

(No Model.)

L. T. LAWTON.

LAMP HANGER.

No. 318,756.

Patented May 26, 1885.

Fig. 1

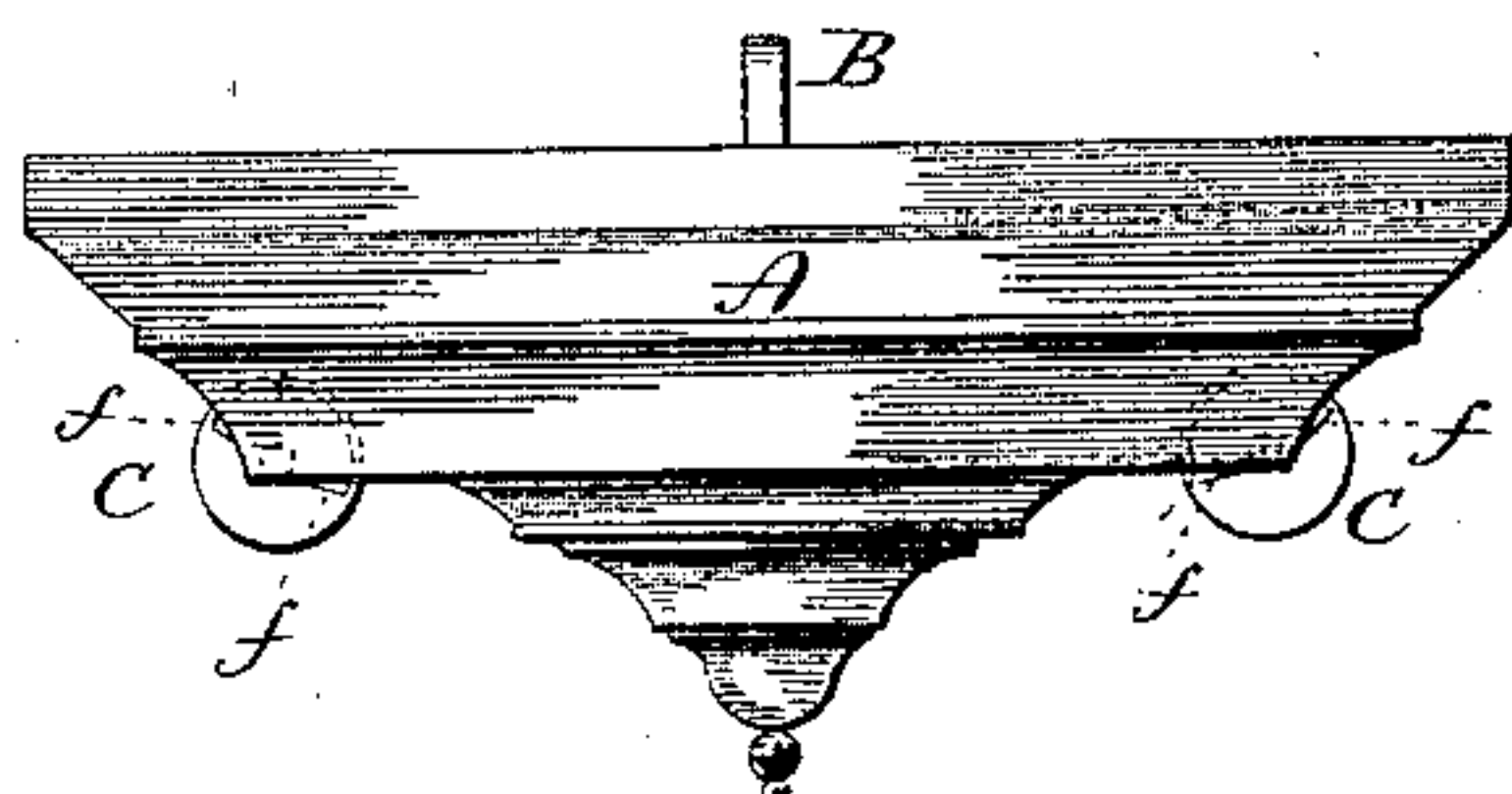


Fig. 2

