

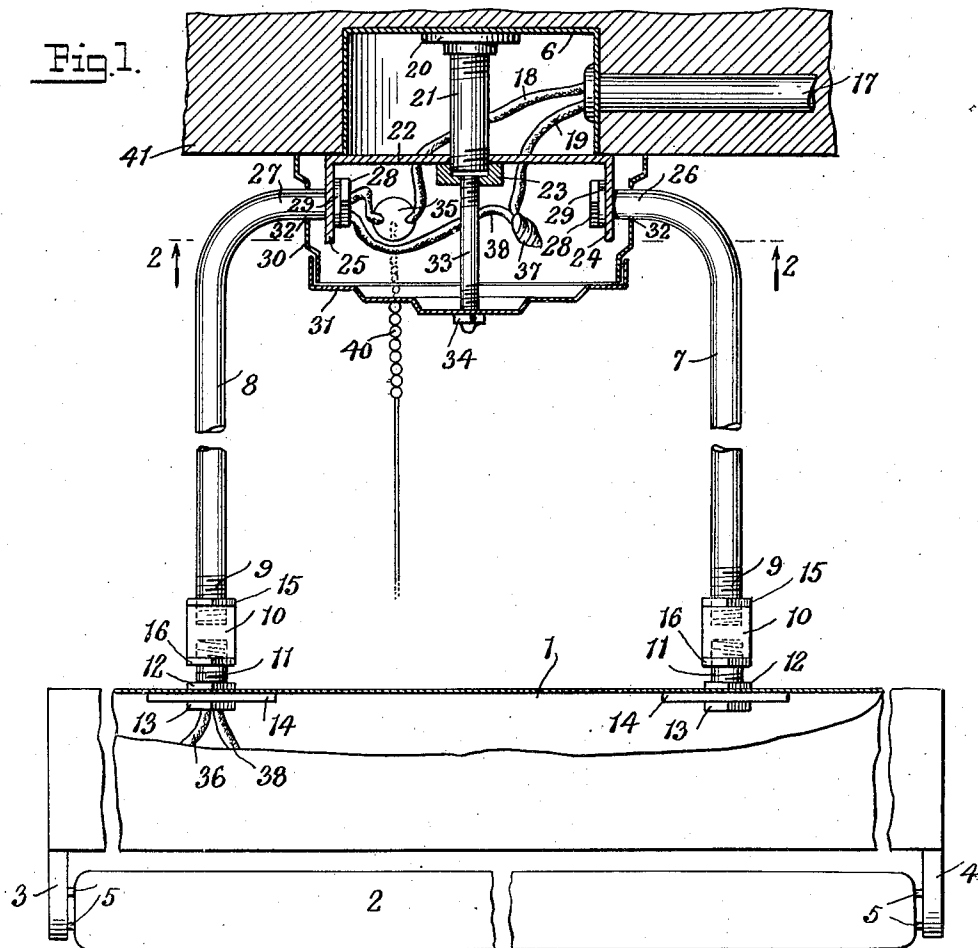
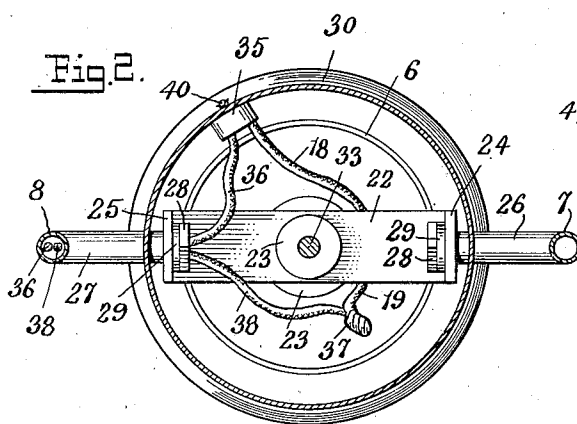
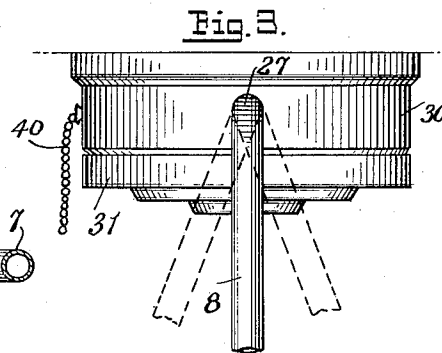
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ELECTRIC FIXTURE

