

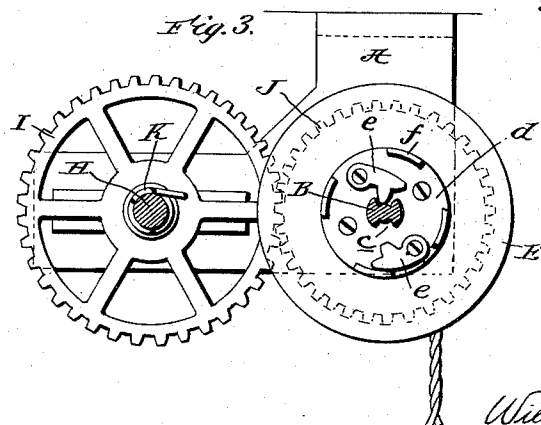
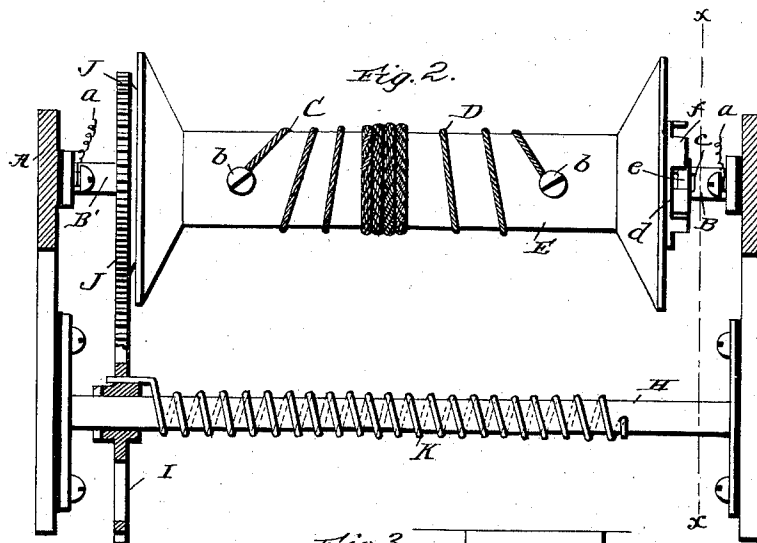
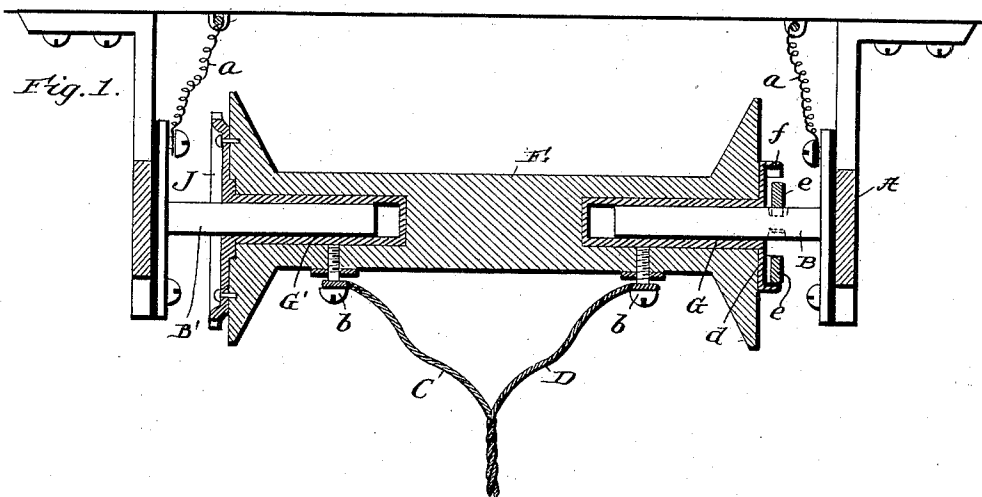
No. 609,972.

Patented Aug. 30, 1898.

W. F. MURPHY.
HANGER FOR ELECTRIC LAMPS.

(Application filed Dec. 21, 1897.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM F. MURPHY, OF IOWA CITY, IOWA.

HANGER FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 609,972, dated August 30, 1898.

Application filed December 21, 1897. Serial No. 662,926. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. MURPHY, a citizen of the United States, residing at Iowa City, in the county of Johnson and State of Iowa, have invented certain new and useful Improvements in Hangers for Electric Lamps and other Electrical Devices; and I do 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 hangers for electric lamps and other electrical devices; and its novelty and advantages will be fully understood from the following description and claims when taken in conjunction with the annexed drawings, in which—

Figure 1 is a vertical section taken through the spool or drum of my improved hanger. Fig. 2 is a horizontal section of the hanger, taken in a plane above the spool or drum; and Fig. 3 is a vertical section taken as indicated by the dotted lines *xx* of Fig. 2.

