

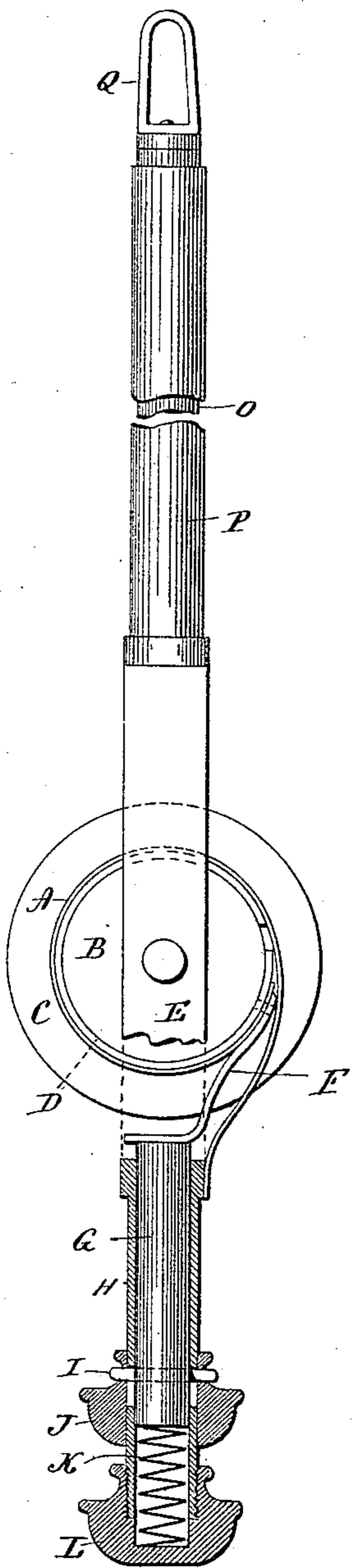
(No Model.)

E. L. BRYANT.
SUSPENSION DEVICE FOR LAMPS.

No. 441,394.

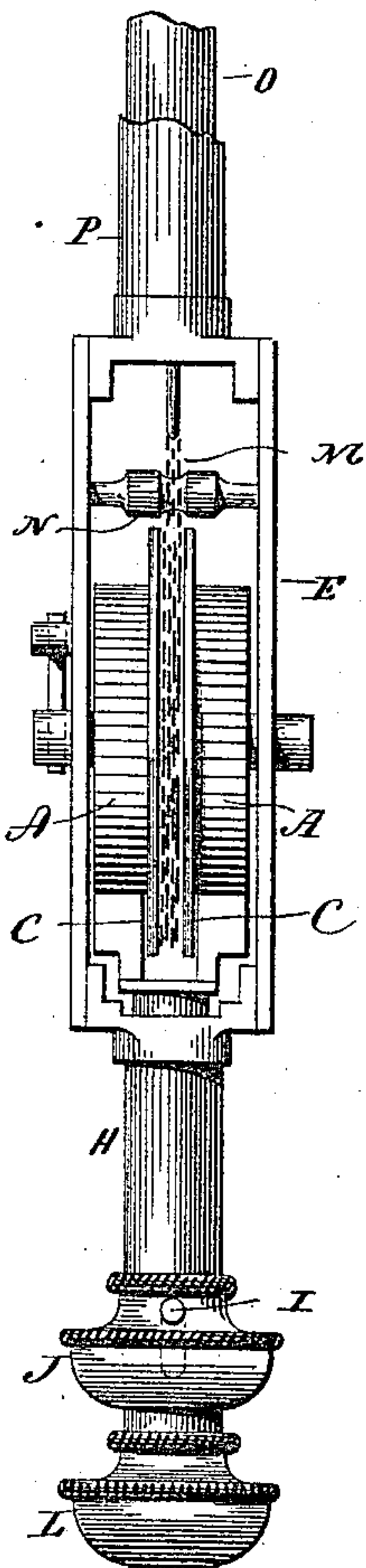
Patented Nov. 25, 1890.