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ELECTRIC FIXTURE

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6 Claims. Cl. 248—343)

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This invention relates to electric fixtures and more particularly to a means for attaching the same, whereby a secure mounting is assured for the fixture.

At the present time, fixtures intended for use with fluorescent lamps, when suspended from the ceiling, are usually attached by straight tubular rods, secured at their upper ends in a boxlike housing attached to an outlet box mounted in the ceiling structure. This arrangement is such that the fixture is rigidly mounted, but owing to the length and bulk of the fixture, any strain or leverage applied against the fixture often tends to loosen it if not pull it completely loose from its fastening. Such an occurrence often takes place when an angular, vigorous pull is exerted upon the cord dependent from a switch mounted in the canopy of the fixture.

An object of the present invention is to provide a mounting means, particularly adapted for fixtures intended for the lengthy fluorescent lamps, and wherein the fixture, while securely mounted on an outlet box, will nevertheless require only a relatively small and ornamental canopy and is provided with a means of attachment by which a swinging movement of the fixture is permitted so that it will neither be loosened or dislodged from its fastening when strain is imposed upon it nor will it be likely to be damaged in the event of a shock.

Another object of the invention is to provide, in a structure of the character described, means by which the mounting of the fixture is greatly facilitated; means by which the fixture may be readily supported from an outlet box of conventional character, and means by which the fixture may be leveled or adjusted to meet various conditions of installation.

These and other objects are attained by the invention, a more particular description of which will hereinafter appear and be set forth in the claims appended hereto.

In the accompanying drawing, wherein an illustrative embodiment of the invention is disclosed, Fig. 1 is a vertical sectional view through the improved mounting means for the fixture; Fig. 2 is a sectional view on the line 2—2 of Fig. 1, looking in the direction of the arrows, and Fig. 3 is a view of the canopy taken at right angles to that of Fig. 1.

Referring to the drawing, 1 indicates an electric fixture of the character intended for holding the lengthy fluorescent lamps 2, said fixture having the conventional sockets 3 and 4, in which the pins 5 of the lamp are received in the known

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manner. The fixture 1 is supported or hung from a ceiling outlet box 6 mounted in the ceiling structure 41 in the usual way. The fixture is supported by means of a pair of tubular rods 7 and 8.

The lower end of each of these rods is threaded, as indicated at 9, for engagement with an internally-threaded sleeve-like coupling 10. Threaded in the opposite end of said coupling is a nipple 11 which is passed through a hole in the body of the fixture 1 and is secured thereto by the nuts 12 and 13. A reinforcing piece 14 surrounds the hole in the fixture through which the nipple extends, to add rigidity and strength at this point. The thread 9 at the lower end of each of the rods 7 and 8 is of the "right-hand" type, while the thread at the upper end of the nipple 11 is "left-hand" and the couplings 10 when rotated will thus draw the end of the rods 7 or 8 toward the nipple 11 or move these elements apart, according to the direction of rotation of the coupling. This arrangement is such that by rotation of one or the other of the couplings 10, the effective length of either of the supporting rods 7 and 8 can be regulated so that the fixture can at any time be leveled. Lock nuts 15 and 16 are provided at the opposite ends of each of the couplings 10 to lock the couplings in any selected position of adjustment.

The outlet box 6 is mounted in the ceiling structure 41 in the conventional manner, and conduit 17, flexible metal cable or other enclosure for the wiring, leads into the box and conveys the wires 18 and 19 thereinto. The outlet box 6 is provided with a central boss 20 which threadably receives one end of a stud 21, the lower end of said stud passing through a hole in a bar bridge 22, which extends across the lower, or open, end of the outlet box 6 and is clamped firmly across the same by means of a nut 23 threadably received on the lower threaded end of the vertically disposed, downwardly projecting stud 21.

