(No Model.)

C. A. PFLUGER.

LINE WIRE TIGHTENING DEVICE FOR ELECTRIC LAMP SUPPORTS.

No. 482,486. Patented Sept. 13, 1892.

Fig. 1.

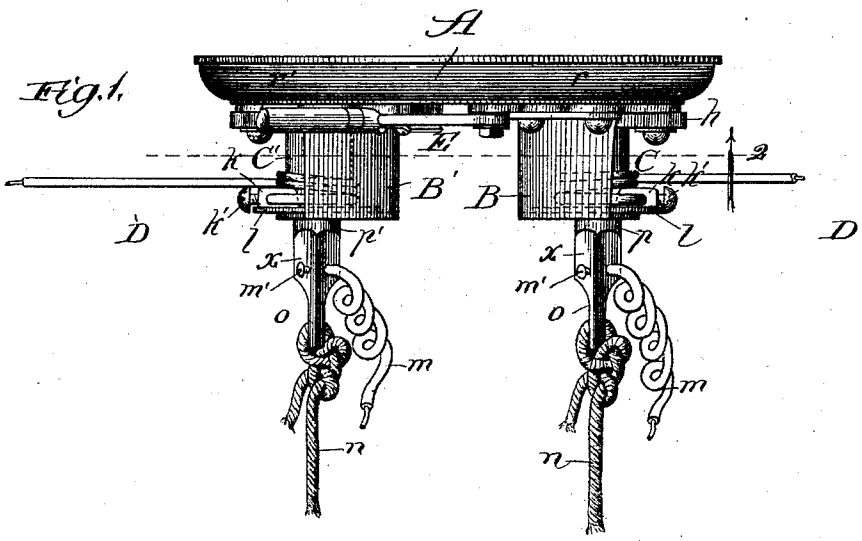
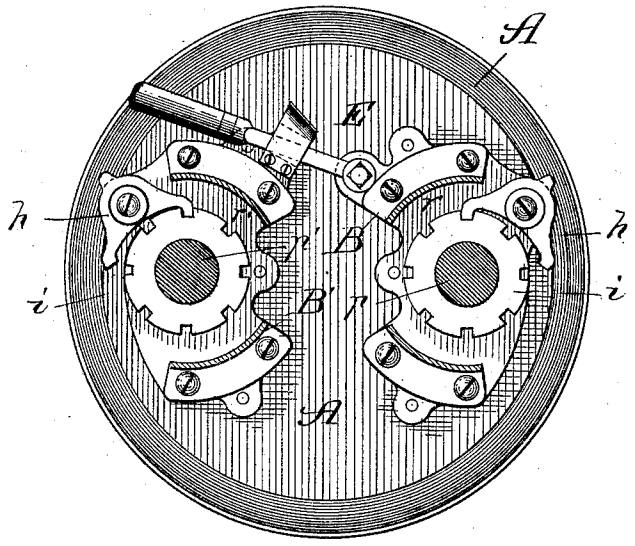


Fig. 2.



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CHARLES A. PFLUGER, OF CHICAGO, ILLINOIS.

LINE-WIRE-TIGHTENING DEVICE FOR ELECTRIC-LAMP SUPPORTS.

SPECIFICATION forming part of Letters Patent No. 482,486, dated September 13, 1892.

Application filed May 3, 1892. Serial No. 431,684. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. PFLUGER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Line-Wire-Tightening Devices for Electric-Lamp Supports, of which the following is a specification.

The line-wires of electric lamps commonly sag for lack of means by which to tighten them.

The object of my invention is to provide means of simple construction on each lamp-support which shall not add greatly to the cost of the support, but whereby the line-wire may be readily tightened when required.

The particular construction or form of the support, and whether it be of the kind for an arc lamp or for an incandescent lamp, is immaterial to my invention, though for the sake of convenient representation and because I have more particularly devised my improvement for use with arc-lamp supports I illustrate it upon an arc-lamp support in the form of a ceiling-board in the accompanying drawings, in which—

Figure 1 is a view in elevation of a ceiling-board provided with means for suspending an arc lamp and formed in accordance with my improvement; and Fig. 2 is a bottom plan view of the same, partly in section.

