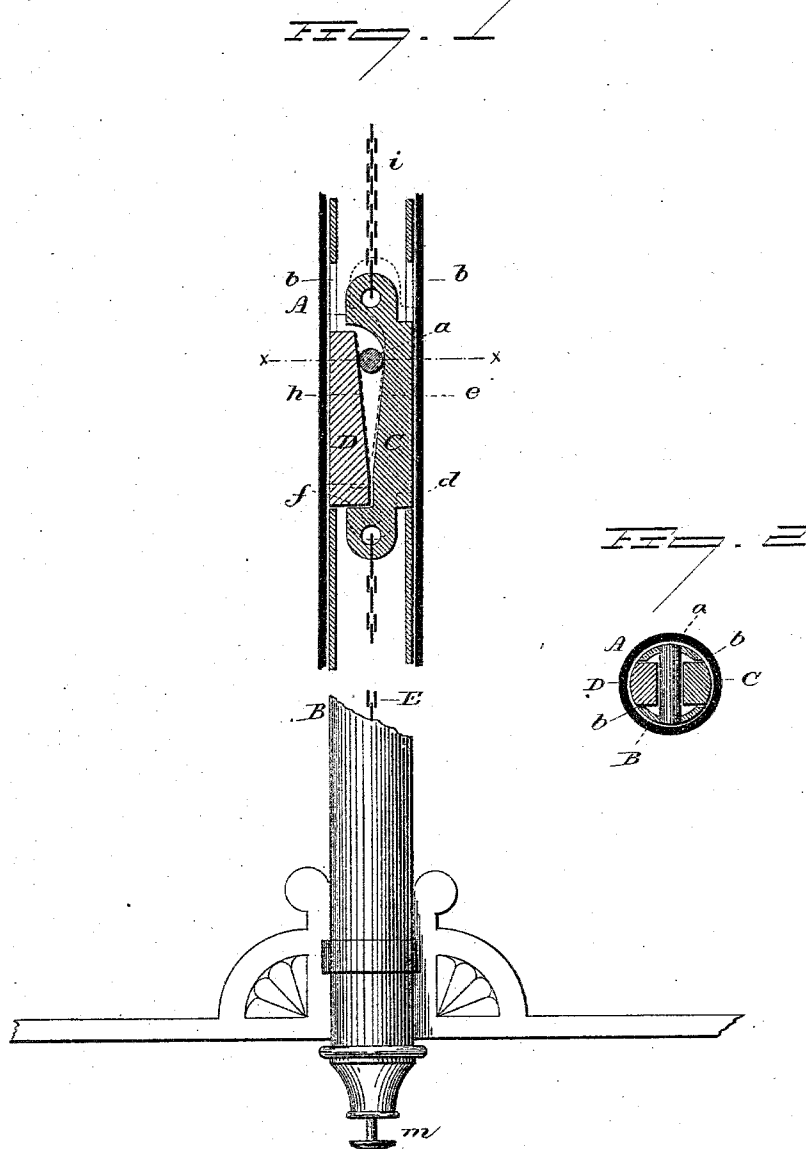


(No Model.)

R. B. PERKINS.
EXTENSION LAMP FIXTURE.

No. 288,852.

Patented Nov. 20, 1883.



Witnesses.
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UNITED STATES PATENT OFFICE.

RUSSELL B. PERKINS, OF MERIDEN, CONNECTICUT, ASSIGNOR TO EDWARD MILLER & CO., OF SAME PLACE.

EXTENSION LAMP-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 288,852, dated November 20, 1883.

Application filed August 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, RUSSELL B. PERKINS, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Extension Lamp-Fixtures; 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 vertical central section; Fig. 2, a transverse section on line *x x*.

This invention relates to an improvement in clamping devices for that class of lamp-fixtures which are designed to be suspended from the ceiling as a chandelier, and in which a tube is made stationary to the ceiling, a second tube arranged to slide up and down within the stationary tube, the said sliding tube carrying the arms which support the burner, the purpose of the clamping device being to engage the two tubes at any desired elevation to which the sliding portion may be moved, and hold it in that position, yet permit it to be adjusted to different elevations, the object of my invention being a simple clamp, which may operate by expansion in diametrically-opposite directions, substantially fixed in the inner tube, and so that the clamping device, forced in diametrically-opposite directions, will engage at corresponding points on the inside of the outer tube; and in such invention as more fully hereinafter described, and particularly recited in the claims, my invention consists.

A represents the outer tube, and B the inner tube, the one arranged to slide telescopically in the other, and in the usual manner for extension chandelier or lamp fixtures.

