May 15, 1923. 1,454,935

W. F. LENT

BASE FOR PORTABLE LAMPS

Filed Feb. 27, 1922

Fig. 1.

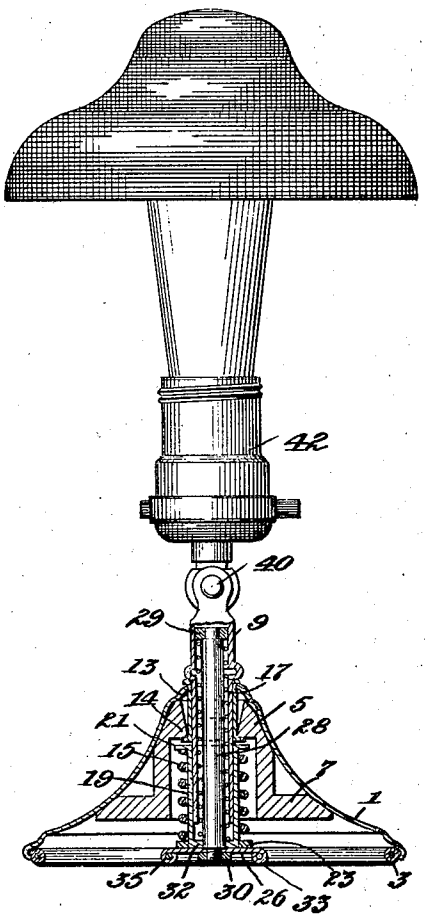


Fig. 3.

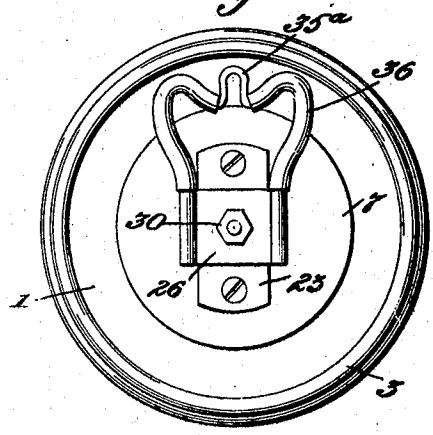


Fig. 4.

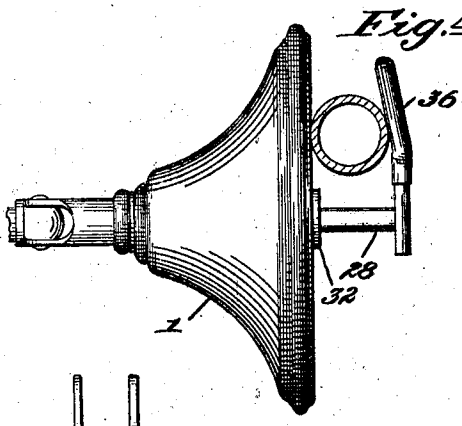


Fig. 2.

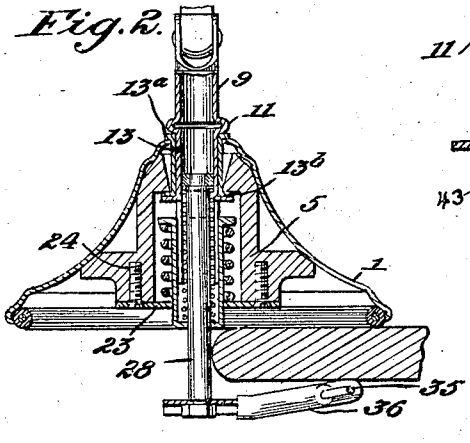
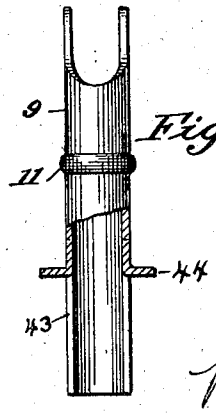


Fig. 5.



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Patented May 15, 1923. 1,454,935

UNITED STATES PATENT OFFICE.

WILMAR F. LENT, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE GREIST MANUFACTURING COMPANY, OF NEW HAVEN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

BASE FOR PORTABLE LAMPS.

Application filed February 27, 1922. Serial No. 539,474.

To all whom it may concern:

Be it known that I, WILMAR F. LENT, citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented a certain new and useful Improvement in Bases for Portable Lamps, of which the following is a full, clear, and exact description.

This invention relates to bases for portable lamps, and in particular to improved means which is concealed in the base of a lamp for clamping the same to a table, or other support.

An important feature of the invention comprises a clamp, which is housed within the base of the lamp, and is adapted to be withdrawn for engaging with a support when desired, or to be housed within the base and is controlled by two springs, one or both of which are caused to come into action to permit an extension of the clamping member, in accordance with the thickness of the support to which the lamp base is to be clamped.

The foregoing, and other important features of the invention, including novel combinations of parts and details of construction will be more fully described hereinafter, and the novel features thereof will be pointed out in the appended claims.

In the drawings,

Fig. 1 is a view in side elevation of a lamp with the base thereof in section showing the features of the invention;

Fig. 2 is a longitudinal sectional view of the base of the lamp, taken on a plane at right angles to that of the plane of section of Fig. 1, and illustrating the clamp in action;

Fig. 3 is an inverted plan view of the base,

Fig. 4 is a side elevation of the base with the clamping member engaging a horizontal tubular support, and

Fig. 5 is a detail view, partly in section, of the stem.