In the drawings similar letters designate corresponding parts in all the views, referring to which—

A designates bracket-arms which are designed to be connected to the ceiling of a room or to any other suitable support.

B B' designate metallic spindles which are fixedly connected with the bracket-arms and which extend inwardly from said arms, as shown.

CD designate insulated electric wires, which are designed to be electrically connected with the filament of a lamp or other electrical device (not shown) in the ordinary manner, and E designates the spool or drum with which said wires are connected and upon which they are designed to be wound, as will be presently described. The said spool or drum E is provided in its opposite ends and longitudinal center with metallic bushings G G', which are designed to loosely receive the spindles B B', respectively, so as to permit the spool or drum to freely rotate thereon.

In the present embodiment of my invention the spindles B B' are electrically connected by wires *a* with the opposite poles of an electro-generator, (not shown,) and the metallic screws *b*, which connect the wires C D with the spool E, impinge against the metallic

bushings G G' of the sockets F, whereby it will be seen that the wires C D will at all times be electrically connected with the wires *a* and that there is no liability of such electrical connection being interrupted or affected by the rotation of the spool.

For the purpose of enabling the operator to adjustably fix the lamp or other electrical device connected to the ends of wires C D at various points I prefer to employ the following-described construction:

H designates an arbor which is connected to but insulated from the bracket-arms A and is preferably arranged in the same horizontal plane as the spindles B B'.

I designates a peripherally-toothed wheel which is loosely mounted on the arbor and is arranged to mesh with a peripherally-toothed flange J, which I provide the bushing G' with at its outer end, and K designates a coiled spring which surrounds the arbor H and is connected at one end to the arbor and at its opposite end to the wheel I. This spring K when the wires C D are drawn off the spool and said spool is rotated will be contracted, and when said wires C D are released will be expanded and through the medium of the gears I J will rotate the spool, so as to rewind the wires C D thereon.

The spindle B is provided with seats *c*, Fig. 3, and the bushing G with a flange *d* at its outer end, which flange serves for the connection of pawls *e* and has stops to limit the outward movement of the pawls.

In virtue of this construction it will be seen that when the person operating the hanger draws upon the wires C D the spool E will be free to rotate and pay off the wires. When, however, a sufficient length of wire is drawn off the spool and the lamp or other device is in the position desired, it may be secured in such position by the operator holding the wires momentarily, so as to permit one of the pawls *e* to drop into its seat *c* in the spindle B and fix the spool against rotation. Also when it is desired to wind a portion of the wires C D on the spool and move the lamp nearer the hanger it is simply necessary for the operator to draw upon the wires C D, which will remove the uppermost pawl *e* from its seat *c*, and then quickly slacken the said wires C D, which will place the spring K in action and

enable it by means of the gear to rotate the spool rapidly and thereby by reason of centrifugal action hold the pawls out of the seat *c* until the wires C D are again placed under tension, when the uppermost pawl will drop into the seat and fix the spool against rotation and the lamp or other electrical device on the wire C D in the position desired.

It will be appreciated from the foregoing that notwithstanding its simplicity my improved hanger permits of the lamp or other electrical device on the wires C D being fixed at any distance from the hanger within the length of the said wires C D, and this without any danger of the circuit which is supplied to the lamp or other electrical device being interrupted, which is an important advantage.

Having thus described my invention, what I claim is—

1. In a hanger for electric devices, the combination of bracket-arms, metallic spindles connected with and extending inwardly from the bracket-arms and adapted to be electrically connected with the opposite poles of an electric generator, the spool or drum having metallic bushings in its opposite ends snugly receiving the spindles, wires wound on the spool and adapted to be connected with an electrical device, metallic screws connecting the wires to the spool or drum and impinging against the bushings thereof, suit-

able means for rotating the spool to wind the wires thereon, and suitable means for normally holding the spool against rotation, substantially as specified.

2. The hanger described for electric devices comprising the bracket-arms, metallic spindles connected with and extending inwardly from the bracket-arms; one of said spindles having seats, the spool or drum having metallic bushings in its ends snugly receiving the spindles and also having a gear, and pawls adapted to engage the seats of the spindle, an arbor carried by the bracket-arms, a gear mounted on said arbor and meshing with the gear on the spool or drum, a coiled spring surrounding the arbor and having one end fixed with respect to the bracket-arms and its opposite end connected with the gear on the arbor, the wires adapted to be connected with an electric device and wound on the spool or drum and the screws connecting said wires to the spool or drum and impinging against the bushings thereof, substantially as specified.

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

WILLIAM F. MURPHY.

Witnesses:

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