At each of its ends, the bar or bridge 22 is downwardly bent to provide the two downwardly-directed lug portions 24 and 25, which elements receive and hold the ends of the supporting rods 7 and 8. At its upper end, each of the rods 7 and 8 is bent substantially at right angles to the body of the rod. The bent end portion of the rod 7, indicated at 26, passes through a hole provided in the lug portion 24 of the bar 22, and in which this portion of the rod can move or swing. Similarly, the bent end portion 27 of the rod 8 enters through a hole provided through the lug portion 24 and is swingable therein. A nut 28 and washer 29 are received on the inner end of each of the

rod portions 26 and 27, thereby preventing these portions from pulling out of the lug portions 24 and 25, yet permitting the fixture to swing when required.

At 30 is shown the body portion of a canopy which may be substantially cylindrical in shape and of any desired ornamental form and relatively small as compared to the long, elongated canopies now generally used for fluorescent fixtures at the present time. The canopy consists of two parts, namely, the body portion indicated at 30 and a cover plate or closure member indicated at 31. The body 30 of the canopy is provided in its side wall with diametrically opposite holes 32, through which the bent ends 26 and 27 of the supporting rods 7 and 8 are passed to pass through the lugs 24 and 25. The cover member or closure 31 fits over and closes the lower end of the canopy body 30 and is held in place by means of a threaded stud 33 which has its upper end portion threadably received in one end of the nut 23. Said stud 33 passes through a centrally located hole in the cover member 31, and a nut 34 received on the lower end of the stud 33 holds the cover member securely in position to close the lower end of the canopy and thus conceal the wiring within the same as well as conceal the connections of the bent ends 26 and 27 of the rods 7 and 8 with the lug portions 24 and 25.

A switch 35 is mounted in the canopy, said switch being operated by a pull chain 40 hanging down from the canopy. The wire 18 is connected to one side of the switch, and the other side of the switch attaches to a wire 36 which extends down through the rod 8 into the fixture 1 for attachment to the proper terminals in the fixture 1. Wire 19 connects by the splice 37 to a wire 38 extending down through the rod 8 into the fixture for attachment therein to the proper terminals for lighting the lamp 2 in the known manner.

The attachment of the fixture is extremely simple. The parts of the same, consisting of the fixture 1 with the rods 7 and 8 attached in the manner described, the canopy body 30 in place on the bent ends 26 and 27 of the rods, and the bar 22 connecting the bent ends of the rods, are first assembled. The fixture with the above-mentioned parts attached, is raised into position so that the lower end of the stud 21 passes through the central hole in the bar or bridge 22. The nut 23 is threaded on the lower protruding end of the stud 21 and the nut will then hold the assembly in place. The wires are then connected up in the manner illustrated in Fig. 1 and as previously described. When this is done, one end of the stud 33 is threaded into nut 23, the cover member or closure plate 31 is then slipped over the lower end of the stud 33 and the nut 34 is then threaded on the protruding end of the stud 33 to thereby hold the cover in place.

The resultant fixture and means of attachment is a simple and secure one. The canopy is relatively small and may be made in numerous artistic designs and shapes, and the removal of the cover plate at any time permits ready access to the wiring. Since the rods 7 and 8 are hung from the lug portions 24 and 25 of the bar or bridge 22 and are swingingly suspended from the same, the fixture may, when necessary swing as indicated in dotted lines in Fig. 3, and thus be saved from possible injury when subjected to a blow or push. This is of special importance when a switch is mounted in the canopy and the switch is operated by a

pull chain. Some users of such a pull chain often pull vigorously on the chain at a sharp angle, thus exerting an angular pull against the body of the fixture 1, and the case of an immovably mounted fixture, subjecting the fixture to considerable strain and often loosening it from its attaching means. By providing a swinging means for the fixture, as herein described, an angular strain on the fixture is avoided when the pull chain of the switch is roughly subjected to angular pulling strain.

