Oct. 7, 1941. P. C. CALISSI 2,258,108

LAMP

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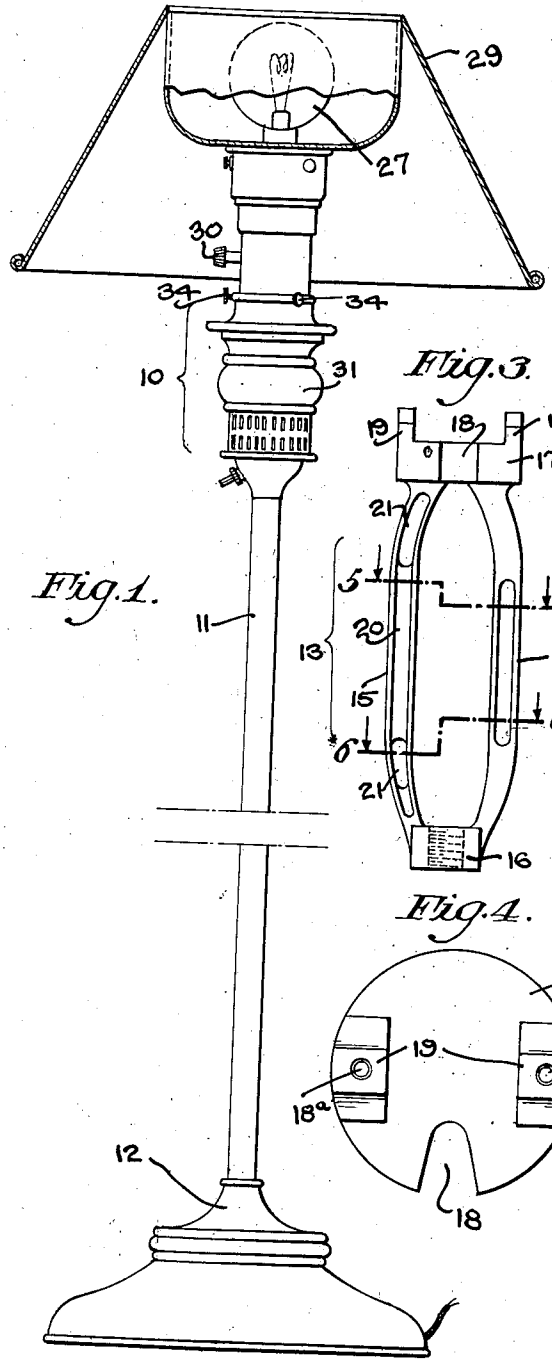


Fig. 1.

Fig. 3.

Fig. 4.

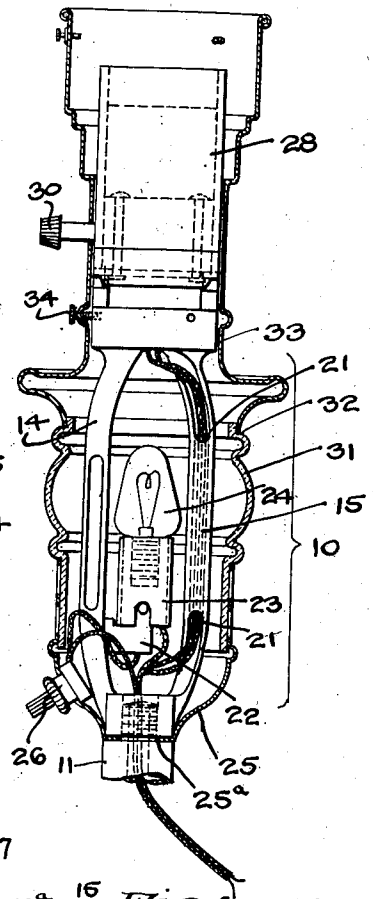


Fig. 2.

