

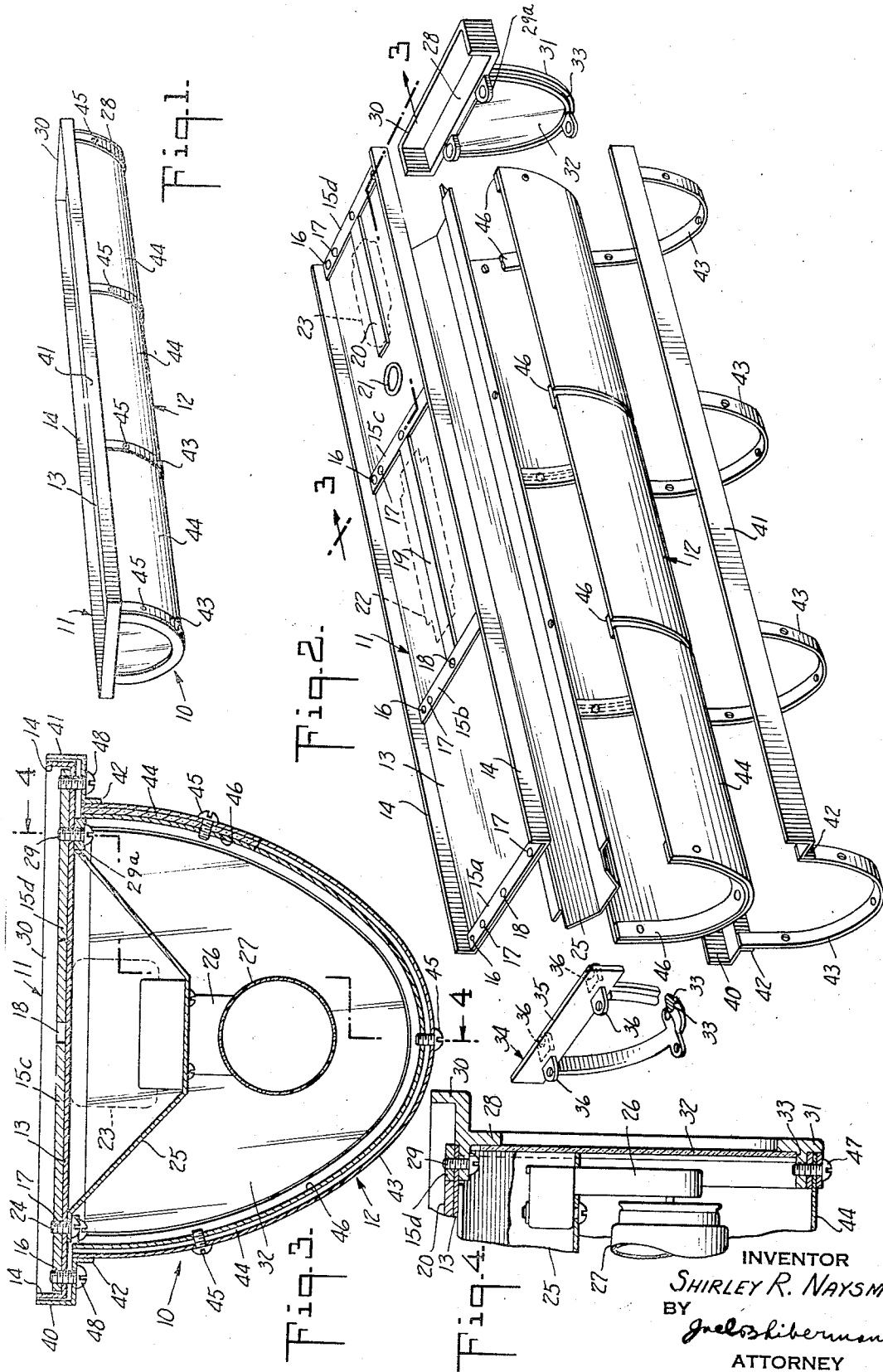
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DIRECT LIGHTING LUMINAIRE

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## DIRECT LIGHTING LUMINAIRE

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3 Claims. (Cl. 240—78)

The present invention relates to direct lighting luminaires, and is more particularly directed toward enclosed direct lighting luminaires adapted to use fluorescent lamps.

The invention contemplates direct lighting luminaires adapted to employ a single fluorescent lamp or a plurality of fluorescent lamps arranged end to end to form a continuous enclosed lighting trough.

According to the present invention the luminaires are made up in such a way that a pan adapted to be supported near the ceiling carries the accessories, the wiring trough and the lamp sockets for the fluorescent lamps in such a way that one of these pans may be assembled with two end pieces and a closure of corresponding length to form a single unit, or a plurality of the pans with end members, suitable intermediate members and closures may be employed to make up the continuous lighting trough.

Other and further objects will appear as the description proceeds.

The accompanying drawing shows, for the purposes of illustrating the present invention, an embodiment in which the invention may take form, it being understood that the drawing is illustrative of the invention rather than limiting the same.