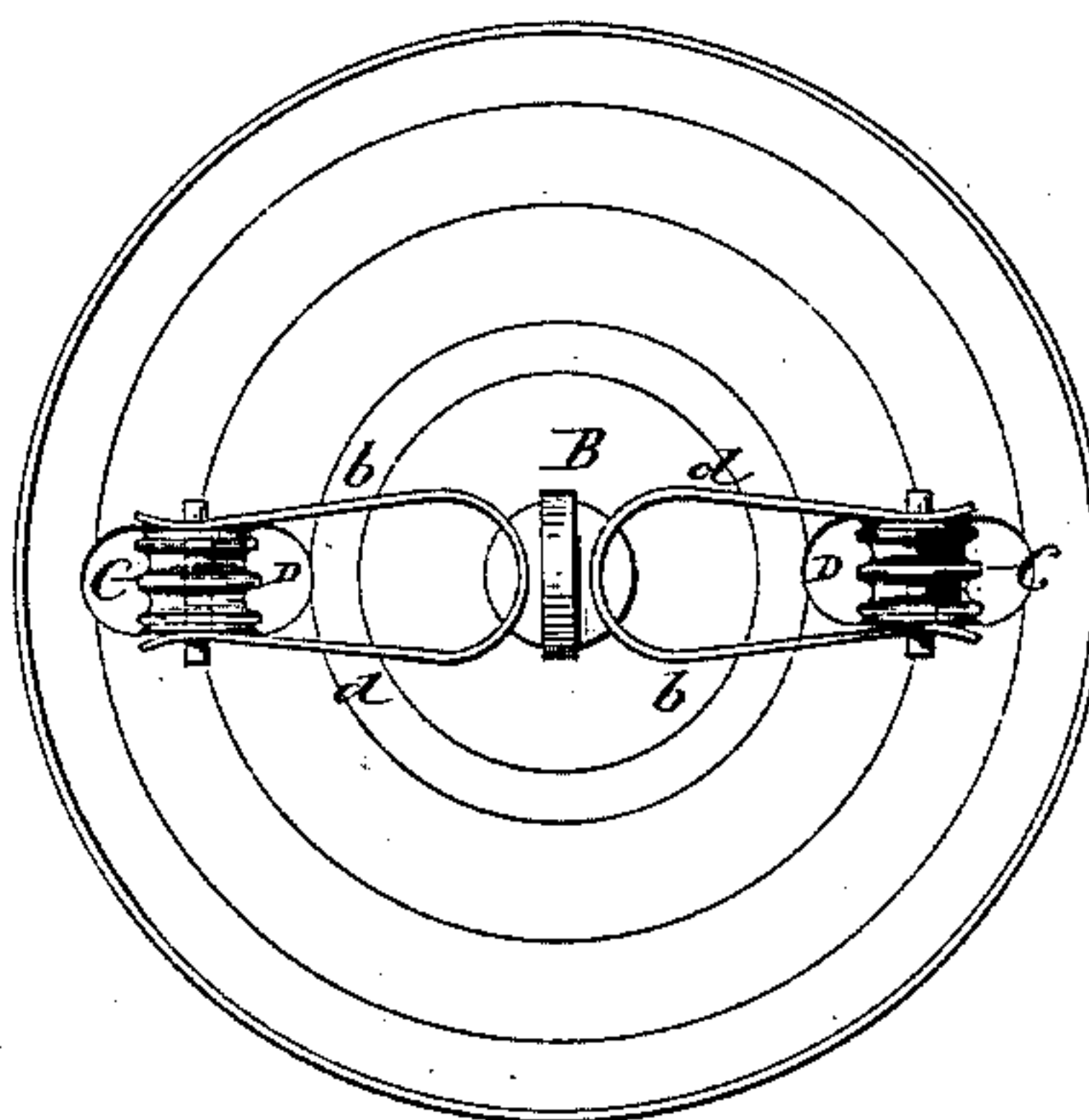


Fig. 3

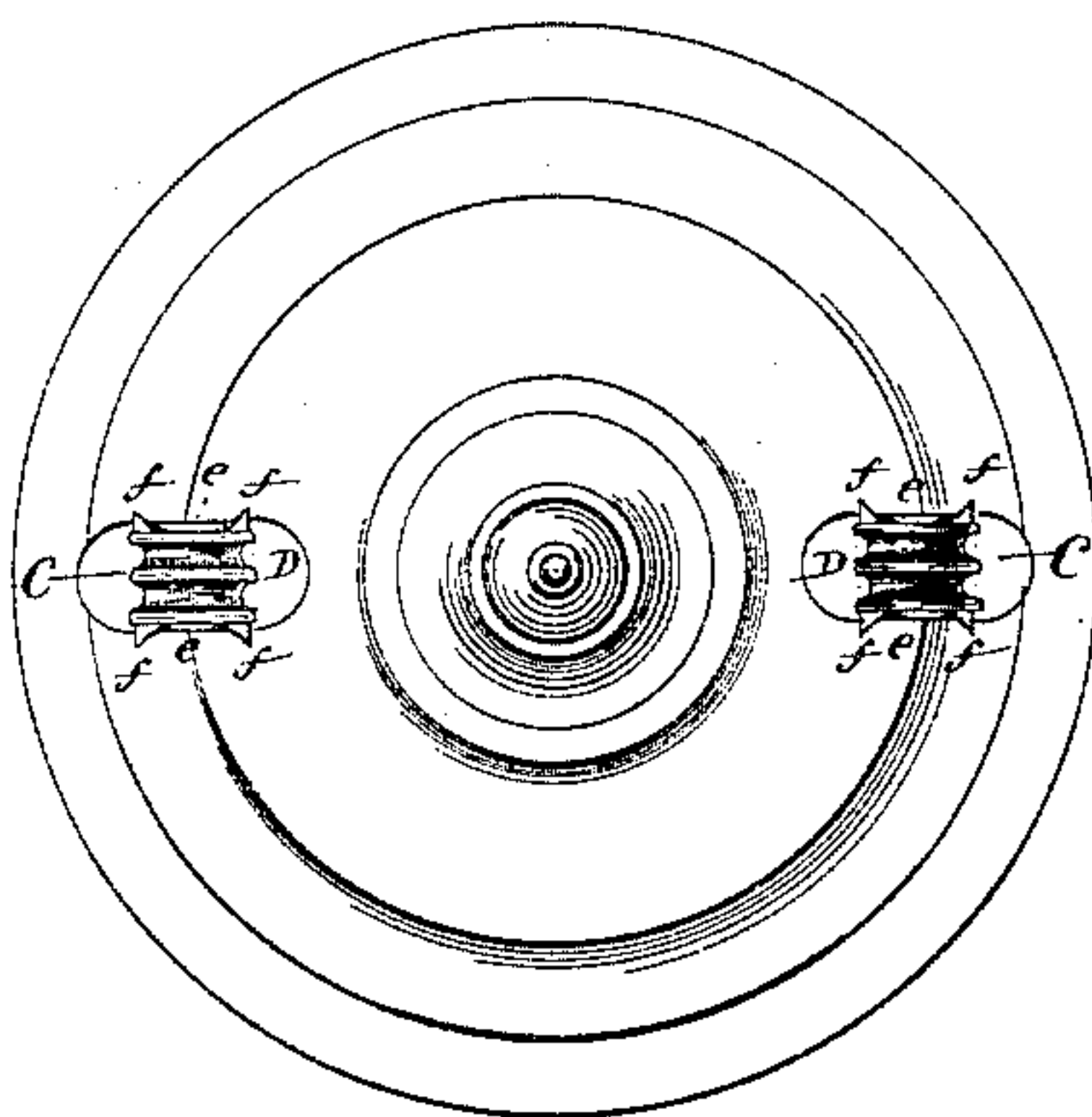


Fig. 4

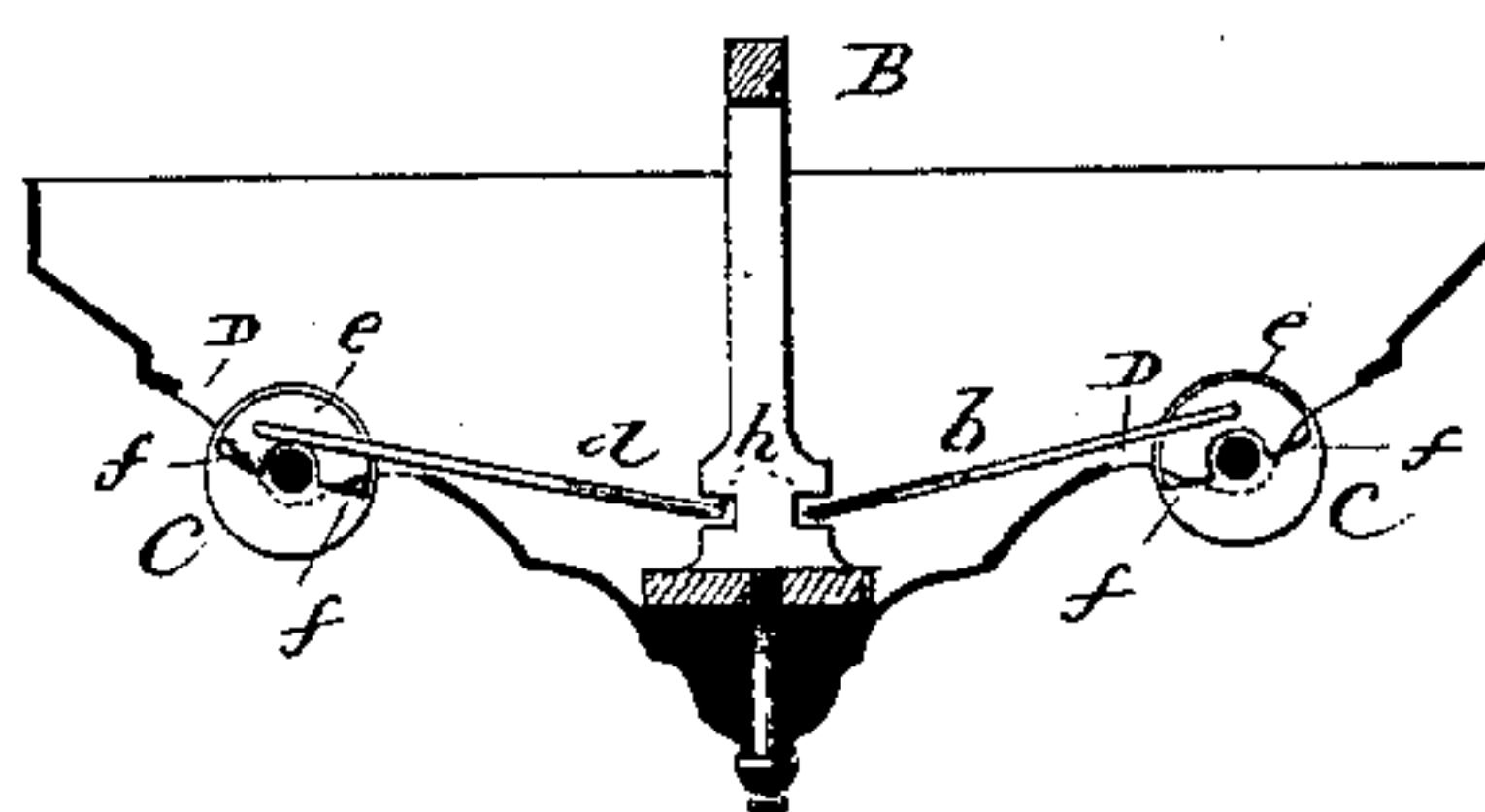


Fig. 5