As here represented the outer tube, A, is the fixed tube, and the arms to support the lamps are attached to the inner tube. Diametrically across the inner tube a stationary pin, or may be an anti-friction roll, *a*, is arranged. On opposite sides of the inner tube, and transversely to the axis of the pin *a*, openings *b* are made through the tube. At one side of the pin *a* the one part, C, of the clamping device is arranged. Its outer surface extends into the opening *b*. Near its lower end is a

shoulder, *d*, which in the unclamped position rests upon the bottom of the opening *b* on that side of the tube. The inner face, *e*, of the clamping-piece C—that is, the face next the pin *a*—is inclined or wedge-shaped, the thicker end of the wedge being at the bottom, and at the lower end of the inclined portion is a shoulder, *f*. Upon this shoulder stands the second clamping-piece, D. This clamping-piece, like the first, extends outward into the other opening, *b*, in the tube, and its face *h*, next the pin *a*, is inclined or wedge-shaped, like the other clamping-piece, C, with its thicker end at the bottom. At the upper end or above the pin *a* a shoulder, *n*, is made in the part C, so that the part D stands between the two shoulders *f n* on the part C, and must therefore move up and down with the part C. Yet they may be otherwise connected so as to insure the like vertical movement of both parts. From the upper end of the clamping-piece C a chain or cord, *i*, leads to the spring or pulley above, in the usual manner for suspending lamp-fixtures, and so that the tendency of the spring is to lift the clamping devices upward in the inner tube, and such lifting of the clamping devices, if permitted, will draw the two parts C D upward on their respective sides of the pin *a* into the position seen in broken lines, and because of such lifting or moving of the clamping parts C D, their thicker portion is brought between their respective sides of the pin and the corresponding inner surface of the outer tube, and until the outer face of those two parts is forced into frictional contact with corresponding surfaces in the outer tube, as seen in broken lines. These two parts C D, thus brought into contact with the outer tube, wedge themselves between the pin and the tube. The weight of the fixture comes upon the pin between the wedges, and thereby serves to force the wedges asunder and into engagement with the outer tube, so as to hold the two parts in their proper relation. From the lower end of the clamping-piece C a cord or chain, E, extends down through the tube B to a convenient point below the fixture, where a suitable handle, *m*, is applied, and so that when a person desires to adjust the fixture, they place the thumb of one hand upon the

lower extremity of the fixture, and with two fingers on the handle *m* pull downward, which causes a corresponding upward pressure on the inner tube, and a downward pull upon the clamping device, so that either the inner tube is raised or the clamping devices pulled down, or both, into the position seen in Fig. 1, which permits the clamping devices to come into their contracted position, as there shown, and free the parts from engagement, and so that while so held the movable part may be raised or lowered, as desired, until the required point of elevation is attained, and then, the hand removed, the clamp assumes its locking position, as before described.

I do not wish to be understood as claiming, broadly, a wedge-like clamp as a means for engaging the adjustable part of a lamp-chandelier with the stationary part, as such I am aware is not new.

I am aware that two clamping-pieces have been arranged in openings in the inner tube, and movable radially therein under a force to produce sufficient friction between their outer surface and the inner surface of the outer tube to retain the movable part of the fixture at any desired position; but in such arrangement of clamping-pieces a wedge-like device has been introduced between them to force them apart and into their clamping position, or by the withdrawal of the wedge to relieve the clamp. I therefore do not wish to be understood as

claiming, broadly, a pair of clamping-pieces arranged in the inner tube, and so as to be forced radially into contact with the inner surface of the outer tube.

I claim—

1. In an extension lamp-fixture, the combination of an outer tube and an inner tube arranged telescopically, the one stationary and the other movable, the pin *a* diametrically across the inner tube, the said inner tube constructed with openings *b* on opposite sides, the wedge-like clamping parts *C D*, arranged one each side the pin, and so as to operate through the openings in the inner tube, and connected above with a lifting device, and means, substantially such as described, extending downward whereby said clamping devices may be contracted, substantially as described.

2. The combination of the outer tube, *A*, the inner tube, *B*, constructed with the recesses *b b*, the pin *a*, diametrically through the tube *B*, the clamping-piece *C*, having its face *e* inclined and fitted for attachment to the lifting device above, and constructed with shoulders *f n*, and the second clamping-piece, *D*, having its face *h* inclined and arranged between the shoulders *f n* on the part *C*, substantially as described.

RUSSELL B. PERKINS.

Witnesses:

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