A. W. CARROLL & E. J. FULLER.

DROP CORD EXTENSION REEL.

APPLICATION FILED MAR. 28, 1916.

1,243,039.

Patented Oct. 16, 1917.

2 SHEETS—SHEET 1.

Fig. 1

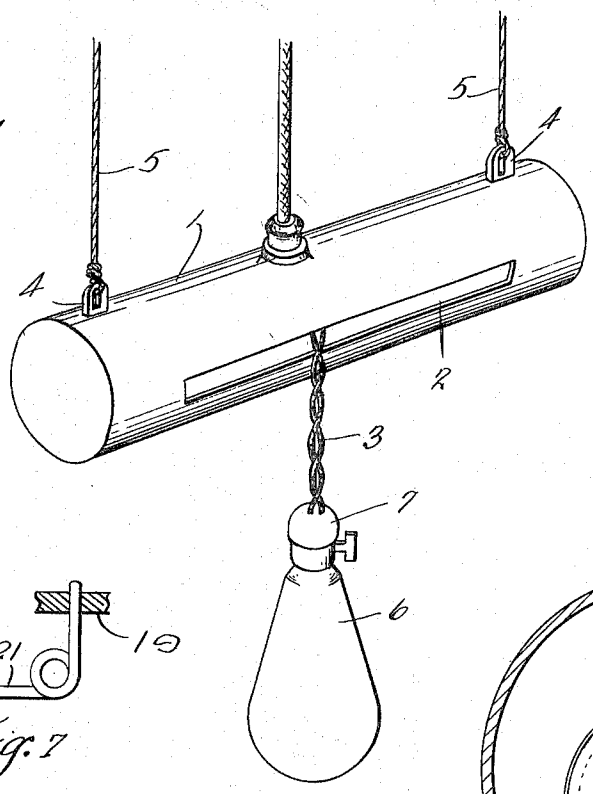


Fig. 8

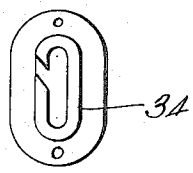


Fig. 4

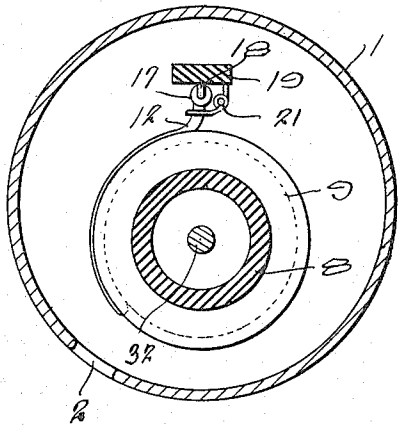
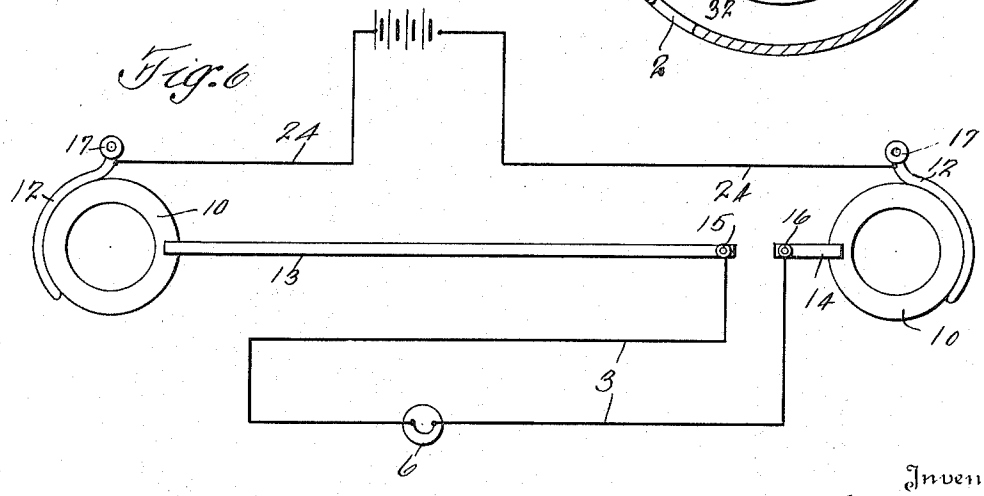


Fig. 7

Fig. 6



Witnesses

Chas. H. Tuttle.

