H. UHL & U. S. G. BARNHART. ELECTRIC DROP LIGHT HANGER.

APPLICATION FILED APR. 16, 1910. Patented Jan. 17, 1911. Henry The &
Wysses S. Grant Barnhart

By Victor J. Exams

UNITED STATES PATENT OFFICE.

HENRY UHL AND ULYSSES S. GRANT BARNHART, OF LONGMONT, COLORADO.

ELECTRIC-DROP-LIGHT HANGER.

982,222.

Specification of Letters Patent. Patented Jan. 17, 1911.

Application filed April 16, 1910. Serial No. 555,840.

To all whom it may concern:

Be it known that we, Henry Uhl and Ulysses S. Grant Barnhart, citizens of the United States, residing at 219 Emery street, 5 Longmont, in the county of Boulder and State of Colorado, have invented new and useful Improvements in Electric - Drop-Light Hangers, of which the following is a specification.

10 This invention relates to electric drop lights and has to do more particularly with a take up device on which the flexible cord conductors are adapted to wind and unwind in adjusting the lamp at any desired height.

The invention has for one of its objects to improve and simplify the construction and operation of devices of this character so as to be comparatively simple and inexpensive to manufacture, reliable and efficient in 20 use and composed of comparatively few parts.

Another object of the invention is the provision of a spring rotated spool or drum on which the cord conductors wind and un-25 wind and a novel grip or clutch device with which the drop cord or conductors are engaged to hold the light in any desired position against the tension of the spring which tends to turn the spool in a direction to take 30 up the lamp cord.

With these objects in view, and others as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of 35 parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawing, which illustrates one embodiment of the inven-40 tion;—Figure 1 is a perspective view of the device shown in use. Fig. 2 is a vertical section of the device taken in a plane coincident with the axis of the spool. Fig. 3 is a transverse section on line 3-3, Fig. 2. 45 Fig. 4 is a transverse section on line 4—4, Fig. 2. Fig. 5 is a bottom plan view of the device.

Similar reference characters are employed to designate corresponding parts throughout the several views.

Referring to the drawing, A designates the winding cr take-up device, which is adapted to be secured to the ceiling or some overhead support, and suspended from the ⁵⁵ device by a two-wire flexible cord 1 is a lamp 2, and this lamp is adjustable to any

height in order to place the light in the best

position.

The device A comprises a box or casing 3, which is fastened by screws or other devices 4 to the ceiling, and arranged in the casing is a spool or drum 5 that freely rotates on a horizontal shaft 6 which has non-circular ends disposed in grooves 7 in the inner faces of the end walls of the casing, the said 65 grooves extending to the open top of the latter so that the shaft and spool can be readily lifted out or inserted. At one end of the spool is a spiral spring 8 that has its outer end fastened at 9 to the spool and its 70 inner end fastened at 10 to the shaft, and this spring, which is housed by a cap 11. has its coils so arranged that when the lamp is pulled downwardly, the spring will be placed under tension so as to take up the 75 lamp cord whenever it is desired to raise the lamp. The lamp cord 1 winds around the spool or drum and passes out of the box through an opening 12 in the bottom of the same and the ends of the conductors that 80 form the lamp cord pass through openings 13 and 14 in the spool and are connected with collector rings 15 and 16 respectively secured to and insulated from each other on the end of the spool opposite from the wind- 85 ing spring. Arranged in the box or casing are brushes 17 and 18 which bear on the rings 15 and 16, respectively, and these brushes are connected at a point outside the casing with the wires 19 and 20 of a light- 90 ing circuit.

In order to hold the lamp cord fixed in any desired position of adjustment of the lamp, the bottom of the casing has a slot 21 leading from one side of the cord open- 95 ing 12, and into this slot the cord can be wedged to prevent the spring of the spool from winding the cord. To insure against slipping of the cord in the slot there is provided a yielding gripping jaw 22 disposed 100 at one side of the slot and so arranged as to pinch the cord between it and the opposite edge of the slot. The jaw yields downwardly so that it is merely necessary to pull downwardly on the cord and then exert a 105 lateral pull to disengage the cord from the slot and move it into the opening 12 which is large enough to permit the cord to work freely up or down. After the cord has been pulled down or taken up in placing the lamp 110 in the desired position, it is merely necessary to pull laterally on the cord in a direction to

enter it in the slot 21 where it will be held

by a yielding jaw.

From the foregoing description taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention relates, and while we have described the principle of operation of the invention, together with the device which we now consider to be the best embodiment therof, we desire to have it understood that the device shown is merely illustrative and that such changes may be made when desired as are within the scope of the claims.

What we claim as new and desire to secure

by Letters Patent is:—

1. A device of the class described including a drum, a spring tending constantly to turn the drum in a given direction, a cord conductor adapted to be wound on the drum by the expansion of the spring, a casing in which the drum is mounted, said casing having an opening in its bottom through which the cord conductor passes, there being a slot extending from one side of the opening, a jaw extending longitudinally of the slot at one side thereof and mounted to swing downwardly for permitting the cord con-

ductor to be entered in the slot, said jaw 30 being of such width as to prevent it from being drawn into the casing by the tension of the spring acting on the cord conductor, the free edge of the jaw serving to press the cord conductor against the edge of the slot 35 to prevent the cord conductor from winding

while it is disposed in the slot.

2. A device of the class described comprising a casing having an opening in its bottom and a slot leading from the opening, 40 a lamp suspending element freely movable through the opening and adapted to be engaged in the slot, a take-up means in the casing for the element, and a downwardly yielding jaw secured to the underside of the 45 bottom of the casing and extending longitudinally of the slot at one edge thereof for gripping the element between the jaw and opposite edge of the slot, said jaw terminating at the opening.

In testimony whereof we affix our signa-

tures in presence of two witnesses.

HENRY UHL. ULYSSES S. GRANT BARNHART.

Witnesses:
HORACE L. RICHARDSON,
J. M. CARAWAY.