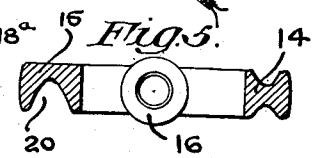


Fig. 5.

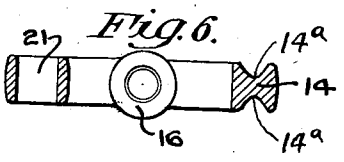


Fig. 6.

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Fig. 7.

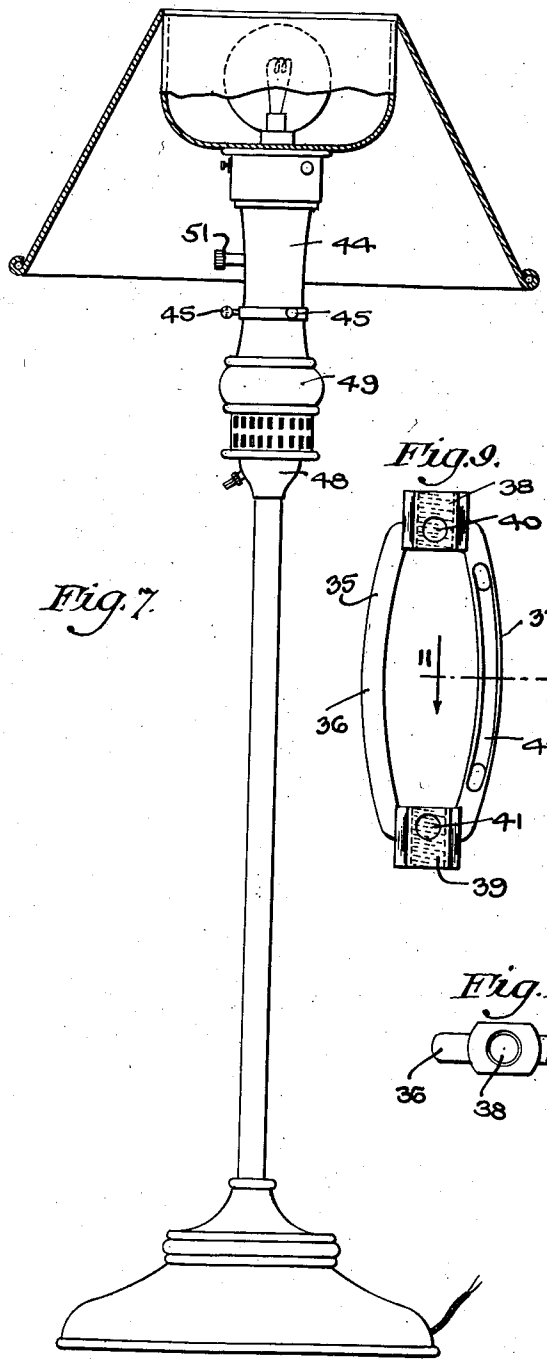


Fig. 9.

Fig. 8.

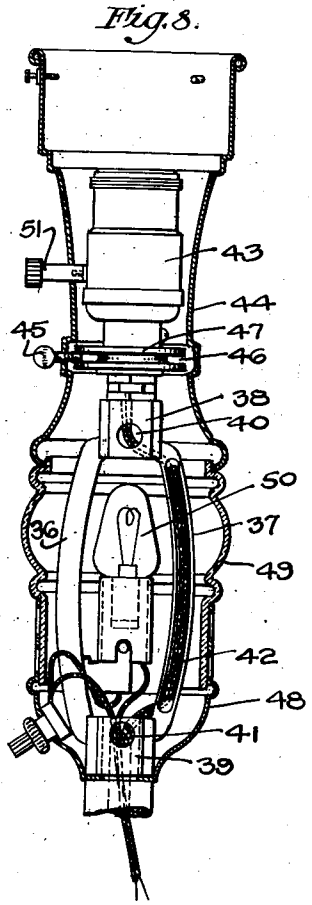
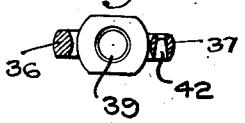


Fig. 10.

