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FLUORESCENT LIGHTING FIXTURE AND SUPPORTING MEANS THEREFOR

Filed Oct. 10, 1957

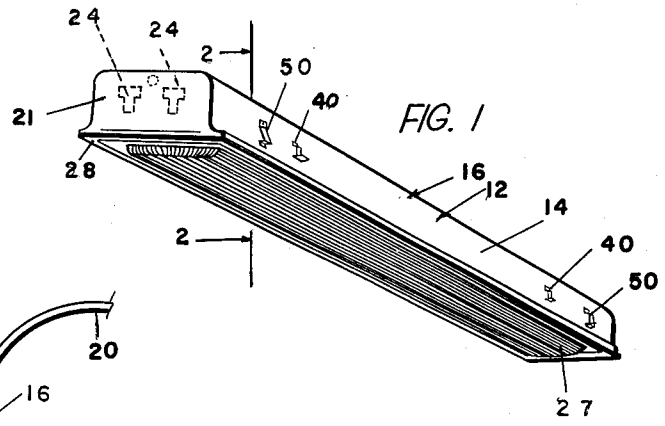


FIG. 1

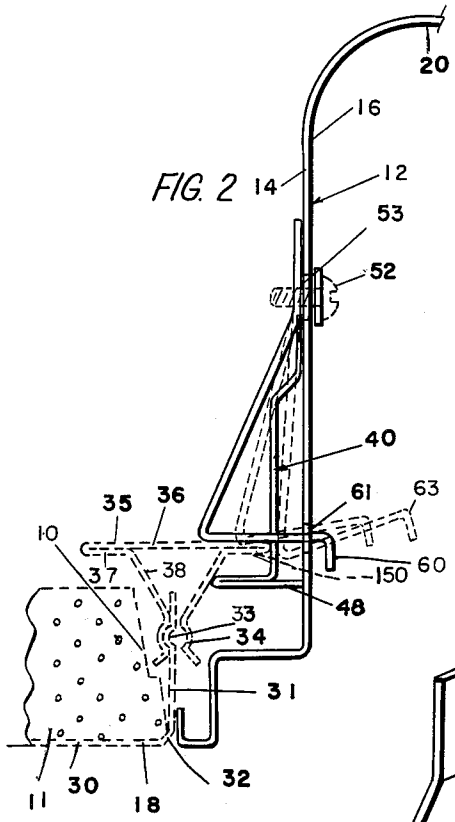


FIG. 2

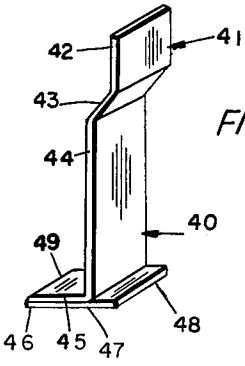


FIG. 3

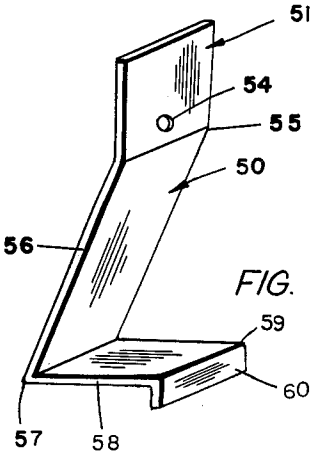


FIG. 4

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FLUORESCENT LIGHTING FIXTURE AND SUPPORTING MEANS THEREFOR

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1 Claim. (Cl. 240—78)

This invention relates to lighting fixtures and has particular reference to a lighting fixture having an improved means for supporting it in a ceiling.

This invention primarily comprehends a lighting fixture of the ceiling type adapted to receive fluorescent light bulbs and which may be used as a single fixture or two or more of the fixtures may be arranged in end to end abutting arrangement. The fixture is provided with a bottom opening which is closed or covered by a light emitting panel and the present invention is directed to means for conveniently supporting the fixture in a recess in a ceiling.

It is, accordingly, an object of this invention to provide a lighting fixture which is simple in construction, economical to manufacture, and simple and easy to install.

Another object of the invention is to provide a lighting fixture of such character having a pivoted spring urged bracket means which is spring tensioned for maintaining the fixture in a recess in a ceiling or the like.

A further object of this invention is to provide an improved supporting means for supporting lighting fixtures.

With the above and other objects in view, the present invention consists of the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawing and more particularly pointed out in the appended claim, it being understood that changes may be made in the form, size, proportions, and minor detaiils of construction without departing from the spirit or sacrificing any of the advantages of the invention.

Fig. 1 is an isometric view of a lighting fixture according to the invention;

Fig. 2 is a cross sectional view taken on line 2—2 of Fig. 1;

Fig. 3 is an enlarged view of the housing spacer stops according to the invention; and

Fig. 4 is an enlarged view of one of the holders shown in Fig. 1.

