Feb. 6, 1945. F. H. REEVES 2,368,879

FLUORESCENT TUBULAR DISCHARGE LAMP FITTING

Filed Oct. 27, 1943

Fig. 1.

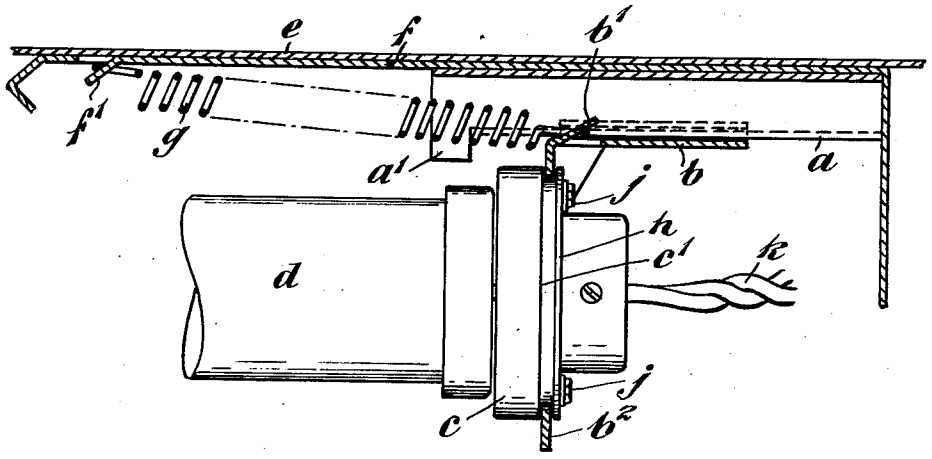


Fig. 2.

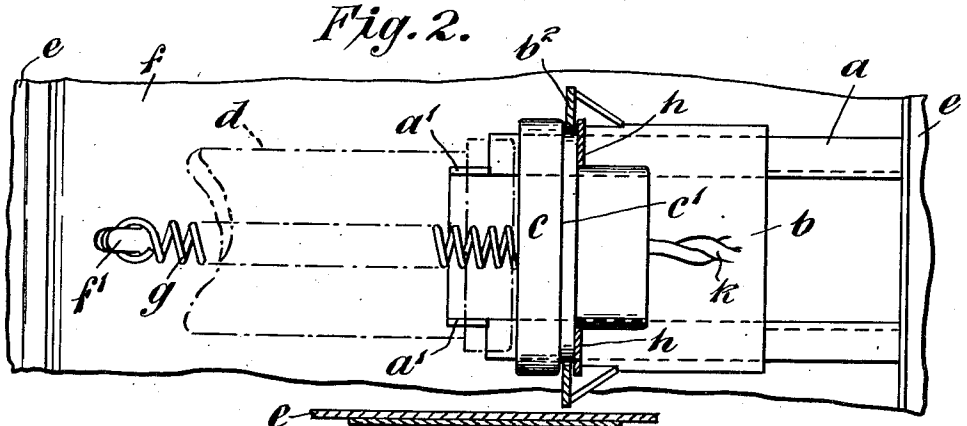
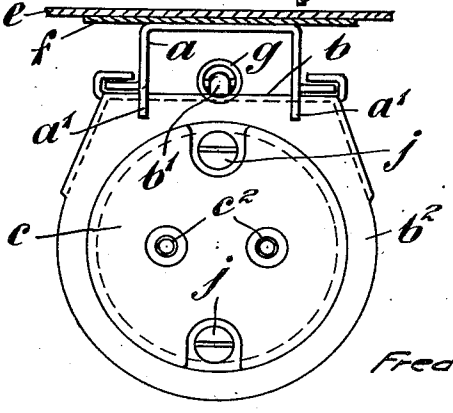


Fig. 3.



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FLUORESCENT TUBULAR DISCHARGE LAMP FITTING

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1 Claim. (Cl. 240—78)

This invention has reference to improvements connected with fluorescent tubular discharge lamp fittings, more particularly fittings of this character which incorporate a substantially rectangular or semi-cylindrical trough which trough in additional to providing therein a mounting for each end of the lamp or lamps also provides reflecting surfaces for the light rays emitted from the lamp or lamps.

