

(No Model.)

C. F. REINMANN.

DEVICE FOR RAISING OR LOWERING INCANDESCENT ELECTRIC LAMPS.
No. 448,164.

Patented Mar. 10, 1891.

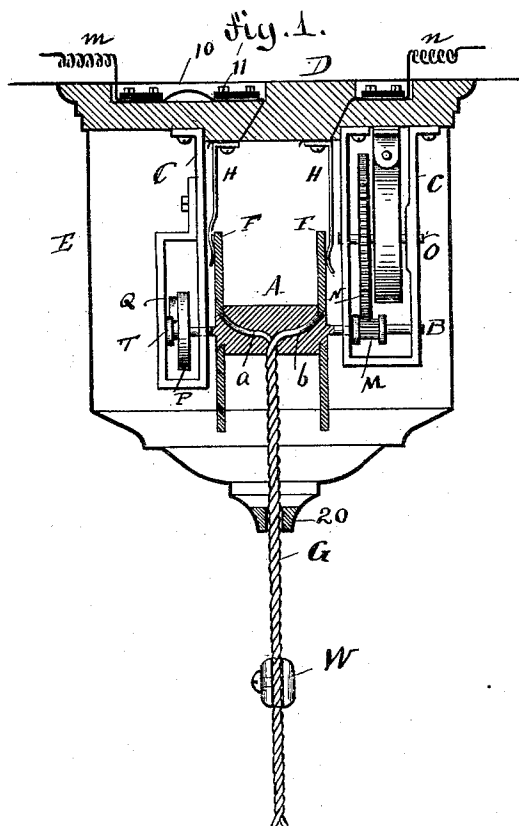
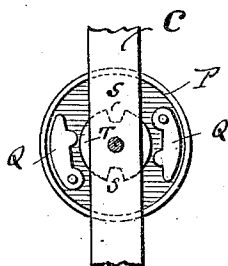


Fig. 2.



WITNESSES:

Chas. F. Reinmann.
Reinmann.

INVENTOR

Charles F. Reinmann

BY

Joseph H. Reinmann

ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES F. REINMANN, OF BROOKLYN, NEW YORK.

DEVICE FOR RAISING OR LOWERING INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 448,164, dated March 10, 1891.

Application filed February 8, 1890. Serial No. 339,757. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. REINMANN, of Brooklyn, in the county of Kings and State of New York, a citizen of the United States, have invented certain new and useful Improvements in Devices for Raising or Lowering Incandescent Electric Lights, of which the following is a specification.

This invention relates to improvements in devices for suspending and hanging incandescent electric lamps; and the object of my invention is to provide a device of this kind by means of which the incandescent electric lamp can be easily raised or lowered, and will remain in any desired position when released.

The invention consists of details of construction and combination of parts, as will be fully described hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical transverse sectional view of my improved device for raising or lowering incandescent electric lamps. Fig. 2 is a detail view of the arresting device.

Similar letters and figures of reference indicate corresponding parts.

A ceiling-plate D constitutes the base of this apparatus and serves as an attaching-plate for fastening it to the ceiling. This plate is provided with recesses 10 in its upper side, and with binding-posts 11, to which the line-wires *m n* are connected, disposed in said recesses. Two hangers C C are attached to and depend from the ceiling-plate, and two dependent spring-brushes H H are also attached to said plate in connection with said wires, and project downward therefrom between the hangers. A shaft B is journaled in bearings of said hangers, and a spool A is fixed on said shaft. This spool is composed of an insulating-body and metallic end disks, which rotate in contact with the dependent spring-brushes H H, and serve as current-conductors. Insulated electric conductors *a* and *b* are connected, respectively, with the spool heads, and are twisted together in the usual manner to form the suspension-cord G for the lamp, said cord being wound and unwound from the spool for lowering and elevating the lamp. The shaft B is provided with a pinion M, engaging a gear-wheel N, fixed on the same shaft with the spring O,

one end of which is secured to the shaft and the other end is suitably fastened to the casing.

By pulling down or unwinding the cord G from the spool or drum A the spring O is coiled up or tightened, and when the said cord G is released the spring O uncoils, thereby rotating the gear-wheel N and pinion M, the shaft B, and the drum or spool A, whereby the cord G is wound on said drum or spool and the electric lamp raised. On that end of the shaft B opposite the one provided with the pinion M a disk P is secured, which is provided with two pawls Q, that can engage notches S in a fixed disk T on one hanger C, thus forming an automatic locking device, such as are used on curtain-rollers.

W is an adjustable block or stop fastened on the cord G to prevent the lamp being raised so high that it cannot be grasped conveniently by a person standing on the floor.

A suitable ornamental casing E incloses the entire mechanism, and is provided at its bottom with an eye 20, through which the cord G runs. This eye also serves as a stop for the adjustable stop W on the cord.

The operation is as follows: When the lamp is to be lowered, it is seized and pulled down as far as possible, and then the cord is gently slackened so as to permit the pawls Q to engage the notches S in the plate T, thereby locking the mechanism in the casing and keeping the lamp in desired position. When it is desired to raise the lamp, the same is pulled downward suddenly, so as to throw out the pawls Q, and when the lamp is released the uncoiling of the spring O rotates the spool or drum A, whereby the cord G is wound on said spool and the lamp raised. Whether the lamp is in raised or lowered position, or whether it is being raised or lowered, the electric circuit is never broken, as the spring-brushes at all times remain in contact with the metal end plates of the spool or drum A, and said end plates are connected with the wires forming the suspension-cord.

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

1. The combination of a ceiling-plate having binding-posts for the line-wires, hangers dependent therefrom, spring-brushes dependent from said ceiling-plate and in connection

with the binding-posts, a shaft journaled in said hangers, a spring-motor for rotating said shaft, an automatic locking and releasing device also in connection with said shaft, a spool
5 fixed to said shaft and having conductive heads insulated from each other and in contact with said spring-brushes, and a lamp-cord composed of insulated conducting-wires, the upper ends of which are connected, respectively,
10 to the spool-heads.

2. The combination of a ceiling-plate having binding-posts for the line-wires, hangers dependent therefrom, spring-brushes dependent from said ceiling-plate and in connection
15 with the binding-posts, a shaft journaled in said hangers, a spring-motor for rotating said shaft, an automatic locking and releasing device also in connection with said shaft, a spool fixed to said shaft and having conductive
20 heads insulated from each other and in contact with said spring-brushes, a lamp-cord composed of insulated conducting-wires, the upper ends of which are connected, respectively, to the spool-heads, and a casing inclosing said mechanism and provided with an
25 eye in its bottom for the passage of the cord.

3. The combination of a ceiling-plate having binding-posts for the line-wires, hangers dependent therefrom, spring-brushes dependent from said ceiling-plate and in connection
30 with the binding-posts, a shaft journaled in said hangers, a spring-motor for rotating said shaft, an automatic locking and releasing device also in connection with said shaft, a spool fixed to said shaft and having conductive heads
35 insulated from each other and in contact with said spring-brushes, a lamp-cord composed of insulated conducting-wires, the upper ends of which are connected, respectively, to the spool-heads, a casing inclosing said mechanism and provided with an eye in its bottom
40 for the passage of the cord, and an adjustable stop on said lamp-cord adapted to act in conjunction with said eye.

In testimony that I claim the foregoing as
45 my invention I have signed my name in presence of two subscribing witnesses.

CHARLES F. REINMANN.

Witnesses:

OSCAR F. GUNZ,
JOHN A. STRALEY.