

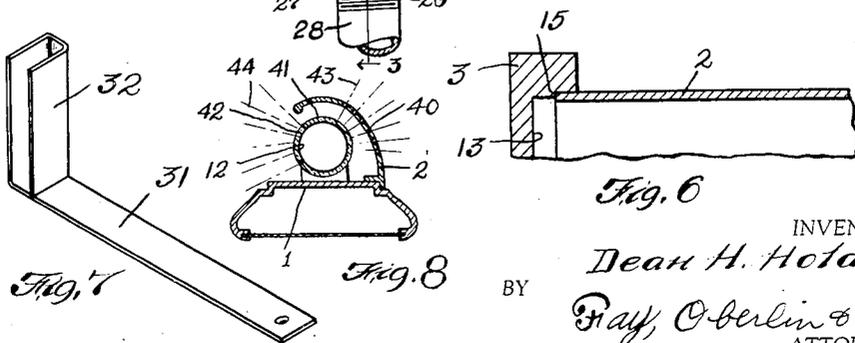
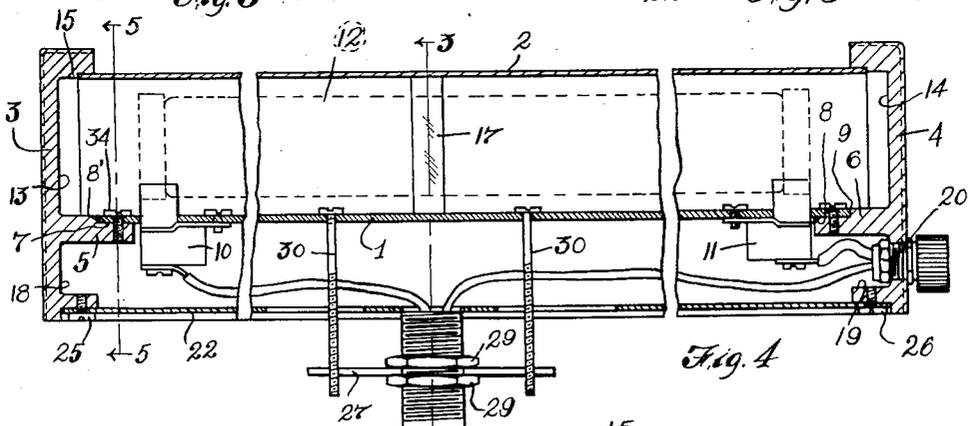
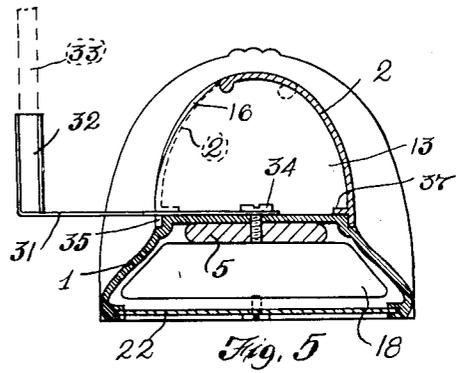
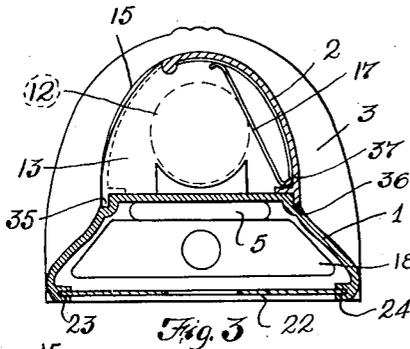
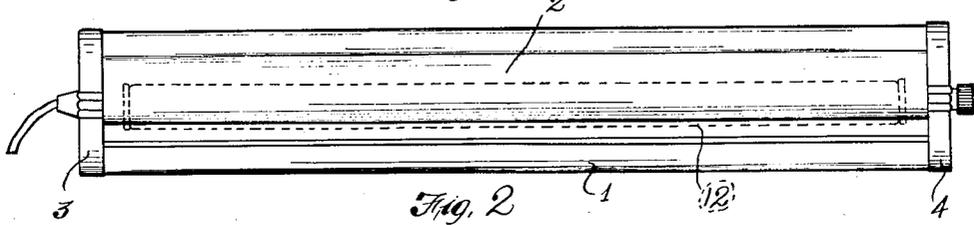
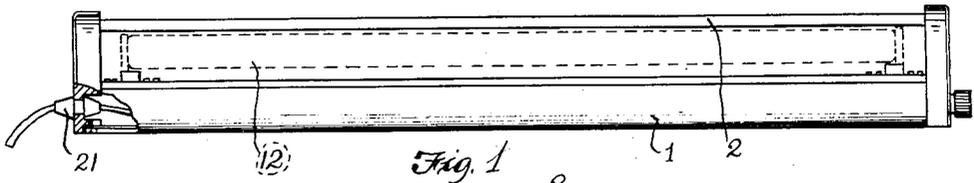
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2,183,647

