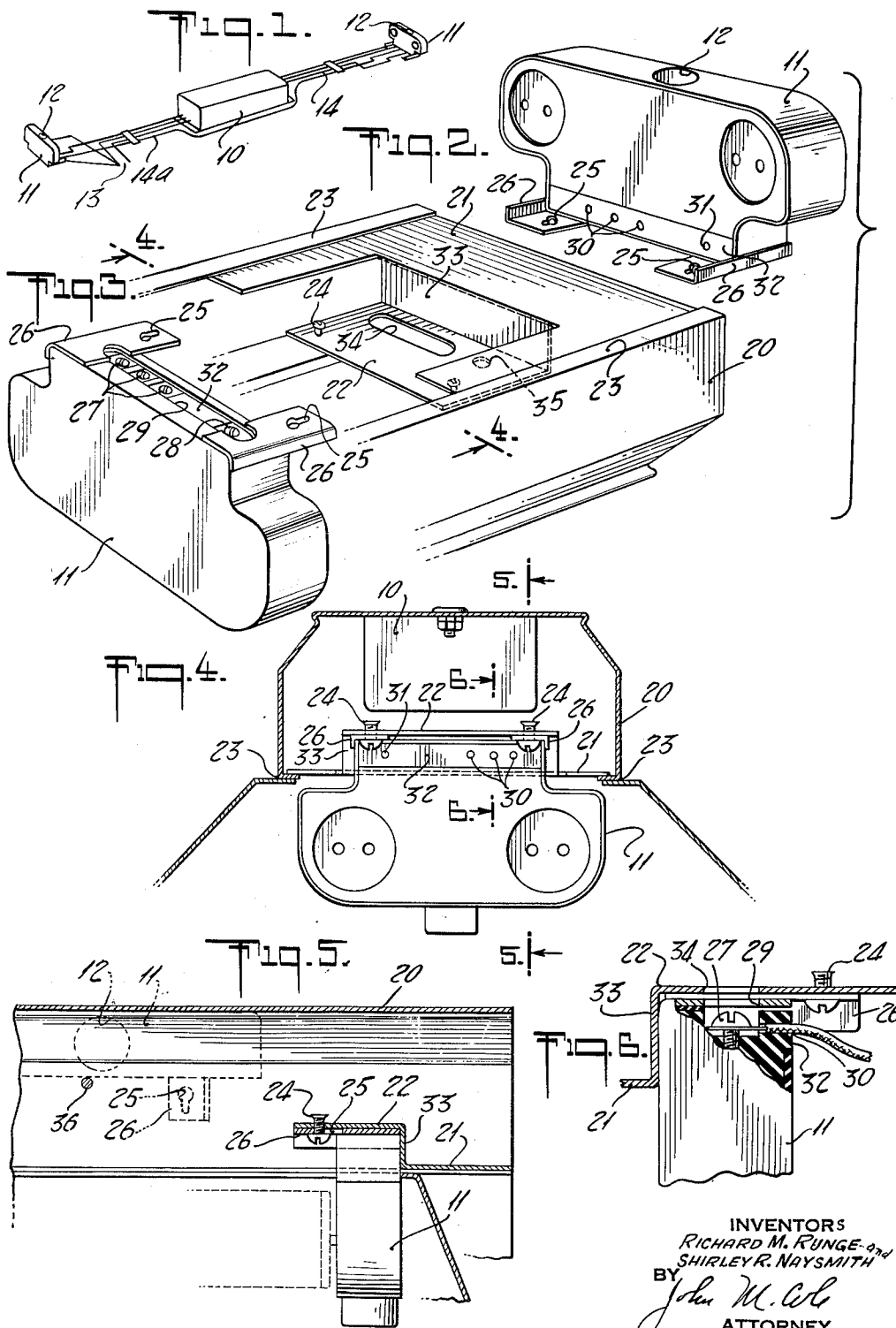


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R. M. RUNGE ET AL
FLUORESCENT LIGHTING FIXTURE

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FLUORESCENT LIGHTING FIXTURE

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2 Claims. (Cl. 240—51.11)

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The present invention relates to fluorescent lighting fixtures and is more particularly directed toward industrial and commercial lighting fixtures of the type employing wiring troughs or channels and detachable reflectors.

It has heretofore been customary in the manufacture of fluorescent lighting fixtures and lighting equipment to provide a metal wireway or channel of the length corresponding with lamp length or of the length of two lamps or slightly longer than such lengths, and to completely wire and test these wireways or channels at the factory before shipment. Such prewired channels carry a number of fluorescent lamp sockets or holders which in normal use project below the mouth or opening in the channel so as to pass through the cover or reflector to be secured to the channel and support the lamps inside the reflector or below the channel cover.