In the drawing:

Figure 1 is a perspective view of a direct lighting unit;

Figure 2 is an exploded perspective view taken from the top of the parts employed in assembling an enclosed, continuous, direct lighting trough;

Figure 3 is a sectional view taken on the broken line 3—3 of Figure 2 looking in the direction of the arrows; and

Figure 4 is a vertical sectional view taken on the line 4—4 of Figure 3.

As shown in Figure 1 the lighting fixture 10 is elongated and has a flat rectangular upper portion 11 adapted to be secured to the ceiling and a light transmitting closure 12 of generally U-shaped configuration extending the entire length of the unit. These units may be made up in lengths corresponding with the length of a fluorescent lamp, for example, four feet, or multiples of a lamp length. While the fixture shown has a single fluorescent lamp, it is apparent that a slightly wider construction would accommodate two such lamps.

A single four-foot unit is illustrated in Figure 1, and the perspective view of Figure 2 shows the same unit, except that at the left a joining ele-

ment is illustrated to permit making up a continuous lighting trough.

The lighting unit has an elongated ceiling pan 13 whose length is slightly more than the length of the fluorescent lamp to be used and its auxiliaries. It has side flanges 14, 14 which extend up to the ceiling line. In the form shown it carries four identical cross straps 15a, 15b, 15c, 15d. These straps have holes 16, 16 near their ends and holes 17, 17 spaced inwardly from the ends of the straps. They also have a central hole 18 for securement to supports. The pan 13 also carries two longitudinally extending straps 19 and 20 and has an eyelet 21 for a wireway.

The straps 19 and 20 support fluorescent lamp auxiliaries 22, 23. The closer spaced holes 17, 17 of the intermediate cross straps 15b, 15c receive screws 24 which support a U-shaped auxiliary housing 25. This housing covers fluorescent lamp auxiliaries 22 and 23, provides a wireway continuous of the unit and supports fluorescent lamp sockets 26. A fluorescent lamp 27 extends between the sockets. The end cross strap 15d at the right supports an end member 28 by means of screws 29 passing through lugs 29a and threaded into the holes 17, 17 of strap 15d, as indicated. The end member 28 has an upper portion 30 which is flanged to correspond with the flanges 14, 14 of the ceiling pan and has a downwardly extending skeletonized portion 31 of U-shaped contour. The opening in the end member 28 may be closed by means of light transmitting material 32. The outer edge of the end plate 28 has a flange 33 for a purpose to be indicated. Where the units are made for a single lamp two end members 28 are employed. The end member 34 at the left of Figure 2 has a narrow vertical fin-like element 35 at the top provided with lugs 36 to permit securing it to the strap 15a and to another similar strap. It has the same outer configuration as the end plate 28 and is provided with two flanges 33. It is open so that light from one lamp can pass through into the next adjacent unit.

The closure for the fixture has two long L-shaped straps 40 and 41 with downwardly extending flanges 42, 42, and U-shaped straps 43 are secured to these parallel straps. Panels of translucent material 44 are fitted within the U-shaped straps 43 and are secured in position by screws 45 which pass through the outer straps 43 and into inner straps 46. The straps 46 at the ends of the closure fit the flanges 33 on the end members 28 and 34 and are secured to them by screws indicated at 47. The horizontal L-shaped

straps 40 are secured to the cross straps 15a, 15b, 15c, 15d by screws 48 which pass through the outer holes 16, 16 of the cross straps.

It is apparent that, within the scope of the invention, modifications and different arrangements may be made other than is herein disclosed, and the present disclosure is illustrated merely, the invention comprehending all variations thereof.

What is claimed is:

1. A direct lighting luminaire comprising an elongated support, downwardly opening fluorescent lamp sockets supported below and adjacent the ends of the elongated support, a fluorescent lamp therein, end members carried by the support, the end members being of U-shaped configuration and extending below the lamp, a closure having parallel straps along the edges of the support, outer U-shaped straps secured to the parallel straps, inner U-shaped straps secured to the outer U-shaped straps, translucent material secured between the U-shaped straps and extending from one parallel strap to the other and from one end member to the other, and means for securing the closure to the support and to the end members.

2. A luminaire adapted for mounting close to the ceiling and comprising an elongated sheet metal ceiling pan having a flat bottom with side

flanges to space the bottom of the pan below the ceiling, an upwardly opening trough shaped housing with reflecting outer walls, the housing being secured immediately below the pan bottom to provide a longitudinal wireway, fluorescent lamp sockets secured to the housing and extending below the bottom of the housing, fluorescent lamp auxiliaries secured to the lower face of the pan bottom and enclosed by the housing, cross straps secured to the pan bottom at its ends, end members secured to the cross straps, the end members having upwardly extending flanges even with the flanges on the pan and pendant U-shaped portions below the lamp sockets, a fluorescent lamp carried by the sockets, a trough shaped light transmitting closure whose upper edges are adjacent the side margins of the pan and whose ends are adjacent the end members, and means for detachably securing the closure in place.

3. A luminaire such as claimed in claim 2, wherein the end members are provided with means to similarly secure them to the cross straps of adjacent ceiling pans so that the length of the luminaire may be a multiple of the length of the ceiling pan, and are open opposite the wireway to provide a continuous wireway.

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