Fig. 1



Witnesses
William D. Kelby.
Frank W. Beck

Fig. 2



Edson L. Bryant
Inventor
By Atty
Charles Seymour

UNITED STATES PATENT OFFICE.

EDSON L. BRYANT, OF ANSONIA, CONNECTICUT, ASSIGNOR OF ONE-HALF TO
WALLACE & SONS, OF SAME PLACE.

SUSPENSION DEVICE FOR LAMPS.

SPECIFICATION forming part of Letters Patent No. 441,394, dated November 25, 1890.

Application filed June 30, 1890. Serial No. 357,208. (No model.)

To all whom it may concern:

Be it known that I, EDSON L. BRYANT, of Ansonia, in the county of New Haven and State of Connecticut, have invented a new Improvement in Suspension Devices for Lamps; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view, partly in side elevation and partly in vertical section, of a suspension device constructed in accordance with my invention; Fig. 2, a similar edge view thereof.

My invention relates to an improved suspension device for hanging lamps, the object being to provide simple and effective means for relieving the friction upon the drum on which the chain is wound.

With these ends in view my invention consists in the construction as hereinafter described, and particularly recited in the claim.

My improved friction-relief device comprises two sheet-metal friction-bands A A, respectively encircling the friction-hubs B B, located on opposite sides of the chain-flanges C C of the spring-drum, which being of well-known construction needs no specific illustration or description herein. The said friction-bands are faced with strips D, of leather or equivalent material, and secured at their lower ends to the lower end of the frame E, in which the said drum is journaled. These bands, which very nearly encircle the said hubs, have their movable outer ends respectively attached to the upper ends of two fingers F F, located on opposite sides of the said chain-flanges and formed by suitably slotting a bent sheet-metal strip, the lower end whereof is rigidly secured to the upper end of a short plunger G, extending upward through the lower end of the frame and inclosed in a short tube H, rigidly secured to and depending therefrom, and provided with a slot to receive a pin I, connecting with the said plunger, an operating-collar J encircling the said short tube. A stiff spiral spring K, interposed be-

tween the lower end of the plunger and a knob L, screwed onto the lower end of the tube, exerts a constant tendency to lift the plunger, and hence the fingers F F, which are thus caused to draw the friction-bands onto the hubs. The normal friction thus secured is utilized in the well-known manner to overcome variations in the weight of the lamp and supplement the action of the spring in the drum.

Other than the novel features described the device is of ordinary construction, and consists of a chain M, a roller N, an inner tube O, to which the chain is attached, an outer tube P, secured to the upper end of the frame and inclosing the inner tube, and a suspension-eye Q, attached to the upper end of the inner tube.

In using the device the knob L is used as a point of purchase for the hand, while the operating-collar is pulled down with the fingers, the tension of the spiral spring being thus overcome, and the outer ends of the friction-bands being pulled away from the friction-hubs, so as to relieve their grip thereupon sufficiently to permit the spring-drum to be rotated. As soon, however, as the operating-collar is released, the spring at once operates to lift the plunger and again draw the bands tightly upon the friction-hubs.

If desired, the friction-bands themselves may be made to hug the hubs with sufficient power to develop the required friction. In such case the spiral spring will be dispensed with. If desired, also, one band may be employed in place of two, as shown. I would therefore have it understood that I do not limit myself to the exact construction shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

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

In a suspension device for hanging lamps, the combination of a spring-drum arranged upon an axis in said frame, one or more fric-

tion-bands, one end held stationary upon the frame, the drum constructed with frictional surfaces corresponding to said bands and around which said bands extend, a tubular
5 extension from said frame, a movable plunger therein, the other ends of the said band or bands attached to said plunger, and a collar

around said tubular extension, but connected with said plunger, substantially as and for the purpose described.

EDSON L. BRYANT.

Witnesses:

J. TRUMBONE,
H. D. RICHARDSON.