Fig. 11.



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Patented Oct. 7, 1941 2,258,108

UNITED STATES PATENT OFFICE

2,258,108

LAMP

Paul C. Calissi, Philadelphia, Pa.

Application June 3, 1939, Serial No. 277,209

5 Claims. (Cl. 240—81)

This invention relates to electric lamps and has as its principal object to provide in the standard of the lamp an auxiliary light of such low wattage that it may serve economically as a pilot to dimly illuminate the room in the immediate vicinity of the lamp. Thus, when the main lighting unit of the lamp is extinguished, the pilot may be utilized to provide subdued illumination sufficient to enable one entering the darkened room to distinguish objects and so avoid any danger of tripping over them.

This invention is an improvement over my prior Patent No. 2,156,617, granted May 2, 1939, and has as its principal object the provision of a construction for enabling ready replacement not only of the pilot as desired but also of the glass or like enclosure for the latter, at the same time that it provides for incorporating the pilot in the lamp standard without rendering the pilot so obtrusive as to reduce the desired pleasing appearance of the lamp structure considered as a whole, all of which will be apparent more fully hereinafter.

In addition, it is an object of the present invention to provide an improved type of open or harp-sharped frame within which the pilot may be disposed and which effectively connects together the parts constituting the enclosure for the pilot, the said frame being designed to accommodate the wiring in the side arms thereof in such manner as to effect a neat and safe wiring assembly.

It will be understood, accordingly, that the present invention consists substantially in the combination, construction, location and relative arrangement of parts, all as described hereinafter, as shown in the accompanying drawings and as finally pointed out in the appended claims.

In the said accompanying drawings:

Figure 1 is an elevational view of a lamp structure constructed in accordance with and embodying the principles of the present invention;

Figure 2 is an enlarged vertical section showing the improved pilot lamp assembly embodied in the standard of the main lamp structure;

Figure 3 is an elevational view of the main connecting member of the pilot lamp assembly;

Figure 4 is an enlarged plan view of the said main connecting member;

Figure 5 is a cross-sectional view on lines 5—5 of Figure 3 looking in the direction of the arrows;

Figure 6 is a cross sectional view on lines 6—6 of Figure 3 looking in the direction of the arrows;

Figure 7 is an elevational view of a lamp embodying a somewhat modified form of the present invention;

Figure 8 is a vertical sectional view of the modified construction of lamp;

Figure 9 is an elevational view of a modified form of the connecting member or frame such as is employed in the lamp of Figure 7;

Figure 10 is a top plan view of the member shown in Figure 9; and

Figure 11 is a cross-sectional view taken on the line 11—11 of Figure 9.

Referring now more particularly to the drawings, it will be observed that the pilot lamp assembly, designated generally by the reference numeral 10, is incorporated at the upper end of the standard 11 of the pedestal type lamp 12. While the lamp shown in the drawings is of the so-called floor lamp type, it will be understood that the present invention is equally applicable to table and bridge lamps where the latter are provided with a straight length portion similar to the standard 11 illustrated.

The reference character 13 designates generally the improved main connecting harp-like frame of substantially hollow rectangular shape, this element being formed with oppositely bowed side members 14 and 15 integrally connected at their bottom ends by the internally threaded boss 16, and at their top ends by the solid head 17 having a wiring clearance cut out in the side thereof, as at 18, and having in addition two upstanding spaced apart lugs 19, 19, each of which is provided with a vertically extending internally threaded hole 18^a, for a purpose to be described.

