This invention relates in general to lighting fixtures and is more particularly directed to a novel and improved support for lighting fixture elements such as globes to facilitate cleaning and replacement of electric lamps.

In lighting fixtures and particularly ceiling type fixtures wherein the bulb or lamps are enclosed or at least partially enclosed within a surrounding globe, it is necessary to completely remove the globe from the fixture for cleaning and replacement of the bulb. Since the globes are often fragile and difficult to handle, care must be exercised in their removal and replacement. Moreover, with globes having a central opening through which a rod or pipe extends for the attachment of a nut to hold the globe in place, should the nut accidentally become disengaged from the rod, there is not only the danger of breaking the globe, but also the danger of injury to persons in the vicinity let alone the inconvenience and time lost in the search of such nut.

To obviate the limitations above presented an improved support in accordance with the present invention is provided wherein the globe to be secured is fixedly attached to the support and at the same time lowered and raised in position without actually being disengaged from the globe with supporting means. Generally to permit the globe to be raised or lowered a supporting nut must be removed from the supporting shaft or pipe. The removal of such nut presents the possibility of dislocation or otherwise misplacement thereof, a factor which means loss of time and money. Therefore a captive type nut assembly is provided which is capably held to the shaft to prevent its removal thereafter from and to permit automatic alignment of the globe in its fixed position.

Another object of the invention resides in a novel and improved globe support for electric fixtures that is characterized by its simplicity, relatively low cost and dependability.

A still further object of the invention resides in a novel and improved globe support for electric fixtures. The above and other objects and advantages of the invention will become apparent from the following description and accompanying drawings forming a part of this application.

In the drawings:
Figure 1 is a cross sectional view of an electric fixture having a globe support in accordance with the invention;
Figure 2 is a view of the globe support shown in Figure 1 in the extended position; and
Figure 3 is an expanded sectional view of the lower portion of the globe support shown in Figure 2 forming captive nut assembly according to the invention.

While it will become apparent that the invention may be readily applied to a variety of electric fixtures having globes of glass, plastic or other material for enclosing or particularly enclosing the lighting means, for the purposes of this application the invention is illustrated as being applied to a ceiling type fixture having a globe of translucent or transparent material secured to the fixture by supporting means engaging a central opening.

With reference to drawings Figures 1 through 3, the light fixture is generally denoted by the numeral 10 and includes a relatively flat base or pan 11 and a globe 12 of glass or other transparent or translucent material. The base 11 is secured to the ceiling 13 by means of a conventional outlet box 14 embedded in the ceiling and a transverse bracket member 15 secured to the outlet box 14 by screws 16. The bracket member 15 has a pair of threaded openings for the receipt of screws 17 that extend through cooperating openings in the base 11.

The globe 12, or otherwise called "drop-glass," has a central opening 18 for attachment to the fixture. The periphery of the drop-glass engages a shoulder 19 on the base which aligns the glass with the base and the central opening with the supporting member. When the glass 12 is in place it encloses lighting means such as the bulb 20 carried by socket 21.

The glass support or hanger, in accordance with a preferred embodiment of the invention, is generally designated by the numeral 22. As shown in Figures 1 through 3 the glass can be secured in the upper position or lowered away from the base for the purpose of cleaning or replacement of the lamp or bulb 20. More specifically the hanger 22 comprises an L-shaped channel member 23 having a horizontal leg 24 and a vertically disposed leg 25. The leg 24 includes an opening 26 therein through which a captive threaded bolt 27 extends for attachment to the base 11 of the fixture by means of cooperating nut 28.

The downwardly or vertically disposed leg 25 of channel member 23 includes an elongated slot 29 extending longitudinally along the web portion of the channel member. A second L-shaped channel member 31, disposed to slidably engage inwardly channel member 23 along its respective flange portions, has a horizontal upper leg 32 extending in the same general direction as leg 24 with an opening 33 extending therethrough for receiving an elongated rod 33' threaded at its lower extremity. The upper end of the rod 33' is riveted at 34 to the leg 32 to prevent rotation thereof relative to the bracket 31.

The channel member 31 has an elongated slot 35 extending longitudinally along the web portion similar to the slot 29 in member 23, both slots being aligned when the channel members are slidably engaged. To fixedly position one channel member with respect to the other a screw extends through both slots 29 and 35 and is engaged by a winged nut 37 for the purpose of locking both channel members in a fixed predetermined position.

A third bracket member is provided which has a vertical member 39 having an upper portion 40 relatively narrower than the remainder thereof and a hole 41 extending therethrough for receiving a rivet member 42. The rivet 42 communicates with the slot 35 and permits slidable engagement of the bracket with the channel member 31. The narrow upper bracket portion 40 of bracket 39 permits free, unrestricted rotational movement of the bracket about the rivet and relative to the L-shaped members 23 and 35 when in its extended position for the purposes of cleaning or removal of the bulb or globe.