It is to be appreciated that there are difficulties attendant upon the introduction and removal of lamps of this character, owing mainly to their length, into and from the fitting, and the object of the present invention is to overcome this difficulty and to simplify the means of mounting the ends of the lamp within the respective sockets thereof.

The invention consists of a fluorescent tubular discharge lamp fitting incorporating within the trough a spring-controlled socket mounting for one end of the lamp or lamps, said mounting being adapted to maintain the other end of the lamp or lamps in its or their socket or sockets, each spring-controlled socket being permitted a rotational motion within its mounting and having a linear pin and slot coupling between the ends of the lamp and the socket which will facilitate the coupling and uncoupling operation.

One means of carrying the present invention into practice will now be described with reference to the accompanying sheet of drawings, in which:

Fig. 1 is a part sectional side elevation showing one end of a tubular fluorescent lamp contained within the inverted trough-shaped reflector casing.

Fig. 2 is an inverted plan of Fig. 1 partly in section.

Fig. 3 is an end view looking from the direction of the longitudinal axis of the tubular lamp, but the lamp has been removed from its socket.

There is provided at one end of the fitting say connected to and extending from the one end of the trough a sheet-metal slideway *a* on which is traversably mounted by means of a flanged carrier plate *b* the insulating socket or lamp holder *c* which is adapted to receive one end of the fluorescent tubular discharge lamp *d* which is located within the trough *e*. Secured to the roof or ceiling of the trough *e* is a cranked bracket *f* which is employed as the mounting for the auxiliary control gear for the lamp. From this bracket *f* extends an integral tongue f^1 which forms an anchorage for the outer end of a coiled tension spring *g*, the other end of which is anchored to an integral tongue b^1 which forms part of the flanged carrier plate *b*. This carrier plate *b* is provided with an integral vertically disposed annular section b^2, the inner periphery of the annulus being adapted for location within an annular groove which is formed by a shoulder c^1 on the insulating socket or lamp holder *c* and an annular disc *h* which is adapted to be secured to the socket or lamp holder *c* by means of screw and nut connections *j*.

Formed in the outer face of the insulating socket or lamp holder *c* is a pair of parallel circular holes or recesses c^2 which are adapted to receive a pair of contact pins extending from the one end of the tubular lamp *d*, or alternatively the insulating socket or lamp holder *c* may be provided with the contact pins and the registering holes or recesses formed in the terminal end members of the lamp *d*.

The insulating socket or lamp holder is adapted to be rotated within limits determined by the lead connections *k* to the socket or lamp holder within the annular section b^2 forming part of the flanged carrier plate *b*.

It will be appreciated that in operation it is merely necessary to insert the one end of the tubular lamp *d* in its socket or holder, say the socket or lamp holder *c* rotatably mounted in the flanged carrier plate *b* and by exerting a pressure through the medium of the lamp on the annular section b^2 to traverse the flanged carrier plate *b* along the slideway *a* toward the one end of the trough *d*, thereby extending the spring *g*. When the lamp is correctly positioned within the two end sockets or holders and is released the spring *g* contracts and automatically the flanged carrier plate *b* and the insulating socket or lamp holder *c* carried thereby return to a position in which the tubular lamp *d* will be firmly maintained in its desired setting within the trough, and thus in consequence no intricate fitting or particular rotational motion has to be imparted to the lamp in the process of connection or disconnection.

The slideway *a* is formed with two integral downwardly directed projections a^1 which form an abutment stop for the annular section b^2 of the carrier plate *b* to prevent outward traverse of the plate *b* when the lamp *d* is removed from its socket or holder.

I claim:

A fixture for a tubular fluorescent lamp, omprising, in combination, a lamp housing, a bracket mounted in one end of the housing to slide

toward and away from the other end of the housing, a spring that urges the bracket toward said other end of the housing, a ring carried by said bracket whose axis is substantially parallel to the direction in which the bracket is slidable, a wiring block rotatably mounted in said ring, having electrical contacts for energising a lamp upon movement of the lamp against the block in the direction in which the bracket is slidable, and having a shoulder bearing against said ring, and means for retaining said shoulder against axial movement away from the ring.

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