The side member 14, as clearly appears in the cross sectional views of Figures 5 and 6, is provided with grooves 14^a to reduce the weight of the element 13. The opposite side member 15 is provided with a wiring clearance groove 20 which also serves to reduce the weight of the element 13, this groove terminating at opposite ends thereof with transverse apertures 21—21. Secured in any suitable manner to the inner face of the side member 14 at the lower end thereof is the pilot lamp socket bracket 22, the latter supporting the socket 23 and the pilot lamp 24 of low wattage. The size of the pilot lamp, socket and bracket is such that they readily fit between the side members 14 and 15 of the harp element 13 and the latter is so shaped as to have sufficient clearance relative to the socket 23 and the lamp 24, in order that the latter may be

readily grasped by the fingers for insertion into and removal from its socket.

The upper end of the standard 11 of the lamp is preferably of hollow or tubular construction to permit wiring therethrough, its upper end being secured in any suitable manner, as by the use of a connecting nipple (not shown), to the internally threaded boss 16 of the frame 13. Clamped between the threadedly engaged boss 16 and the lamp standard 11 is the base or lower end of a hollow cup-shaped member 25, the apertured bottom 25a of which is positioned to be clamped between the upper end of the standard 11 and the bottom face of the boss 16, as clearly appears in Figure 2. Suitably secured to the cup 25 is the switch 26, Figure 2, shown wired to and controlling the lighting of the pilot lamp 24, it being understood that conventional wiring is employed to permit operation of the pilot lamp 24 independently of the main lamp 27 which is received within the socket 28 and is provided with the conventional lamp shade and reflector unit 29. The main lamp 27 is controlled by any suitable type of switch operated by means of the switch knob 30. The socket 28 for the main lamp is secured to the upper head 17 of the harp element 13 by means of screws threadedly engaging the holes 19a in the lugs 19—19. The switch knob 30 is of the type which may be bodily removed from its associated switch by the simple expedient of unscrewing it from the latter.

Snugly fitted within and resting upon the upper edge of the cup-shaped member 25, the upper wall portion of which latter may have a perforated design therein, is an enclosure or globe 31 of glass or other suitable light transmissible material, upon the upper edge 32 of which rests the hollow metal enclosure member 33. The globe 21, preferably, is frosted or otherwise rendered translucent to light and is provided with a bottom collar which extends within the cup 25 inside the perforated portion thereof. The opaque enclosure member 33 embraces the upper end of the harp element 13 and the main lamp socket 28, being securely held in fixed position by means of the set screws 34, 34 threadedly engaged in the head 17 of the harp element, thus securely holding the globe 31 in the assembled position shown in Figure 2. The inside diameter and shape of the globe 31 and the enclosure 33 is such that, upon the removal of the set screws 34 and the switch knob 30, they may readily be removed from or replaced over the harp element 13, the pilot lamp assembly and the main socket 28, the main lamp 27 having first been removed. The particular design of the globe 31 and the enclosure 33 may be varied as desired, the particular shape or outline here shown not being necessary so long as the internal diameters of these two elements are sufficient to enable the parts to be assembled or removed as above described.

To remove or replace the pilot lamp 24 with respect to its socket 23, it is merely necessary to loosen or remove the set screws 34 and to remove the switch knob 30, and then to raise the glass globe 31 and the enclosure 33 (the main lamp 27 having first been removed) axially with respect to the harp element 13 to a height sufficient to permit access to the pilot lamp. In the event that the lamp shade 29 is supported by the enclosure 33 as illustrated, it will be obvious that this will likewise move in fixed relation with the members 33. However, in the event that the lamp shade 29 is of the type which requires removal of the same in order to remove the main lamp 27, then, the lamp shade is not replaced until after the enclosure 33 is again fixed in place by the set screws 34.

