Nov. 1, 1949. S. M. WEISBERG 2,486,695

FLUORESCENT LAMP FIXTURE

Filed June 1, 1946

Fig. 1.

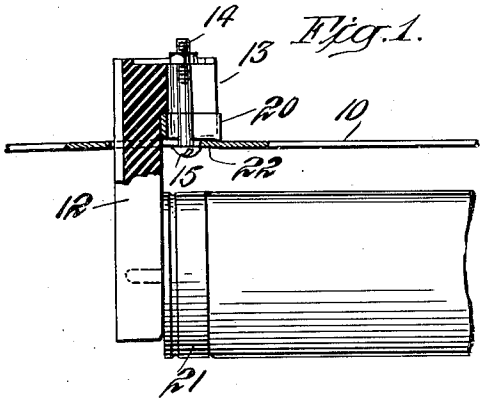


Fig. 2.

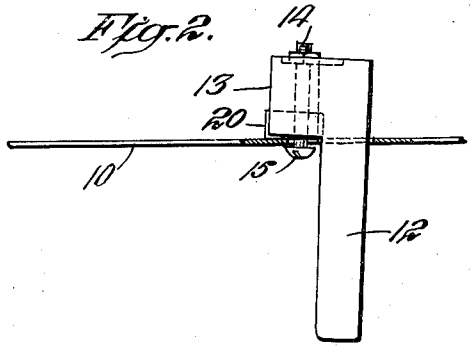


Fig. 3.

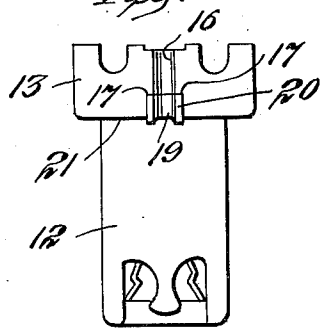


Fig. 4.

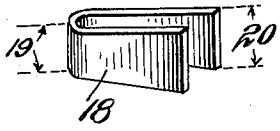


Fig. 5.

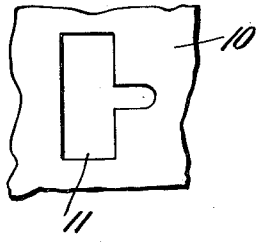


Fig. 6.

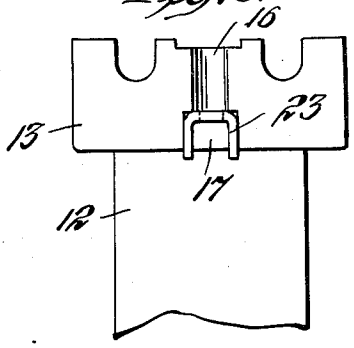
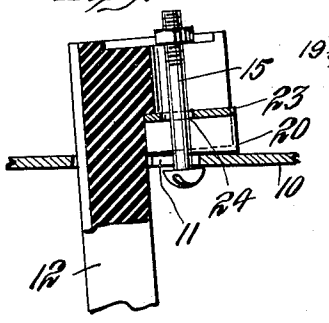


Fig. 7.



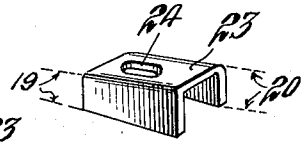


Fig. 8.

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FLUORESCENT LAMP FIXTURE

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4 Claims. (Cl. 240—51.11)

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The invention here disclosed relates to fluorescent lamp fixtures.

The fixtures for supporting fluorescent lamps usually comprise a pair of insulating sockets for receiving the contact pins on the ends of the lamp, mounted in spaced relation on a sheet metal base or back plate.

Frequently the sockets are sprung apart more or less through inattention or carelessness in forcing the lamps into position between the sockets. The sockets when spread in this way will not hold the lamps so securely and may permit the lamps to drop or to lose electrical connection with the socket contacts.

Objects of the present invention are to eliminate the difficulties mentioned and particularly to mount the sockets in such a way that the lamps can only be entered in proper fashion and so will necessarily be properly held in the sockets.

Special objects of the invention are to accomplish the purposes indicated without having to change the socket and base constructions presently in use.

Related objects are to provide a means for attaining the objects mentioned which will not add appreciably to the cost of the fixture and will not complicate the manufacture, assembly or use of the same.

Further special objects are to so construct the lamp fixture that it will automatically grip and hold the lamp through simple engagement of the lamp between the sockets of the fixture.

Other desirable objects attained by the invention are set forth or will appear in the course of the following specification.

The drawing accompanying and forming part of the specification illustrates different practical embodiments of the invention. Structure, however, may be further modified and changed, all within the true intent and broad scope of the invention as hereinafter defined and claimed.

Figs. 1 and 2 in the drawing are broken part sectional views showing the sockets of a fixture as they appear when the lamp is in position and when not in position, respectively;

Fig. 3 is a front view of one of the sockets;

Fig. 4 is a perspective view of a wedge piece for holding the socket in inclined relation on the base;

Fig. 5 is a fragmentary view of that portion of the base piece having an opening for the projecting part of the socket;

Fig. 6 is a broken and enlarged front view of one of the sockets having another form of wedge piece seated therein;

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Fig. 7 is a broken part sectional view illustrating use of the modified form of wedge piece; and

Fig. 8 is a detached perspective view of this particular form of wedge.