The present invention contemplates improvements in such fluorescent lighting equipment according to which the wiring channel can be completely prewired at the factory and tested, after which the sockets, together with their mountings may be detached as units from the wiring channel and shifted to positions such that the units completely housed within the confines of the wiring channel. The wiring channel then completely protects these parts and the wiring channel can be shipped in a more compact form. As the wiring can be completed and tested there is no likelihood of fixtures erroneously connected appearing at the point of installation.

This application shows one of the several species of construction for these general purposes which are more fully described and claimed in our co-pending application, Serial No. 29,236, filed concurrently herewith.

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

Figure 1 is an inverted perspective view illustrating the ballast, sockets, socket carrying straps and wiring, preassembled and out of the wiring channel, the sockets being of the push contact, twin lamp type;

Figure 2 is an inverted exploded perspective view at a larger scale, illustrating one end of the wiring channel and one of the lamp sockets or holders;

Figure 3 is a perspective view of the lamp holder;

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Figure 4 is a cross-sectional view taken on the line 4—4 of Fig. 2, showing the lamp holder and reflector in position;

Figure 5 is a view taken on the line 5—5 of Fig. 4;

Figure 6 is a view taken on the line 6—6 of Fig. 4 at a larger scale.

The electrical parts of the multiple lamp fluorescent lighting fixture are illustrated in Figure 1 in the form of a preassembled wiring harness having a ballast 10, two push contact, twin lamp holders 11—11 each having a starter socket 12. The ballast, sockets or lamp holders and the current supply wires 13 are connected by wiring generally indicated at 14, 14a by which the parts are connected into an operative fluorescent lamp lighting circuit. This wiring circuit is conventional and the number of wires used and their interconnections in the lamp holders and to the starter sockets are also conventional. In practicing the present invention, this wiring harness is completely assembled on the bench and tested before being secured in place in the wiring channel.

The channel shaped wireway 20 somewhat longer than the nominal length of the lamp to be employed carries at each end a reinforcing bridging strap 21 welded in place. This strap has a platformlike element 22 facing downwardly and disposed a distance above the flanges 23 of the wiring channel. This platform carries two non-removable screws 24—24 spaced to fit into the elongated holes 25—25 carried in brackets 26—26 welded to the metal frame of the lamp holder. These lamp holders have binding posts 27, 28 accessible through the elongated opening 29 of the metal housing of the lamp holder. These binding posts are opposite holes 30, 31 in the insulating body member 32 of the lamp holder so that wires may be inserted under the binding posts and fastened in place.

As started above, the wiring is completed on the bench and when the wiring harness is to be assembled in the wireway, the ballast is secured in the usual manner and the lamp holders are inserted in position by passing the large ends of the slots 25—25 past the heads of the screws 24—24, after which each lamp holder is moved (to the right as viewed in Fig. 2) to bring the outer face of the lamp holder against the riser 33, which connects the platform 22 to the body of the plate 21. When in this position, the binding screws are brought opposite openings 34 and 35 in the bracket 32, so that the binding posts have air insulation opposite them and there is no likelihood

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of grounding the binding posts against the metal of the fixture.

While the drawing shows a lamp holder for two lamps with starter socket in each holder, it will be understood that the invention is suitable for use with similar lamp holders having provisions for a larger or lesser number of lamps and with or without starters.

When the wireway with wiring harness is to be packed for shipment, the lamp holders are removed from their seating, placed within the channel so that they do not project as shown in dotted lines at the left of Fig. 5, and secured in place by a cross wire 36 which snaps under the heads of the channel, as shown in the application above referred to.

Since it is obvious that the invention may be embodied in other forms and constructions within the scope of the claims, we wish it to be understood that the particular form shown is but one of these forms, and various modifications and changes being possible, we do not otherwise limit ourselves in any way with respect thereto.

What is claimed is:

1. In a fluorescent fixture, in combination, a preassembled fluorescent lamp-circuit wiring-harness including two lamp holders of the push contact, multiple lamp type each including a metal housing, lamp and starter sockets and mounting brackets, a ballast, and wiring inter-connecting the sockets and ballast; an inverted wiring channel in which the ballast is secured and completely housed; a pair of transverse channel reinforcing straps in the channel, means for detachably securing the mounting brackets to the straps to locate the holders in such position

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that the lamp sockets project below the channel, and means to support the detached holders completely housed within the wiring channel.

2. In a fluorescent fixture, an inverted channel having a reinforcing strap carrying two clamping screws, a push contact, multiple lamp type fluorescent lamp holder having mounting brackets provided with elongated slots larger at one end than the other and binding screws between the brackets for securing wires, the heads of the clamping screws being insertable through the wider portions of the slots so that the holder may be slid to bring the narrow portions of the slots under the heads of the screws, the strap having an abutment against which the back of the lamp holder is brought to align the lamp holder, the strap having openings opposite the binding screws to provide air insulation.

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