Referring now more specifically to the drawing, Figs. 1 to 4 show a lighting fixture adapted to be secured in an opening 10 in a ceiling 11. A fixture 12 is made up of a top 20, side walls 16, and end walls 21 which are connected together to form a downwardly open elongated housing for receiving conventional fluorescent light bulbs in spaced terminal sockets 24. The open bottom of the housing is closed by means of a glass panel 27 which is hingedly connected to the housing. The glass panel 27 may be monuted in a frame 28 hingedly connected to the housing.

Angle bars 18 have a horizontal leg 30 and a vertical leg 31 connected together at 32. The horizontal leg 30 underlies the ceiling 11 and is attached thereto and the vertical leg 31 extends vertically and its upper portion is spaced from the inner edge of the opening 10. The vertical leg 31 has a corrugation 33 extending therearound which is received in a cleft 34 of a T-bar 35.

The T-bar 35 is formed of a horizontal portion 36 with its ends turned toward each other at 37, then inwardly and downwardly at 38, and then belled out to form the cleft 34. The cleft 34 receives the corrugations 33 to hold the T-bar 35 in position.

Housing spacer stops 40 are attached to the sides of the fixture 12 by spot welding or other convenient fastening means at 41. The spacer stops 40 have an attaching portion 42 which engages the sides of the fixture 12. The stops 40 are bent outwardly and downwardly at 43, then downwardly at 44, then outwardly at 45, and then inwardly at 46 to form a horizontal portion 47 with an end 48 which engages the side of the fixture 122. An upper surface 49 is adapted to engage an under surface 150 of the T-bar 35 to center the housing in the T-bar 35 as a stop to prevent the unit from being inserted in the ceiling 11 too far.

Holders 50 are attached to the sides of the housing at spaced points and are made up of an upper portion 51 which is attached to the housing by means of a screw 52. The screw 52 may be a self-tapping screw and extends through a slot 53 in the side of the housing and threadably engages a hole 54 in the holder 50. The holder 50 is bent outwardly and downwardly at 55 forming an outwardly and downwardly extending portion 56 which is then bent inwardly at 57 to form a horizontal supporting portion 58, then downwardly at 59 to form a stop portion 60. The horizontally extending portion 58 extends through a slot 61 and the stop portion 60 engages the side of the fixture 12 and limits the outward movement of the horizontal portion 58. The horizontal portion 58 will overlie the portion 36 of the T-bar 35 and, therefore, support the fixture 12 in position.

When it is desired to install a fixture such as shown in Fig. 1, the spacer stops 40 are welded or otherwise attached to the sides of the fixture 12 at spaced points as shown in Fig. 1 and the holders 50 are attached as shown by means of the screws 52. The angle bars 18 are installed on the ceiling 11 around the opening 10 and the T-bars 35 are put in position. The fixture 12 is then moved upwardly through the opening 10 and as the outwardly and downwardly extending portion 56 engages the inner edge of the T-bar 35, it will be deflected inwardly to a dotted line position 63. Then as the fixture 12 continues to move upwardly through the opening 10, the holders 50 will snap outwardly to the position shown in full lines with the stop portion 60 limiting the outward movement of the lower end of the portion 58. The spacer stops 40 will engage the holders 50 of the T-bar 35 and limit the upward movement of the fixture 12.

The operator may then release the fixture 12 so that the fixture 12 may move down until the downward movement is limited by the holders 50 as the horizontally extending portion 58 thereof engages the portion 36 of the T-bar 35. The screws 52 may then be loosened and the holders 50 adjusted upwardly and downwardly in order to cause the fixture 12 to be properly oriented relative to the lower surface of the ceiling 11.

The foregoing specification sets forth the invention in its preferred practical forms but the structure shown is capable of modification within a range of equivalents without departing from the invention which is to be understood is broadly novel as is commensurate with the appended claim.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

In combination, a light fixture and means to mount said light fixture in an opening in a ceiling comprising an elongated housing, means to support fluorescent light

bulbs in said housing, a ceiling having an opening therein, a bar attached to said ceiling around the periphery of said opening, said bar having an upstanding leg extending upward and disposed around said opening, spaced holder members attached to the sides of said housing, said holder members comprising resilent members attached to said housing at their upper ends and extending downwardly and outwardly therefrom in their unstressed position, said holder members being resiliently bendable toward said housing to lie in substantially flush engagement with the sides of said housing while said housing is moved into an opening, and means on said bar engaging said holder members when said holder members are in their outward position, said means on said bar engaging said holder members comprising a T-shaped bar having spaced legs, said upstanding leg being disposed between said spaced legs and attached thereto by attaching means, said holder members resting on the upper surface of said T-shaped bar, and spaced means attached to said housing to engage the lower side of said T-shaped bar and limit the upward movement of said housing.

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