With reference to the intermediate connecting harp or frame 13, it will be observed that it is of such construction that it serves effectively not only as a connector for the vertically spaced sections of the lamp standard and as a support for the pilot lamp and the parts immediately associated with the latter, but also that it provides a means for securing neatly and safely in permanently fixed position the wiring conductors for the lamp. As clearly appears in Figures 1 to 6, the lamp conductors leading to the main lamp 27 extending upwardly through the lower section of the lamp standard and into the bore of the lower boss 16 of the member 13 is thence threaded into and through the aperture 21 which communicates with the lower end of the wiring clearance groove 20. The conductors referred to are thus accommodated in this groove and pass outwardly thereof by way of the aperture 21 in communication with the upper extremity of the groove and thence extend upwardly to the main lamp socket by way of the cut-out wiring clearance 18 formed in the side of the upper head 17 of the connecting frame 13. The conductors leading to the pilot lamp extend upwardly through the bore of the lower boss 16, it being understood, of course, that these latter conductors are conventionally connected in parallel with the conductors leading to the main lamp, the connection being effected preferably at a point immediately below the connecting member 13, it being further understood that the switches for controlling the operation of the main lamp and pilot lamp are respectively included in circuit with these lamps in conventional manner for insuring independent operation thereof. By means of the frame member 13, the lamp conductors are maintained in fixed relation and out of the way of the pilot bulb and render the wiring assembly at once compact, secure and safe.

As has been heretofore indicated, the construction herein involved is adapted not only to so-called floor lamps but also to table lamps, in which latter the standard is of materially reduced length. Usually, the table lamp is of necessity similar and more compact in the immediate vicinity of the main lamp than is the floor lamp type of construction, and an example of this more compact construction is illustrated in Figures 7 to 11. In this modified form as shown in the latter figures, it will be observed that the harp-like frame member 35 is provided with a pair of oppositely bowed side members 36 and 37 similar to those of the frame member shown in Figures 1 to 6 and their lower extremities are connected as in the previously described form by an internally threaded boss 39. However, the upper extremities of these side arms 36 and 37 are joined together by an internally threaded boss 38 instead of by a solid head as in the previous case, the upper and lower bosses 38 and 39 being respectively provided with transverse apertures 40 and 41 in the side walls thereof through which are threaded the conductors which lie in the wiring clearance groove 42 formed in the side arm 37.

In this modified form of construction, the main lamp socket 43 is connected by means of a suitable nipple (not shown) directly to the connecting harp-like frame member, this nipple being in threaded engagement with the internal thread-

ed bore of the upper boss **38**. The wiring leading to the main lamp socket **43** emerges from the upper extremity of the wiring clearance groove **42** and is threaded through the transverse opening **40** in the upper boss **38** and thus upwardly through the bore of that boss to the lamp socket **43**. In all other respects, the harp-like connecting frame member of the herein-described modified form functions in the same manner and for the same purpose as that of the form previously described.

It will be noted that in the arrangement shown in Figures 1 to 6, the upper shell **33**, which rests upon the globe **31** is secured in position by means of set screws **34** threadedly engaged into the solid head of the harp element **13**. In the modified form of construction as shown in Figures 7 to 11, the upper shell **44**, which is the equivalent of the shell **33** of Figure 2, is secured in place by means of set screws **45—45** threadedly carried by said shell and projecting into the annular groove **46** of a holding member **47** secured in position above the harp-like connecting member. This shell-holding member with its annular groove **46** formed in the peripheral edge thereof eliminates the necessity of accurately registering the set screws **45** with threaded apertures therefor as in the case of the construction shown in Figure 2.

As in the previously described construction, the upper shell **44** serves conjointly with the lower shell **48** to securely clamp in position the intermediate light transmissible globe **49** and said shells and globe when secured together as shown conjointly provide a completely enclosed housing for the pilot lamp **50**, this housing being openable at will to remove and replace the pilot lamp by the simple expedient of loosening the said screws **45—45** sufficiently to permit the upper shell **44** and the globe **49** to be raised vertically to a height sufficient to afford access to the pilot lamp. It will be understood, of course, that in order to raise the shell **44**, the main lamp switch knob **51** must be removed and to that end this knob is of the removable type as in the construction previously described.

