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2,319,461

FLOURESCENT ELECTRIC TUBE SOCKET AND TUBE HOLDER

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Fig. 1.

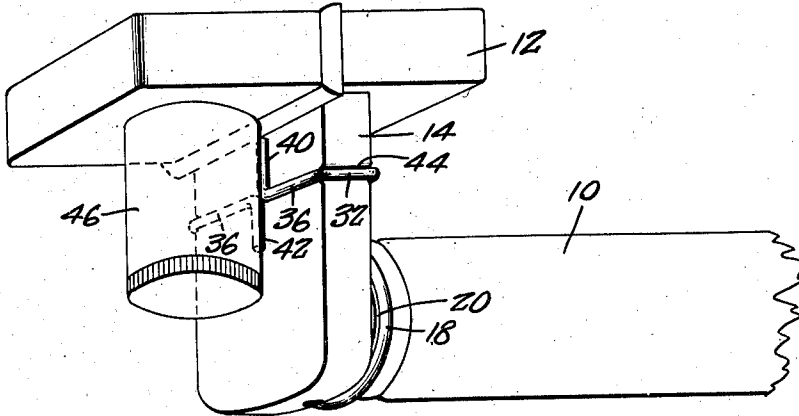


Fig. 2.

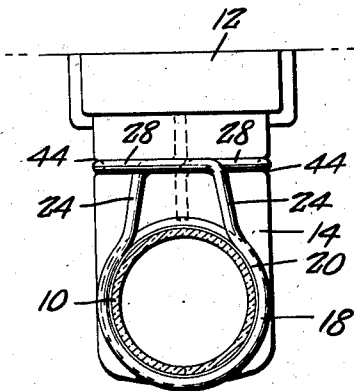
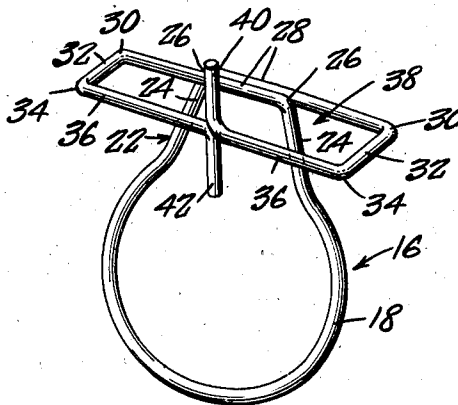


Fig. 3.



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FLUORESCENT ELECTRIC TUBE SOCKET
AND TUBE HOLDER

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2 Claims. (Cl. 173—328)

My invention relates to illumination, and has among its objects and advantages the provision of an improved socket and tube holder for fluorescent electric tubes.

In the accompanying drawing:

Figure 1 is a perspective view of the socket and holder in association with one end of the tube;

Figure 2 is an end view; and

Figure 3 is a perspective view of the tube holder.

In the embodiment selected for illustration, the tube 10 is of the conventional type and is supported at both ends. Figure 1 illustrates support at one end only of the tube, which support comprises a body 12 having a tube socket 14 secured thereto in right angular relationship therewith. Means for detachably connecting the tube 10 with the socket 14 comprises a holder 16, best illustrated in Figure 3. This holder comprises a single piece of wire bent to provide a loop 18 adapted to encircle the tube 10 and lie within a circumferential groove 20 in the usual metallic cap at the end of the tube.

The loop 18 terminates in a neck formation 22 comprising wire lengths 24 arranged in slightly converging relationship in a direction away from the loop and bent at 26 to provide parallel lengths 28 arranged at right angles to the axis of the neck 22. The lengths 28 terminate in bends 30 to provide right angular lengths 32 terminating in bends 34 to provide two lengths 36 paralleling the respective lengths 28 and co-acting with the latter and the lengths 32 to provide a socket-encircling loop 38 of generally rectangular configuration in conformity with the cross sectional contour of the socket 14. One of the lengths 36 is bent to provide an upstanding pin 40 and the other length is bent to provide a depending pin 42 arranged in axial alignment with the pin 40.

In operation, the loop 18 fits snugly within the groove 20 to hold the tube in a firm manner. The socket 14 is notched at 44 for the reception of the lengths 32 to restrain the loop 38 from relative axial movement on the socket 14. The loop 38 has snug fitting engagement with the socket 14, and the pins 40 and 42 also engage

the socket to brace the loop 38. Thus the tube 10 is held firmly in assembled relationship with the socket 14 to restrain the tube from accidental shifting and to eliminate arcing incident to loose connections. The holder is bent from wire having the necessary resiliency to resist deformation when being assembled with the tube and the socket as well as to provide a tensioned connection between the holder and the tube and the socket.

The body 12 is extended beyond the socket 14 to provide a mount for a starter 46 so that the starter may be removed and replaced without disturbing the tube. In connecting the tube with the socket, the tube is first connected with the loop 18 and the loop 38 is then slipped into position on the socket 14.

Without further elaboration, the foregoing will so fully illustrate my invention, that others may, by applying current knowledge, readily adapt the same for use under various conditions of service.

I claim:

1. The combination of a socket, an illuminating tube having end engagement with the socket, a holder having a loop embracing the tube and a loop embracing the socket to connect the tube and the socket, and means extending upwardly and downwardly from the loop embracing the socket and contacting with the socket to restrain that loop from rocking to hold the tube in firm engagement with the socket.

2. The combination of a socket, an illuminating tube having end engagement with the socket, a holder having first and second loops embracing the tube and socket respectively, the inner and outer sides of said second loop being each of two-part formation, said second loop being located at the upper side of said first loop with the parts of its inner side extending in opposite directions from the lateral sides of said first loop, and the parts of the outer side of said second loop extending in the direction of each other from the ends of the loop and having angular terminals extending above and below the loop in contact with the outer side of the socket.

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