H. C. T. Riley

Inventors

A. W. Carroll.

& E. J. Fuller.

By A. Randolph Jr.

Attorney

A. W. CARROLL & E. J. FULLER.

DROP CORD EXTENSION REEL.

APPLICATION FILED MAR. 28, 1916.

1,243,039.

Patented Oct. 16, 1917.

2 SHEETS—SHEET 2.

Fig. 2

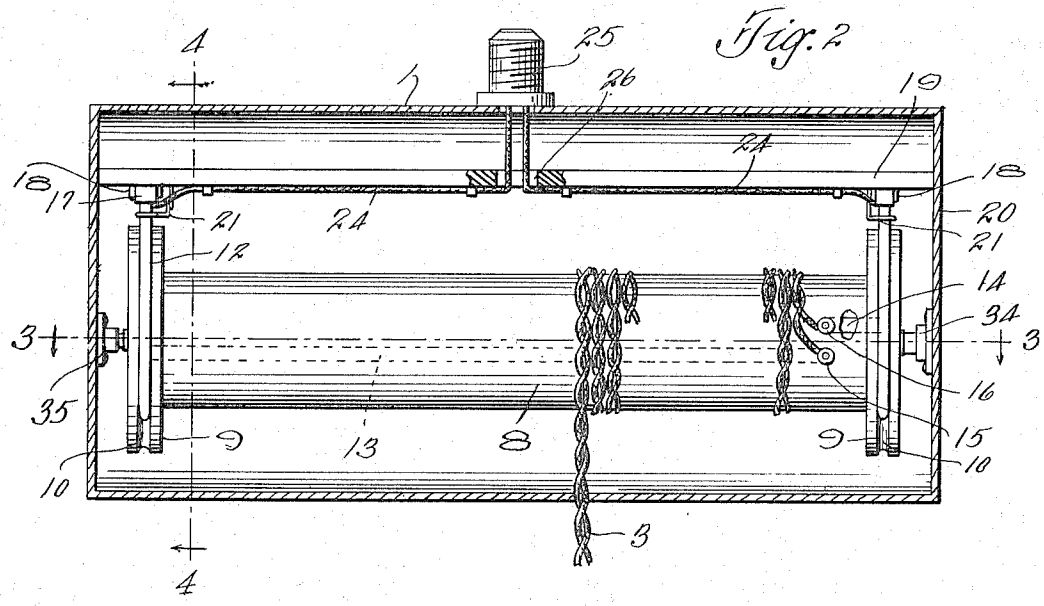
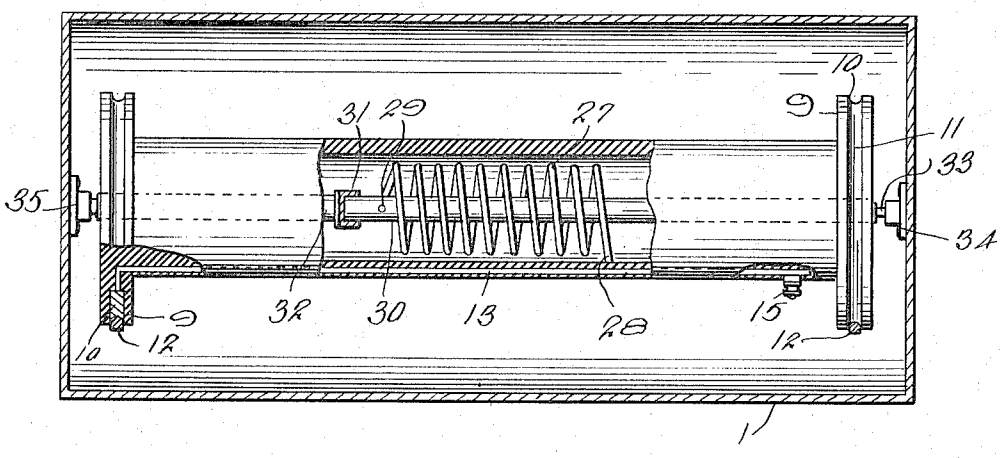