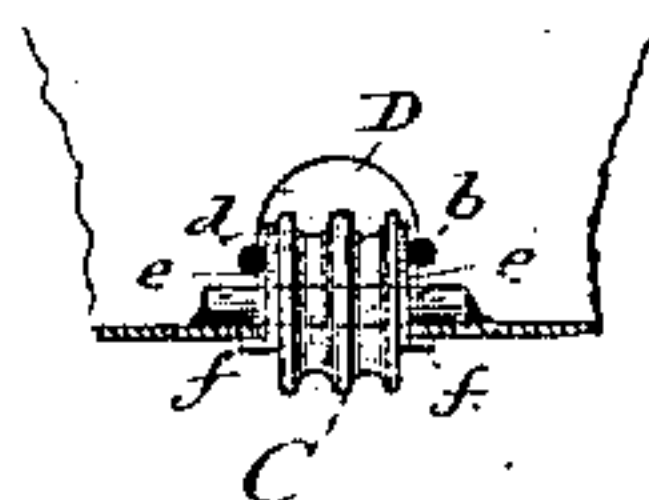


Fig. 6



Witnesses
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UNITED STATES PATENT OFFICE.

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LAMP-HANGER.

SPECIFICATION forming part of Letters Patent No. 318,756, dated May 26, 1885.