What is claimed as new and useful is:

1. An element for a lamp assembly comprising a substantially hollow rectangular shaped member having a pair of laterally spaced legs, an internally threaded boss at the lower junction of said legs for securing said member to a supporting structure, and means at the upper junction of said legs for supporting a lamp socket in vertically spaced relation to said supporting structure, said means being in the form of a solid head having a wiring clearance groove in one side thereof, one of said legs being provided with means to receive and fixedly support a pilot lamp socket and removable lamp wholly between said legs.

2. In a lamp, a support therefor, a harp-like element secured to and extending axially of said support, said harp-like element including a pair of laterally spaced legs joined together at their top and bottom extremities, means at the lower junction of said legs for securing said element to said support and at the upper junction of said legs for supporting a main lamp socket immediately above said element and in vertically extending position, an upwardly presenting cup-shaped opaque member having its lower edge fixedly secured below said element, a light transmissible member movably associated with and arranged to rest upon said fixed cup-shaped member, a second opaque member engageable with the upper extremity of said light transmissible member and movable together with the latter, said second opaque member being extended upwardly to embrace said main lamp socket, means for securing said second opaque member fixedly in position whereby to clamp said light transmissible member in secured position between said opaque members, said last-mentioned means including a plurality of set screws arranged circumferentially about and extending radially through said second opaque member for engagement with a part disposed interiorly of said opaque member and fixed to said harp-like element, and a pilot lamp disposed between the legs of said harp-like element whereby said lamp is embraced within and completely enclosed by a surrounding enclosure formed of said opaque members and said light-transmissible member.

3. An element for a lamp assembly as defined in claim 1 wherein the solid head at the upper junction of said laterally spaced legs includes means for freely passing lamp conducting wires upwardly beyond said head while confining said wires within the perimetral limits of said head.

4. In a lamp, a support therefor, a harp-like element secured to and extending axially of said support, said harp-like element including a pair of laterally spaced legs joined together at their top and bottom extremities, means at the lower junction of said legs for securing said element to said support and at the upper junction of said legs for supporting a main lamp socket immediately above said element and in vertically extending position, an upwardly presenting cup-shaped opaque member having its lower edge fixedly secured below said element, a light transmissible member movably associated with and arranged to rest upon said fixed cup-shaped member, a second opaque member engageable with the upper extremity of said light transmissible member and movable together with the latter, said second opaque member being extended upwardly to embrace said main lamp socket, means for securing said second opaque member fixedly in position whereby to clamp said light transmissible member in secured position between said opaque members, and a pilot lamp disposed between the legs of said harp-like element whereby said lamp is embraced within and completely enclosed by a surrounding enclosure formed of said opaque members and said light transmissible member, said last-mentioned means including a plurality of set screws spaced circumferentially about said second opaque member and extending radially therethrough and a solid head provided at the upper junction of the legs of said harp-like element having circumferentially spaced threaded sockets therein for respectively receiving said set screws.

5. In a lamp, a support therefor, a harp-like element secured to and extending axially of said support, said harp-like element including a pair of laterally spaced legs joined together at their top and bottom extremities, means at the lower junction of said legs for securing said element to said support and at the upper junction of said legs for supporting a main lamp socket immediately above said element and in vertically extending position, an upwardly presenting cup-shaped opaque member having its lower edge fixedly secured below said element, a light transmissible member movably associated with and arranged to rest upon said fixed cup-shaped member, a second opaque member engageable with the upper extremity of said light transmissible member and movable together with the lat-

ter, said second opaque member being extended upwardly to embrace said main lamp socket, means for securing said second opaque member fixedly in position whereby to clamp said light transmissible member in secured position between said opaque members, and a pilot lamp disposed between the legs of said harp-like element whereby said lamp is embraced within and completely enclosed by a surrounding enclosure formed of said opaque members and said light transmissible member, said last-mentioned means including a plurality of set screws spaced circumferentially about said second opaque member and extending radially therethrough, and a circular member disposed above and secured to the upper junction of the legs of said harp-like member and having an annular groove therein adapted to receive said set screws.

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