Fig. 3



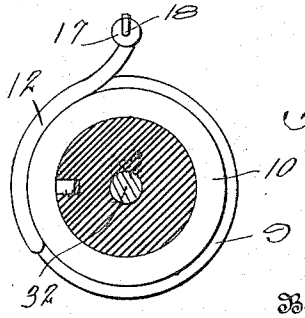


Fig. 5

Witnesses

Chas. H. Trostle

H. J. Riley

Inventors

A. W. Carroll

+ E. J. Fuller.

By Randolph & Co.

Attorney

UNITED STATES PATENT OFFICE.

ARTHUR W. CARROLL AND EDWARD J. FULLER, OF SEATTLE, WASHINGTON.

DROP-CORD-EXTENSION REEL.

1,243,039. Specification of Letters Patent. Patented Oct. 16, 1917.

Application filed March 28, 1916. Serial No. 87,237.

To all whom it may concern:

Be it known that we, (1) ARTHUR W. CARROLL, (2) EDWARD J. FULLER, citizens of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Drop-Cord-Extension Reels; and we 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.

The invention relates to a drop cord extension reel.

The object of the present invention is to improve the construction of drop cords and to provide a simple, practical and comparatively inexpensive drop cord extension reel of strong and durable construction adapted to enable an electric light or other electric device to be supported in an elevated position out of the way when not in use, and capable of permitting the extension cord to be unreeled to the desired extent so that the light may be supported at the desired elevation or carried to the desired point for use.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described illustrated in the accompanying drawings and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings.

Figure 1 is a perspective view of a drop cord extension reel constructed in accordance with this invention.

Fig. 2 is a longitudinal sectional view of the same, the reel being shown in elevation.

Fig. 3 is a longitudinal sectional view on the line 3—3 of Fig. 2, the spring actuated reel being partly in section.

Fig. 4 is a transverse sectional view on the line 4—4 of Fig. 2.

Fig. 5 is a detail sectional view illustrating the construction of the head of the spring actuated reel and the brushes.

Fig. 6 is a diagrammatic view of the circuit of the drop cord extension reel.

Fig. 7 is a detail of one of the springs.

Fig. 8 is a detail view of the bracket plate.

Like numerals of reference designate corresponding parts in the several figures of the drawings.

In the accompanying drawing in which is illustrated the preferred embodiment of the invention the drop cord extension comprises in its construction, a casing 1 preferably of cylindrical form as shown but may be of any other desired configuration as will be readily understood. The casing 1 which is provided at the front adjacent to its lower portion with the longitudinal slot or opening 2 for the passage of the extension cord 3 which may be constructed of sheet metal or any other suitable material and it is provided with spaced ears 4 for enabling the casing to be mounted in position.

In Fig. 1 of the drawing the casing is suspended by spaced flexible connections 5 to enable it to hang from a ceiling or other support at the desired elevation but the said ears 4 may receive suitable fastening devices for permanently mounting the casing on any suitable support. The extension cord which is of usual construction consists of two insulated wires to which an electric lamp 6 is connected by a suitable socket 7 of the ordinary construction, but any other form of lamp or any other electric device may of course be connected with the cord, the extension reel being designed to be proportioned to support a lamp or device with which it is to be used.

The extension cord is adapted to be wound around a reel located within the casing and consisting of a hollow cylindrical body of hard rubber or other insulating material and provided at its ends with enlarged heads 9 consisting of disks or spools and hard rubber having peripheral grooves 10 in which are arranged annular contact members 11 consisting of metallic strips or plates and engaged by curved brushes 12. The annular contact members are connected by suitable conductors 13 and 14 with binding screws or posts 15 and 16 with which the wires of the second cord are connected.