The L-shaped bracket member 39 has a horizontal lower leg 43 extending in the same general direction as the legs 24 and 32 with a hole extending therethrough for receiving an externally threaded captive bushing 44. The drop-glass 12 is fixedly secured to the horizontal leg of the bracket by means of a captive nut assembly generally designated by the reference numeral 45 and felt or other resilient washers 46 and 47. The captive nut assembly 45 includes a member 48 threaded at 49 for engagement of the bushing 44 carried by the leg 43 of the bracket member 39. The threaded member 48 further includes a peripheral flange 50 welded or otherwise.
wise secured to the large annular member or knob 51. The periphery of the knob 51 is flanged as indicated at 52 and the height of the flange is preferably arranged to extend above the nut 48. The underside of the nut 48 is recessed as indicated at 53 to receive rotatably the head portion 55 of an internally and externally threaded bushing 54. The shank 56 of the bushing extends through an opening 57 in the member 51 and receives a smaller knob 58 cemented or otherwise fixedly secured to the shank 56. With this arrangement the knob and bushing rotate independently of the annular knob 51.

To fixedly secure the drop glass 12 to the fixture as shown in Fig. 1, the glass is raised vertically until the lower end of rod 33 extends through the bushing 44 and enters the threaded opening 59 in the bushing 54. Rotation of the knob 58 will engage the bushing 54 and rod 33 and secure the glass 12 in the raised position. The adjustment of channel member 35 provides for different sizes of globes so that once having determined the size of globe necessary, the channel member 35 is adjusted accordingly and locked in place by wing nut 37. When dropping the globe for cleaning purposes and the like, as shown in Figure 2, the knob 58 is rotated in the other direction to disengage the bushing 54 from rod 33. Since the nut 48 remains in engagement with the bushing 44 the globe will remain secured to the supporting bracket and the knob 58 will remain in place in the assembly 45. In this way the glass can be lowered and raised with a minimum of difficulty and without the problem of having to hold the globe with one hand while endeavoring to engage the nut 58 with the other. The invention therefore not only affords a safer, more dependable globe support, but at the same time contributes materially to the safety of the user.

With the certain embodiments of the invention have been illustrated and described, it is apparent that alterations, modifications and changes may be made without departing from the true scope and spirit thereof.

What is claimed is:

1. A hanger for lighting fixtures having enclosure means for enclosing the fixture comprising a first elongated L-shaped channel member having means on one leg for attachment to a fixture element, a second elongated L-shaped channel member having one leg secured to the other leg of the first said member for movement relative thereto, an L-shaped bracket member having a leg secured to the leg of the said second L-shaped channel member for movement relative thereto, the other leg of the L-shaped bracket member including composite fastening means having at least two rotatably coupled elements, one of said elements releasably securing said enclosure to said other leg of the L-shaped bracket member and means on the other leg of said second L-shaped channel member detachably connected with the other element for releasably securing the enclosure means in its enclosable position.

2. An extensible globe hanger for lighting fixtures comprising a first L-shaped channel member having means on one leg for securing the channel member to a fixture element, the other leg of the channel member including an elongated slot, a second L-shaped channel member, one leg of said second member having an elongated slot aligned with the slot of the first member, the channel members being disposed to fit said L-shaped channel for relative slidable engagement, means in communication with the slotted portions of the channel members to fixedly position the said members one relative to the other, an L-shaped bracket member having one leg slidably secured to the one leg of the second L-shaped channel member along the slotted portion thereof, the said bracket member including a second leg having a hole extending therefrom for receiving a threaded bushing having a central bore, a captive nut for engaging the bushing to secure the globe to the hanger, a threaded rod carried by one of the said L-shaped channel members and axially aligned with the said bushing and means secured to the captive nut for engaging the threaded rod when disposed to communicate with the bore of said bushing for mounting the globe in its operable position.

3. A hanger for lighting fixtures according to claim 2 wherein said threaded rod is carried by said second L-shaped channel member.

4. In an electric fixture having a light source and means at least partially enclosing said source, a hanger assembly including relatively slidable members carried by a fixture element with one of said members fixedly positioned relative to the fixture element and the member of said members being slidable relative to said one member, a threaded bushing carried by said other member and extending through an opening in said enclosing means, a composite knob having a pair of rotatably coupled knob portions with one portion having a threaded opening therein connected to said threaded bushing to secure said enclosing means to said other member, a threaded rod fixedly attached to one of said slidable members and extending through said threaded bushing when said enclosing means is in the light source enclosing position, said other knob rotatably carried by said first knob portion having a central threaded opening therein and threadably engaging said threaded rod to hold the enclosing means in the enclosing position, whereby release of the second knob from engagement to the threaded rod will permit the enclosing means to move out of the enclosing position a distance determined by the said slidable members.

5. In an electric fixture having a light source and means at least partially enclosing said source, a hanger assembly including relatively slidable members carried by said fixture, enclosing means for movement into and out of an enclosing position, a composite knob formed of at least two knob portions coupled one to the other for rotation of one knob portion relative to the other portion, one of said knob portions securing said enclosing means to one of said slidable members and the other knob portion releasably holding the enclosing means in said enclosing position and operable to release the enclosing means for movement out of the enclosing position while remaining in coupled rotatable relationship to said one knob portion.

6. A hanger for lighting fixtures having enclosure means comprising at least two elongated channel members coupled one to the other for relative longitudinal movement, means cooperating with said members for restricting longitudinal movement thereof, an elongated bracket member coupled to at least one of said channel members for relative longitudinal movement and means including a captive knob assembly having a pair of individual knob portions coupled one to the other for rotation of one knob portion relative to the other knob portion, one of said knob portions releasably securing said enclosure means to the last said bracket and the other knob portion releasably holding the enclosure in an enclosing position.

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