Application filed March 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, LYMAN T. LAWTON, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Lamp-Hangers; 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 side view of the hanger complete; Fig. 2, a top view of same; Fig. 3, an underside view; Fig. 4, a section through the hanger, showing a side view of the pulleys and springs with the disks applied; Fig. 5, a transverse section through the hanger, showing edge view of the pulleys; Fig. 6, a perspective view of one of the disks *e* detached.

This invention relates to an improvement in the device employed for suspending a lamp from the ceiling, and which device carries pulleys, over which chains or cords from the lamp below pass, thence down, attached to weights, and so that while the hanger remains stationary at the point of suspension the lamp may be adjusted to different elevations. The movable part of an extension-lamp is liable to great variations in weight, due to varying weights of fount, or of shades, or to the removal or addition of a shade, as in some cases shades are desirable and in others they are not; but in making the lamp-fixture for market the supporting-weight is a standard, and not adapted to variation; hence if it be only sufficient to counterbalance a fixture of a certain weight, then if more weight be added, as by the application of a heavy fount or shade, the weight will be too light, and the lamp will not be supported; or if the lamp be lighter than that for which the weight was designed, then it can only be supported at its highest elevation. Various frictional devices have been applied to the pulleys, which, while they will permit the pulleys to revolve under the movement of the fixture, will produce so great a resistance to the revolution of the pulleys as to admit of a great variation between the weight and the fixture suspended.

The object of my invention is a simple and

cheap device for applying such friction to the pulleys; and it consists in a U-shaped spring applied to the pulleys, one leg upon one side of the pulley and the other upon the opposite side, and so as to grasp the pulley between its two ends with an elastic pressure, as more fully hereinafter described.

As represented in the accompanying illustrations, I show the pulleys as arranged in the canopy which hides the hanger and serves as an ornament to the fixture; but the pulleys may in like manner be applied to any of the known hangers.

A represents the canopy, in which the suspending-loop B is arranged in the usual manner. C C are the two pulleys, arranged diametrically opposite each other in openings D through the canopy in radial planes, and so that the pulleys may revolve under the action of the chains or cords passing over them, and by which the fixture below is suspended.

A U-shaped spring made from wire is applied to each pulley—one leg, *b*, upon one side and the other leg, *d*, upon the opposite side of the pulley. The bend of the spring is such that the legs, when applied to the surface of the pulleys, as seen in Fig. 2, embrace the pulley with a considerable frictional contact. The springs lie upon the inside of the canopy, and are therefore hidden from view. The friction of the spring resists the revolution of the pulley under the action of the moving fixture and weight, which friction must be overcome in such movement, whether it be up or down; hence a variation between the weight and the fixture may be made equal to the frictional influence of the springs upon the pulleys. Between the ends of the spring and the pulleys I apply a thin metal disk, *e*, which will bear upon the surface of the pulley to increase the frictional contact. This disk is best made, as seen in Fig. 6, so as to extend over a considerable portion of the side of the pulley, and with lateral projections *f*, one each side the center, and which, as the disk is set over the axis, will extend out onto the surface of the canopy at the opening, and be thereby prevented from displacement or rotation with the pulley. The ends of the springs bear directly upon these disks, so that the pulley is embraced between

the disks under the action of the spring, and the friction of the spring is increased to the extent of the increased surface afforded by the disks. If the disks, or some equivalent there-
5 for, be not used, some provision should be made to prevent the springs being turned out of place by the rotation of the pulley. This may be done by extending the bend beneath a shoulder, *h*, on the hanger B, as seen in
10 Fig. 4. In case of the employment of more than two pulleys it will be understood that they are to be arranged in radial planes distant from each other according to the number of pulleys so introduced.

15 I claim—

I. In a lamp-hanger, the combination of two or more pulleys hung therein, adapted to revolve in radial planes, U-shaped springs

applied to said pulleys, one leg upon one side and the other upon the opposite side, and so 20 that said pulleys are embraced by said legs, substantially as described.

2. In a lamp-hanger, the combination of two or more pulleys arranged to revolve in radial planes, disks *e*, arranged to bear against 25 the sides of said pulley, but without rotation therewith, with U-shaped springs, the legs of the U applied to the said disks, one each side the pulley, and so as to embrace the pulley between said disks with frictional contact, sub- 30 stantially as described.

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Witnesses:

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