The outer shell of the base 1 is preferably made of sheet metal, suitably shaped as shown, and its lower edge portion embraces a ring of wire, 3, which is preferably covered with rubber so that the base may engage a polished surface without marring it. A metal frame 5 fits within the upper portion of the base and is provided with an annular lower part 7, and is hollow interiorly to receive the stem of the lamp, and other parts, to be hereinafter described.

The tubular lamp supporting stem 9 is provided with an annular bead and is cut out, on opposite sides at 43, and formed with two tongues 44, which are bent out beneath a shoulder 14 formed in the base 7. The stem 9 is received within a thimble 13, having an upper flange 13^a resting upon the upper end of the base 1, and a lower flange 13^b which engages a shoulder formed on the upper portion of the metal frame 5.

The bead 11 of the stem is supported above the flange 13^a, and the stem extends downwardly through the thimble 13 and terminates near the lower extremity of the metal frame.

A rod 28, provided at its upper end portion with a washer 29 which fits within the bore of the stem 9, is mounted to reciprocate in said stem. The lower end of the rod 28 is reduced and threaded, and extends through a plate 26 to which it is secured by a nut 30. The plate 26 has two of its opposite edges rolled at 33, to embrace the ends of a wire clamp 35, which is formed as shown in Fig. 3 of the drawings, as a loop and is preferably covered with rubber 36, to prevent scratching the furniture or other articles which it engages. The wire clamp 35 is provided intermediate its ends with a loop 35^a, which is designed to engage a nail or other projection for supporting the lamp horizontally from a wall.

Surrounding the tubular lamp supporting stem 9, within a hollow portion of the metal frame 5 is a sleeve 19 provided at its upper end with a flange 21 extending outwardly, and at its lower end with an inwardly extending annular portion or flange 32 which fits snugly about the rod 28. The base 5 has two downwardly extending portions to which is fastened by screws 24 a bridge piece 23, the latter having a central aperture through which is adapted to slide the sleeve 19.

A spiral spring 17 surrounds the rod 28, and is confined between the washer 29 and the flange 32 of the sleeve 19, and a second spiral spring, which is shorter than the spring 17, surrounds the sleeve 19 and is confined between the flange 21 thereon and the bridge piece 23.

With the parts as above described the two springs, 17 and 15 act conjointly to hold the rod 28, and parts carried thereby including the clamp 35, within the hollow base 1, and

when the clamp is withdrawn from the base the rod, through the action of the washer 29, will effect a compression of the springs 17, and 15, until the rod 28 has been withdrawn a distance which is sufficient to enable the clamp to pass beneath a table or support of the desired thickness, the sleeve 19 being withdrawn when necessary part way through the central aperture of the bridge piece 23, and acting in effect as an extension of the rod 28. The provision of two springs, with the sleeve 19 for withdrawal in applying the clamp to supports, is an important feature of the invention, in that it provides for using the clamp with supports of a wide range of thicknesses and at the same time permits the clamp controlling mechanism to be housed within a lamp base of the average, or a small size.

The clamp is adapted for use in securing the base to various kinds of supports, as for example to a table or the leaf of a desk, as shown in Fig. 2, or to a horizontally or vertically arranged tubular member, or a rod, as shown in Fig. 4. The loop 35ª, moreover, permits the lamp to be suspended from a nail projecting from a wall or other support without withdrawing the clamp from the base.

The upper end of the stem 9 may be connected by a pivot 40, with any suitable design of electric lamp, as 42, these parts being of any preferred or ordinary construction and not being material as to their details as they form no part of the present invention.

If desired, the two springs 17, 15, may be of such relative resistance as to act successively, though it is preferred that the action of these springs be simultaneous.

What is claimed is:

1. A base for portable lamps having in combination a clamping member and means for drawing said member within the base, including two springs arranged to act on telescopic members.

2. A base for portable lamps having in combination a clamping member, a spring acting to withdraw said member within the base, and a second yielding device arranged to act for permitting withdrawal of the clamping device a distance greater than that permitted by said spring.

3. A base for portable lamps having an interior recess, a clamping member, telescoping means permitting the withdrawal of said member from said base, and a plurality of yielding devices arranged to resist the withdrawal of the telescoping means from said base.

4. A base for portable lamps having a recess therein, a clamping member, a rod connected with said member and movable in said recess, a spring for drawing the rod and clamping member within the base to concealed position, and a second spring permitting the rod and clamp to be withdrawn from the base a distance greater than that permitted by the first-named spring acting alone.

5. A base for portable lamps of hollow form, a frame within said base, a clamp, a rod connected with said clamp and extending within said frame, and two springs arranged to normally maintain said rod within the frame, but permitting the withdrawal of the rod from said frame.

6. In a device of the class described, a hollow base, a lamp stem extending therein provided with a passageway, a rod movable in said passageway, a clamp connected with said rod, a spring acting on the rod to permit withdrawal of the clamp from the base, a sleeve telescoping on said stem, a spring surrounding said sleeve and acting to maintain it within the base, said sleeve having a portion to be engaged by the first-named spring, whereby the rod may be withdrawn against the compression of said springs.

In testimony whereof I have hereunto set my hand this 11th day of February A. D. 1922.

WILMAR F. LENT.