While I have described one embodiment of the invention, it is obvious that the same is not to be restricted thereto but is broad enough to cover all structures coming within the scope of the annexed claim.

What I claim is:

1. An electric fixture mounting comprising, an outlet box having a stud, a bar mounted on the stud and provided with downwardly-bent ends, a canopy surrounding the downwardly-bent ends, an electric fixture having a pair of upwardly-extending tubular supports, the upper ends of said supports being bent substantially horizontally and extended through and swingingly mounted in the downwardly-bent ends of the bar, means on the ends of the supports for maintaining the same in the bar, and a cover plate removably fitted over the lower end of the canopy.

2. An electric fixture mounting comprising, an outlet box mounted in a ceiling, a stud projecting out of the box, a bar fitted on the stud and extending across the outlet box and having downwardly-bent ends projecting below the ceiling, an electric fixture having a pair of upwardly-extending supporting rods, the upper ends of the rods being bent toward one another, a canopy having an open lower end and provided with apertures in its side walls through which the bent ends of the supporting rods extend, the downwardly-bent ends of the bar being each provided with a hole through which one of the bent ends of a supporting rod extends, whereby said supporting rods are swingingly mounted in said ends of the bar and in the canopy, a nut on each of the bent ends of the rods to hold said ends in the bar, and a cover plate fitting over and closing the lower end of the canopy and concealing the ends of the rods and the bar in which the same are mounted.

3. In an electric fixture, an outlet box in which a cross bar is supported, said bar having downwardly-bent lug portions at its ends, an electric fixture having upright supporting rods arising from it, said rods having ends bent toward one another and swingingly mounted in the lug portions, and a canopy in which the bar and the connection of the rods therewith are enclosed.

4. An electric fixture mounting comprising, an outlet box mounted in a ceiling, a stud projecting out of the box, a bar fitted on the stud and extending across the outlet box and having downwardly-bent ends projecting below the ceiling, an electric fixture having a pair of tubular upwardly extending supporting rods, the upper ends of the rods being bent substantially horizontally and toward one another, a canopy having an open lower end and provided with apertures through its side wall through which the horizontally-bent ends of the supporting rods extend, the downwardly-bent ends of the bar being each provided with a hole through which the bent end of one of the supporting rods extends, whereby said supporting rods are swingingly mounted in said ends of the bar and in the canopy, a nut on each of the

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bent ends of the rods to hold said ends in the bar, a cover plate fitting over and closing the lower end of the canopy and concealing the ends of the rods and the bar in which the same are mounted, and means for independently adjusting the effective lengths of the supporting rods.

5. In an electric fixture, an outlet box mounted in a ceiling, said box including a cross-bar provided with a plurality of downwardly-depending, apertured lugs extending below the face of the ceiling, a fixture having a plurality of upwardly-extending tubular supporting rods provided with angularly-bent upper ends extending through the apertures in the lugs, whereby said fixture will be swingably supported from said lugs, an annular canopy surrounding the lugs and having apertures through which the ends of the rods are fitted to reach the lugs, a closure member for the lower end of the canopy, a threaded stud extending downwardly from the cross-bar and passing through the closure member and receiving a nut for holding the closure member in place.

6. In an electric fixture, an outlet box mounted in a ceiling, said box including an element in the form of a bridge extending across the lower end of the outlet box, said bridge being provided with

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a plurality of downwardly-depending, apertured lugs extending below the face of the ceiling, a fixture having a plurality of upwardly-extending tubular rods provided with angularly-bent upper ends extending through the apertures in the lugs and swingably mounted therein whereby said fixture will be swingably supported from said lugs, an annular canopy surrounding the lugs and having apertures through which the ends of the rods are extended to reach the lugs, a closure member for the lower end of the canopy, and means for permitting an independent adjustment of each of the supporting rods to thereby regulate the effective length of the same.

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