A is the supporting-plate (shown as a ceiling-board having on its under side at opposite sides of its center metal brackets B and B′, fastened at their upper ends to metal plates *r* and *r′*, secured to the surface of the board.) The plates *r* and *r′* afford bearings for the upper ends of rotary binding-posts, (shown as spindles *p* and *p′*,) formed with or carrying drums or barrels C and C′, confined between the upper and lower ends of the brackets, the lower ends of the spindles passing through bases of the brackets, which afford journal-bearings for them, the spindles being flattened beyond such bases, as represented at *x* in Fig. 1, to adapt them for the application of a tool, as a wrench, by which to turn them, and being provided in their lower extremities with eyes *o*, in which to fasten the suspending medium *n* for the lamp. (Not shown.) I also render each spindle a binding-post for the conductor *m*, forming the lamp connection with it by providing in the spindle a hole into which the conductor is inserted and secured by a set-screw *m′*.

The connection of the line-wire D with the support I make at each rotary barrel by providing thereon above its lower bearing-flange *l* an eye *k*, into which an end of the line-wire is inserted and fastened by a set-screw *k′*.

As a desirable form of retaining means for each rotary post, I provide a ratchet *i* on the upper end of the barrel portion, and adjacent thereto on the top plate a dog *h*, preferably of the double form illustrated, to engage the ratchet in either direction.

A common or any suitable form of switch device E should have its co-operating and separable parts provided, respectively, on the plates *r* and *r′* to enable short-circuiting of the current when the lamp is handled.

As will be seen, the rotating function of the line-wire binding-posts adapts them to be readily turned, as by a wrench applied to their squared portions *x*, and thereby wind upon them the line-wire to tighten it, and the retaining means securely hold the line-wire in its taut condition.

For some purposes of my improved support one of the rotary posts, with its co-operating parts, may suffice, and this may extend from the center of a board A. Besides the details of construction may be variously changed without thereby departing from my invention. Hence I do not limit my improvement to the two binding-posts for the line-wire, nor to the exact details of the construction shown and described.

What I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a suspension-support for an electric lamp, a rotary binding-post at which to connect and tighten the line-wire, and means for holding the post against the strain of the tightened line-wire, substantially as described.

2. In combination with a suspension-support for an electric lamp, a rotary binding-post having a winding-drum provided with an attaching device for the line-wire, and

means for holding the post against the strain of the tightened line-wire, substantially as described.

3. In combination with a suspension-support for an electric lamp, a bracket, a rotary binding-post journaled in the bracket and provided with a winding-drum having an attaching device for the line-wire, and a ratchet and a dog to engage the ratchet and hold the post against the strain of the tightened line-wire, substantially as described.

4. In combination with a suspension-support for an electric-arc lamp, brackets B and B′, fastened to plates *r* and *r′* on a supporting-board A, rotary binding-posts *p* and *p′*, having winding-drums C C′, provided with attaching devices for the line-wire and journaled in the brackets and provided in their protruding ends with eyes at which to suspend the lamp and with attaching means for the wires *m*, and means on the rotary posts for holding them against the strain of the tightened line-wire, substantially as described.

5. A suspension-support for electric-arc lamps, comprising, in combination, a board A, carrying plates *r* and *r′*, and brackets B and B′, rotary binding-posts *p* and *p′*, journaled in the brackets and having winding-drums C and C′, provided with ratchets *i* and flattened on their protruding end portions and there provided with fastening means for the wires *m*, dogs *h*, eyes *o* in the protruding ends of the posts, attaching means *k k′* on the drums for the line-wire, and a suitable switch E, the whole being constructed and arranged to operate substantially as described.

CHARLES A. PFLUGER.

In presence of—
M. J. FROST,
W. N. WILLIAMS.