LIGHTING FIXTURE

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LIGHTING FIXTURE

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4 Claims. (Cl. 240—6)

The present invention relates to a novel construction for an electric lighting fixture capable of a great many different types of uses and installations, such as for both direct and indirect lighting, installations in households and public establishments, for advertising and display lighting, and also adapted for ceiling, wall and table locations.

The general object and nature of my invention is to provide such a lighting fixture which is capable of economical manufacture and wherein the parts can be assembled, rearranged, and removed with maximum convenience without affecting the efficiency of the structure, damaging parts, or the use of any tools other than the human hands and the screw driver.

More particularly one of the objects of my invention is to provide a removable cover member or reflector, adapted to partially enclose the lighting elements, such as an electric lamp, which cover member is capable of being installed and removed in the assembled fixture merely by pressure of the fingers, and is locked against longitudinal movement upon installation and can be reversibly mounted in the fixture so as to direct or reflect light in either of two directions.

Another object is to provide means for resiliently holding the electric lamp in assembled position, which means also has the dual function of aiding in the maintaining of the cover member in position.

Still another object is to provide means, in the form of projecting elements on the end members of the fixture for insuring the proper alignment of the base member and the end members upon assembly.

And further novel features and objects of the invention are to provide recesses or cavities in the end members for the reception of electric wiring appliances such as electric switches, grommets, connecting plugs and the like, for the concealment, protection and insulation of such appliances from the metal parts and exposed portions of the lighting fixture.

A still further object is to provide a novel form of assembly for a backing or closure plate, cooperating with the base member and adapted to reinforce the parts in their assembled positions.

To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims.

The annexed drawing and the following description set forth in detail certain mechanism embodying the invention, such disclosed means

constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing:

Fig. 1 is a side elevational view of a lighting fixture embodying the principle of my invention; Fig. 2 is a top elevational view of the fixture shown in Fig. 1; Fig. 3 is a transverse sectional view taken substantially along line 3—3 of Fig. 4; Fig. 4 is a longitudinal sectional view taken through the fixture and showing one manner of wiring and mounting the same; Fig. 5 is a transverse sectional view taken substantially along line 5—5 of Fig. 4; and further showing a sign holding bracket in position upon the fixture when the latter is used for advertising or display purposes; Fig. 6 is an enlarged detail sectional view of the juncture of the cover member and an end member of the fixture; Fig. 7 is a perspective view of the sign holding bracket; and Fig. 8 is a transverse sectional view of the fixture illustrating a two color lighting effect.

Now referring more particularly to the drawing, the apparatus shown therein consists of a base member 1, the cover member 2, and the end members 3 and 4. The base member 1 and the cover member 2 are fabricated from metallic material such as aluminum, and due to the fact that they are of uniform cross-sectional form and contour throughout their length, such parts are capable of manufacturing by an extrusion process.

The end members 3 and 4 are preferably composed of a non-metallic plastic material and can be fabricated by means of injection and pressure molding processes.