In Figs. 1 and 2 the base or back plate of an ordinary fluorescent lamp fixture is indicated at 10. This is usually a strip of sheet metal of a more or less bendable character having openings such as shown at 11, Fig. 5, for the projecting portions 12 of the lamp sockets. The latter usually have angularly extending base portions 13 standing in back of the base plate and rigidly secured in such relation by screws 14 having their heads 15 engaged over the face of the base plate.

The base portions of the sockets are shown as having front and back extending slots 16 in the inwardly disposed edges of the same, for the securing screws, laterally enlarged at the forward face into cavities 17, sometimes used as seats for the heads or nuts of securing screws employed in fastening the parts of the sockets together and in mounting the sockets on the fixture.

The present invention makes use of seats 17 for the mounting of wedge pieces which by engagement with the back face of the base plate hold the fixtures in the inwardly angled relation shown in Fig. 2.

One form of wedge piece is illustrated in Fig. 4, this being a doubled U-shaped strip 18, having the opposite sides of the same increasing in width from the doubled end portion at 19 to the free ends at 20.

This U-shaped piece has a wedging fit in the seat 17, as shown in Fig. 3, holding itself in position therein and with the wider end portions 20 projecting slightly above the surface 21 of the base portion 13.

The effect, therefore, is as shown in Fig. 2, that the wedge will hold the socket inclined inwardly, that is, toward the companion socket when the securing screw 15 is tightened to draw the wedge against the back of the base plate 10.

In addition to inclining the socket, the wedge piece forms a solid metal backing opposed to the pull of the screw head against the face of the base. This eliminates the need for wide head screws, enabling the securing screw to be set up as tight as possible without the head bending in the relatively thin metal of the base plate.

With the two sockets of the fixture secured in the inwardly inclined relation indicated in Fig. 2, the space between the projecting ends of the sockets may be approximately the same or slightly less than the length of the lamp 21. Conse-

quently, to engage the lamp in the sockets the ends of the lamp must be directly engaged between the ends of the sockets and used to force the sockets apart sufficiently for the lamp tube to enter.

In so doing the sockets will be forced back to the more nearly parallel relation shown in Fig. 1. To gain this position the sockets are obliged to tension and possibly even bend the thin mounting plate 10 after the manner indicated at 22 in this view. This is not objectionable since the pressure thereby created is utilized to more firmly grip and hold the ends of the lamp tube.

In the form of the invention illustrated in Figs. 6, 7 and 8, the wedge is provided by an arched piece of sheet material 23 having inclined side walls increasing in height from the lower ends 19 to the higher ends 20, and the top connecting wall slotted at 24 for free passage of the securing screw.

This wedge piece, like the first described, serves to incline the socket inwardly sufficiently to require a slight spreading action and effect an endwise gripping engagement with the lamp tube.

The wedges are inexpensive, easily installed, hold themselves in place by their frictional engagement in the seats 17 and serve to convert fixtures which otherwise may not be entirely safe or satisfactory, into reliable and securely holding lamp fixtures.

What is claimed is:

1. A fluorescent lamp fixture comprising a resilient base plate having spaced openings for lamp sockets, companion lamp sockets projecting through said openings and having angularly extending base portions disposed at the back of said base plate, rigid wedge pieces disposed between said base portion and the back of said base plate and arranged to position said sockets with the projecting portions of the same inwardly inclined toward each other and screws securing said base portions and wedge pieces in rigid engagement with the back of said base plate and whereby the resiliency of the base plate will enable the projecting portions of the sockets to be sprung apart sufficiently to admit a lamp tube therebetween.

2. A fluorescent lamp fixture comprising a resilient base plate having spaced openings for lamp sockets, companion lamp sockets projecting through said openings and having angularly extending base portions disposed at the back of said base plate, rigid wedge pieces disposed between said base portion and the back of said base plate and arranged to position said sockets with the projecting portions of the same inwardly inclined toward each other and screws securing said base portions and wedge pieces in rigid engagement with the back of said base plate and whereby the resiliency of the base plate will enable the projecting portions of the sockets to be sprung apart sufficiently to admit a lamp tube therebetween, said base portions having seats open toward the base plate and said wedge pieces being frictionally retained in self-holding engagement in said seats.

3. A fluorescent lamp fixture comprising a resilient base plate having spaced openings for lamp sockets, companion lamp sockets projecting through said openings and having angularly extending base portions disposed at the back of said base plate, rigid wedge pieces disposed between said base portion and the back of said base plate and arranged to position said sockets with the projecting portions of the same inwardly inclined toward each other and screws securing said base portions and wedge pieces in rigid engagement with the back of said base plate and whereby the resiliency of the base plate will enable the projecting portions of the sockets to be sprung apart sufficiently to admit a lamp tube therebetween, said wedge pieces being of folded strip material of greater width at one end than at the opposite end and the screws extending between the folded sides of said wedge pieces.

4. A fluorescent lamp fixture comprising a resilient base plate having spaced openings for lamp sockets, companion lamp sockets projecting through said openings and having angularly extending base portions disposed at the back of said base plate, rigid wedge pieces disposed between said base portion and the back of said base plate and arranged to position said sockets with the projecting portions of the same inwardly inclined toward each other and screws securing said base portions and wedge pieces in rigid engagement with the back of said base plate and whereby the resiliency of the base plate will enable the projecting portions of the sockets to be sprung apart sufficiently to admit a lamp tube therebetween, said wedge pieces being of arched strip material inclined from one end toward the other.

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