A recessed lighting fixture having a reflector and lamp mounted in a housing having at least one opening therein. A curved track is mounted in the housing with the lamp assembly being slidably mounted on the track for movement between a first position in which the lamp assembly is substantially wholly contained substantially wholly within the housing and a second position in which the lamp assembly is positioned outside the housing.
RECESSED LIGHTING FIXTURE

This invention relates to lighting fixtures and more particularly to a recessed lighting fixture having a movable lamp assembly therein.

Recessed lighting fixtures embodying lamp assemblies arranged for movement relative to the housing to shift both the direction and angle of the emitted light have been suggested, but such structures are relatively complicated and expensive and, in many instances, provide only limited lamp adjustment. This invention overcomes the foregoing difficulties and provides a novel and improved recessed lighting fixture affording a vertical angular adjustment of the order of 90° and a horizontal directional adjustment of the order of 360°. This is attained by an improved arrangement and organization of elements which provides a simplified structure which is easy to adjust and maintain, and which can be fabricated at a relatively low cost.

Another object of the invention resides in the provision of a novel and improved recessed lighting fixture wherein the angle and direction of the emitted light can be adjusted over relative wide ranges.

The above and other objects and advantages will become more apparent from the following description and accompanying drawings forming part of this application.

In the Drawings:

FIG. 1 is an exploded perspective view of the lighting fixture in accordance with the invention,

FIG. 2 is a cross-sectional view of FIG. 4 taken along the line 2—2 thereof,

FIG. 3 is a bottom view of the assembled fixture shown in FIG. 1,

FIG. 4 is a cross-sectional view of FIG. 2 taken along the line 4—4 thereof,

FIG. 5 is a left-hand elevational view of FIG. 4 with portions broken away, and

FIG. 6 is a perspective view of a clip for slidably engaging a curved track and controlling the angular position of the lamp assembly relative to the housing.

Referring now to the drawings, the recessed fixture generally denoted by the numeral 10 includes a single open-ended cylindrical housing 12 having an outwardly extending flange 13 about the open end thereof. The housing also includes slotted openings 14 for mounting the fixture to a conventional plaster ring now shown since the installation of recessed fixtures is well known in the art. The flange 13 includes a plurality of internally threaded bushings 15 extending from the bottom surface of the flange.

The bottom closure plate and lamp assembly support structure is generally denoted by the numeral 16 and it is held in position on the fixture by an escutcheon plate 17. The closure plate includes a ring 18 having a short cylindrical portion 19 slidably engaging the inside of housing 12 and an outwardly extending flange 20 having a diameter slightly smaller than the diameter defined by the bushings 15 so that the flange 20 will ride against the housing flange 13. A plate 21 underlies and is secured to the flange 20 and has a pear-shaped opening 22 therein to permit the lamp assembly 23 to be moved into and out of the housing 12 as will be described.

The lamp assembly supporting means carried by the closure plate 16 includes a vertically disposed curved track 24 secured at its lower end to the narrow portion of opening 22 and at its upper portion to an upright member 25 fixed at its lower end to the cylindrical portion 19. A hinge 26 is secured to the plate 21 at the base of member 25 as will be observed more clearly in FIG. 4.

The closure plate 16 is held in position by the escutcheon 17 which has screw receiving openings coordinated with the bushings 15. When screws 28 are inserted through openings 27 and engage bushings 15, the closure plate is rotatably held in place since the depth of bushings 15 is slightly greater than the combined thickness of flange 20 and plate 21.

The lamp assembly 23, as will be seen more clearly in FIG. 4, includes a generally conical lamp housing 29 secured at the bottom edge to hinge 26 and carries a bracket or spring clip 30 at its apex. The clip 30 has a shank 31 attached by means of an opening 32 and screw 33 to the lamp housing 29. The screw 33 may also engage and secure the lamp socket 34 in place in the lamp housing. The clip 30 has a pair of ears 35 bent about and slidably engaging track 29, and a spring 36 bears against the underside of track 29 to provide sufficient friction to hold the lamp housing 29 in any adjusted position. A flexible electric cable 37 is connected to the socket 34 and emerges from the lamp housing through an opening 38. The cable then extends through an electrical connector 39 in housing 12 for connection to a suitable supply. Adequate slack is provided in the cable to permit movement of the lamp assembly 23 as will be described.

With the structure as described above, the lamp assembly 23 can be positioned wholly within the housing 12 as shown in full lines in FIG. 4 so that conventional down lighting is provided. The angular position of the lamp assembly can be adjusted simply by grasping the tab 40 on the side of the lamp housing 29 and pulling it downwardly. This causes the lamp assembly to move about the hinge pivot 42 and the spring clip 30 will hold the lamp assembly in any adjusted position including the outermost position shown in the dotted outline in FIG. 4. At the same time, the lamp assembly 23 can be rotated relative to the housing 12. Stop means 41 carried by the housing 12 limits rotation of the lamp assembly to avoid damage to the cable 37.

While only one embodiment of the invention has been illustrated and described, it is apparent that alterations, modifications and changes may be made without departing from the true scope and spirit thereof as defined by the appended claims.

What is claimed is:

1. A recessed lighting fixture comprising a hollow housing open at one end, a lamp assembly, a rotatable housing closure having an opening therein and a track mounted thereon and extending into the housing, from its opening end means for slidably mounting said lamp assembly on said track, said lamp assembly being movably from a first position in which said assembly is contained substantially wholly within said housing to a second position in which said assembly is at least partially without the confines of the housing and means for rotatably mounting said closure on said housing.

2. A recessed lighting fixture according to claim 1 wherein said means for slidably mounting said lamp assembly on said track comprises a clip having a plurality of fingers for slidably and frictionally engaging said track.

3. A recessed lighting fixture according to claim 1 wherein said closure comprises a flange ring and a plate...
mounted on said ring, said plate defining an opening through which the lamp assembly may be moved.

4. A recessed lighting fixture according to claim 1 including means for hinging said lamp assembly to the edge of said opening and at a point opposite said track.

5. A recessed lighting fixture according to claim 3 wherein a flange is provided at the open end of said housing, a plurality of annularly spaced fastening means are mounted on and extend from the outer surface of said flange, said closure being mounted flush against said flange and within a circular area defined by fastening means, an escutcheon plate overlying said fastening means and having a plurality of openings aligned with said fastening means, and means extending through said openings and engaging said fastening means to secure the escutcheon plate to and in spaced relationship with said flange whereby said closure is rotatably retained between said flange and escutcheon plate.

6. A recessed lighting fixture according to claim 2 wherein said clip further comprises a spring finger mounted thereon and bearing against said track.

7. A recessed lighting fixture comprising a cylindrical single open-ended housing having an outwardly extending flange at said open end, a closure plate having an opening therein and an upwardly extending cylindrical member secured thereto, said cylindrical member slidably engaging said housing with said plate lying against said flange, an arcuate track secured at one end to the edge of said opening and extending upwardly therefrom, track supporting means secured at one end to said closure plate and at the other end of said track, a lamp assembly including a lamp housing having a lamp socket mounted therein, means hinging one end of said lamp housing to the edge of said opening opposite said track, a spring clip carried at the upper end of said lamp housing and slidably engaging said track and means including an escutcheon plate removably secured to said housing flange and rotatably securing said closure to said housing.

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