The end members 3 and 4 have inwardly projecting lugs or tongues 5 and 6 respectively which are parallel to and present the surfaces 7 and 8 respectively adapted to bear against the under side of the top wall of the base member 1. Shoulders 8' and 9 are also provided in the lugs or tongues 5 and 6 for the abutment of the ends of the cover member 2. Suitable fastening means such as studs or bolts extend through the base member 1 into the tongues 5 and 6 and hold the end members in proper assembled position on the base member 1. The surfaces 7 and 8 maintain the proper transverse alignment of the end members 3 and 4 with respect to the base member 1, and the shoulders 8' and 9 in turn maintain the proper longitudinal positioning and alignment thereof.

Electric sockets or outlets 10 and 11 are mounted upon the under side of the base member

1 and extend therethrough for the reception of terminals on the electric lamp 12. The cover member 2, which from Figs. 3 and 5 will be seen to be of curved cross-sectional form, extends from the side of the base member 1 to a point more than 90° removed from the plane of the top of the base member 1. The cover member 2 serves as both a shield and a reflector for the light from the lamp 12.

Recesses 13 and 14 are provided in the opposed or inner sides of the end members 3 and 4. The side walls of the recesses 13 and 14 are of the same contour as that of the cross-section of the cover member 2 and adapted to receive the latter in position thereagainst. It will be noted that these side walls of the recesses 13 and 14 are of similar form on each side of a central vertical plane (with respect to Figs. 3 and 5) so that the cover member 2 can be assembled in reversible position on either side of the fixture. The dotted lines in Fig. 5 illustrate the reversible position of the cover member 2.

Shoulders 15 and 16 are provided in the side walls of the recesses 13 and 14 respectively for the engagement and abutment of the ends of the cover member 2 when the cover member is in assembled position. It will be noted that the distance between the shoulders 15 and 16 is substantially equal to the length of the cover member 2, so that the latter is locked against longitudinal movement when in assembled position in the fixture.

A spring clip 17 is carried on the inner face of the cover member 2 and adapted to resiliently bear against the electric lamp 12. The bottom walls of the recesses 13 and 14 are of such a depth that the cover member 2 may be pressed inwardly against the spring 17 and to a point where one of its ends clears either one of the shoulders 15 or 16 and can then be longitudinally slid into either one of the recesses 13 or 14, and the opposite end of the cover member then lifted out past either one of the inner sides of the end members 3 or 4. In other words, the depth of the recesses 13 and 14 is greater than the difference between the length of the cover member 2 and the distance between the inner sides or opposing faces of the end members 3 and 4.

It will thus be seen that the spring clip 17 serves the dual function of retaining the cover member 2 in assembled position and of holding the lamp 12 against the base 1.

Additional recesses or cavities 18 and 19 are also provided in the end members 3 and 4 at a point adjacent and in alignment with the ends of the base member 1. The cavities 18 and 19 are for the reception of electrical appliances such as an electric switch 20 or a grommet 21, and wherein such appliances may be concealed and protected from the metal parts of the fixture. A backing plate 22 is adapted to fit in grooves 23 and 24 in the bottom, spaced-apart edges of the base member 1. Fastening screws or studs 25 and 26 secure the ends of the backing plate 22 to the end members 3 and 4. The backing plate 22 thus closes the interior of the base member 1 for the protection of wiring and also reinforces the attachment of the end members 3 and 4 to the base member 1 in assembled position. An adaptor plate 27, capable of being attached to a fixture stud 28 of an outlet box (not shown) by means of the lock nuts 29 is threadably engaged by the long screws or bolts 30 extending through the top of the base member 1 and through the backing plate 22. The heads of the bolts 30 are

accessible from the top or front of the lighting fixture, and by drawing them up, the fixture is attached to the fixture stud 28 and can thereby be mounted against an outlet box whether the latter be in a vertical or horizontal position.

Sign holding brackets 31 having an upright channel portion 32 for the reception of a sign such as indicated at 33 can also be used with the fixture when it is desired to use the latter for advertising or display purposes. A pair of brackets 31 are simply attached to the base member 1 by inserting the fastening bolts 34 through them.

