view illustrating my improvements. Fig. 2 is a front view. Fig. 3 illustrates the cap 13.

1 represents a supporting-arm to be rigidly secured to the ceiling or other fixed support and is provided with an elongated bearing 2 for the journal 3 of my improved drum 4. The journal 3 is on one side only of the drum and is secured in bearing 2 by a clamping-ring. This leaves the opposite side of the drum, which has a central cylindrical post 5, free for the attachment, or rather entrance, of the electrical wires or conductors 6.

The side of the drum adjacent to bearing 2 has a ratchet-wheel 7 secured thereon, and this ratchet-wheel is engaged by a pawl 8, pivoted to a depending arm 9 on bearing 2. The pawl is made with an upwardly-projecting finger 10, against which the free end of a flat spring 11, secured to arm 9, bears to hold the pawl in engagement with the ratchet-teeth. A coiled spring 12 is housed in drum 4 and secured at one end to the drum and at its other end to bearing 2 and is adapted to turn the drum in a direction to wind the wires thereon and elevate the lamp.

The post 5 is made at its outer end with a

longitudinal groove or recess 5<sup>a</sup> deep enough to permit the wires 6 when placed therein to lie in alinement with the axis of the drum. A cap 13 fits this end of post 5 and is slotted, as shown at 14, to aline with the recess in post 5 and permit the wires to be readily placed therein. When the cap is turned partially to move its slot out of alinement with the recess in the post and locked in such position by a set-screw, it will effectually hold the wires in this position. The wires after passing through this groove or recess 5<sup>a</sup> enter a notch in one wall of drum 4 and wind on the drum and then extend downward through a bail 16 to hold the wires against a pulley 17, carried by a depending arm 18 on pawl 8, and at the lower end of the wires the lamp 19 is supported. It will thus be seen that by so constructing my improvements when a downward pull is applied to the lamp or the wires below pulley 17 pawl 8 will be drawn out of engagement with the ratchet-teeth and held out of such engagement until resistance is removed, when the pawl will be moved into engagement with the ratchet-teeth by the spring 11 and hold the drum in the position to which it is adjusted.

To prevent knotting of the wires above the drum due to the turning thereof, I may place a coiled spring 20 thereon to resist the twisting action and tend to keep the wires straight.

The operation of my improvements is as follows: To lower the lamp, the operator grasps the same or the wire above it and pulls downward, thus turning drum 4 and winding up spring 12, the pawl 8 riding over the teeth and holding the drum against reverse movement. To elevate the lamp, the operator exerts a sufficient downward pull on the lamp to move the arm 18 to one side and move the pawl 8 out of engagement with the ratchet-wheel 7, and by maintaining a sufficient resistance to the upward movement of the lamp to hold the pawl out of the path of the ratchet-teeth the spring 12 will turn the drum and cause the wires or conductors to be wound thereon, and when all resistance is removed the pawl will spring into the ratchet-teeth and hold the drum in such position.

By connecting the upper section of the wires at the axis of the drum as above explained the upper wire-section will not wind



on the drum, and this enables me to provide a stationary support for the drum, and I can place my improvements in position on wires already hung without disconnecting any of the working parts or interfering with the light, except where very long wires are in use and a large adjustment of the lamp is desired, when it is necessary to employ some means, such as above explained, for preventing knotting of the wire due to an excessive winding of the drum.

A great many changes might be made in the general form and arrangement of the parts described without departing from my invention, and hence I do not confine myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. The combination with a stationary support, and a drum having a journal on one side mounted to revolve in a bearing in said fixed support, of a central post on the opposite side of said drum through the axis of which the electric wire is passed and wound on the drum.

2. The combination with a stationary support, and a drum mounted to turn thereon, of a central post on one side of the drum having a recess extending into its axis for the reception of an electric wire or wires, to be wound on the drum, and carrying the lamp at its other end, and means for holding the wires in the axis of the post.

3. The combination with a fixed support and a drum mounted to turn thereon, of a central

post on one side of the drum having a longitudinal recess therein to receive the electric wires, a cap to hold the wires in said recess, said wires wound on the drum and supporting a lamp, a spring to turn the drum in one direction, ratchet mechanism to hold the drum in any position, and means operated by the wires depending from the drum, for releasing the ratchet mechanism and permitting the spring to turn the drum.

4. The combination with a stationary support, a drum mounted to turn thereon, and a spring to turn the drum in one direction, of a central post on one side of the drum having a longitudinal recess therein to receive the electric wires before they are wound on the drum, a slotted cap to secure the wires in the recess, means on the wires to prevent twisting thereof when the drum turns, and a ratchet mechanism to hold the drum in any position to which it is moved.

5. The combination of a drum, a stationary support therefor, a flexible conductor, a separate stationary support therefor, said conductor connected with one side of said drum in line with the axis of the latter and then wound on said drum, and means connected with said conductor between its fixed support and its connection with the drum, acting to prevent the twisting and consequent knotting of the conductor when the drum is rotated.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES WILLIAM RILEY.

Witnesses:

C. A. CALHOUN, Jr.,  
A. S. HESTER.