The curved brushes are provided at their upper ends with eyes 17 for the reception of hinge elements 18 preferably in the form of staples and adapted to be secured to a longitudinal overhead supporting member 19 preferably consisting of a strip of insulating material extending across the top of the reel lengthwise of the casing and secured at its terminals to the end 20 of the casing in any suitable manner. The brushes which

are hinged to the supporting member 19 are maintained in proper contact with the annular contact members by springs 21, suitably secured to the supporting member 19 and provided with spring coils 22 and having an approximately U-shaped terminal portion 23 for embracing the brush. The brushes are connected by conductor wires 24 with a plug 25 mounted on the exterior of the casing 1 at the top thereof. The conductor wires 24 extend along the supporting member 19 to the center thereof and pass through an opening 26 in the same and are connected with a plug in the usual manner. Instead of employing a plug, a socket or other suitable connection may of course be provided for enabling the drop cord extension to be connected with a suitable source of current supply.

The reel 8 is actuated by a coiled spring 27 connected at its outer ends with a reel at 28 and at its inner end 29 with a rod 30 fitted at its inner end in a socket 31 of a rod 32. The socket 31 forms a bearing for the inner end of the rod 30 which extends through one of the heads of the reel and has a flattened outer end 33 which engages a recess in a bracket plate 34. The rod 30 forms a bearing for the adjacent end of the reel and the bracket plate 34 is suitably secured to the adjacent end of the casing. The other rod 32 which is fixed to the head through which it extends is journaled in a suitable bearing 35 secured to the adjacent end of the casing. The rod 30 is stationary and when the extension cord is drawn outwardly through the slot or opening 2 of the casing, the spring 27 is placed under tension and is adapted to rewind the reel 8 and the drop cord thereon. The spring may be properly proportioned to the weight of the lamp 6 so that the lamp may be held at any desired adjustment by the friction of the cord 3 against the lower wall of the slot or opening 2. An ordinary pawl similar to that of a curtain shade roller may be provided for this purpose.

What is claimed is:—

1. A drop cord extension including a casing having an opening, a hollow spring actuated reel mounted for rotary movement within the casing and having enlarged heads located at its ends, annular contact members arranged on the heads, a longitudinally disposed supporting member mounted within the casing in spaced relation with the reel, curved brushes hinged to the supporting member and arranged to engage the annular contact members, springs mounted on the said supporting member and embracing the brushes and holding the same in engagement with the annular contact members, conductors supported by the said member and extending longitudinally thereof and connected with the brushes, and an extension cord wound around the reel and extending from the casing.

2. A drop cord extension reel including an outer casing provided with an opening, flexible means connected with the casing at spaced points for suspending the same at a predetermined elevation, a plug mounted on the casing between the said flexible means, a spring actuated reel mounted within the casing and provided at its ends with heads having annular contact members, a fixed longitudinally disposed supporting bar carried by the casing and arranged in spaced relation with the reel, brushes mounted on the bar and arranged to engage the contact members of the said heads, conductors extending along the bar from the brushes to the plug, an extension cord arranged on the reel and extending through the opening of the casing, and separate conductors located within the reel and extending from the said cord to the contact members.

3. A drop cord extension reel including a casing having an opening, a hollow spring actuated reel mounted for rotary movement within the casing and having enlarged heads, annular contact members arranged on the said head, a longitudinally disposed supporting member mounted within the casing in spaced relation with the said reel, hinged brushes secured to the supporting member at the terminal portion thereof and engage the annular contact members, approximately L-shaped springs provided at their angles with spring coils and secured at one end to the supporting member and provided at their other ends with curved terminal portions embracing the brushes and maintaining the same in engagement with the annular contact members, conductors extending along the supporting member and connected with the brushes, and an extension cord arranged on the reel and connected with the annular contact members.

In testimony whereof we affix our signatures in presence of two witnesses.

ARTHUR W. CARROLL.
EDWARD J. FULLER.

Witnesses:
VICTOR SWANSON,
MARIE MUELLER.