It will be noted that recesses or shoulders 35 and 36 are provided in the upper edges of the base member 1 for the reception of the edge of the cover member 2. The cover member 2 has an inwardly and laterally extending flange 37 which overlies the top of the base member 1. Either one of the shoulders 35 and 36 (depending upon the position occupied by the cover member 2) together with the flanges 37, serve as light traps for preventing any of the light from the lamp 12 "leaking" or passing through the joint between the cover member 2 and the base member 1.

It will also be noted that another light trap is formed between the end pieces 3 and 4 and the cover member 2, due to the fact that the ends of the cover member 2 fit within the recesses 13 and 14 and engage against the shoulders 15 and 16.

The modified form of construction illustrated in Fig. 8 shows a novel manner in which a plural lighting effect may be had in the fixture, such lighting effect emanating from the single source of light. In this latter form of modified construction, the cover member 2 has a plurality of perforations 40 which may be arranged in any desired design or in the form of letters carrying an advertising slogan or trade name. The lamp 12 has its walls colored in two different color portions such as indicated at 41 and 42. Thus the light rays 43 from the wall portion 41 (which light rays might be of a green color, for example) pass out through the perforations 40 and show a green colored design or lettering on the exterior of the cover 2, and the light rays 44 from the differently colored wall portion of the lamp 12 (which light rays may be white, for example) pass out through the open space between the base member 1 and the cover member 2, and may be directed against the sign 33 when used with the fixture, or merely allowed to light up the space adjacent the fixture. In this manner a plural colored lighting effect is obtained from a single source of light.

Although in the foregoing description the lighting fixture has been referred to as disposed in a horizontal plane, it should be appreciated to those skilled in the art that it might equally well be disposed in a vertical position or in a reversed position on a ceiling. So therefore the portions of the fixture and the base member referred to in the foregoing description as the top and bottom, can equivalently be described as the front and rear respectively.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:

1. In a lighting fixture, the combination of a

base member, a lamp disposed longitudinally of said base member, and a cover member of curved cross-section and adapted to partially enclose said lamp, end members extending transversely from each end of said base member, said end members having recesses for the reception of the ends of said cover member, said recesses being of a greater depth than the difference between the length of said cover member and the distance between the opposing surfaces of said end members, whereby said cover member is removably insertable between said end members, and resilient means for urging said cover member against the side walls of said recesses.

2. In a lighting fixture, the combination of a base member, a lamp disposed longitudinally of said base member, and a cover member of curved cross-section and adapted to partially enclose said lamp, end members extending transversely from each end of said base member, said end members having recesses for the reception of the ends of said cover member, said recesses being of a greater depth than the difference between the length of said cover member and the distance between the opposing surfaces of said end members, whereby said cover member is removably insertable between said end members, shoulders on the side walls of said recesses for contacting with the ends of said cover member, the distance between said shoulders being substantially equal to the length of said cover member, and resilient means for urging said cover member against the side walls of said recesses and into engagement with said shoulders.

3. In a lighting fixture, the combination of a

base member, a lamp disposed longitudinally of said base member, and a cover member of curved cross-section and adapted to partially enclose said lamp, end members extending transversely from each end of said base member, said end members having recess for the reception of the ends of said cover member, said recesses being of a greater depth than the difference between the length of said cover member and the distance between the opposing surfaces of said end members, whereby said cover member is removably insertable between said end members, inwardly extending projections on said end members, the surface of said projections being parallel to and adapted to contact with a surface of said base member, and means for fastening said projections to said base member.

4. In a lighting fixture, the combination of a base member, a lamp disposed longitudinally of said base member, and a cover member of curved cross-section and adapted to partially enclose said lamp, end members extending transversely from each end of said base member, said end members having recesses for the reception of the ends of said cover member, said recesses being of a greater depth than the difference between the length of said cover member and the distance between the opposing surfaces of said end members, whereby said cover member is removably insertable between said end members, grooves in the bottom edges of said base member, a backing plate having edges adapted to fit in said grooves, and means for fastening said backing plate to said end members.

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