Aug. 6, 1929. W. G. DUNHAM 1,723,471

LAMP SUPPORT

Filed Nov. 21, 1927

Fig. 1.

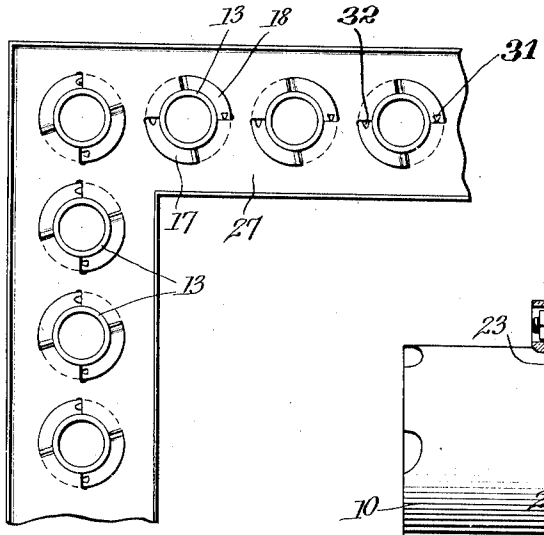


Fig. 2.

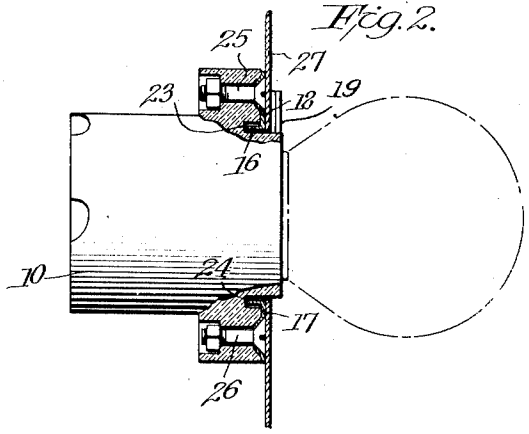


Fig. 3.

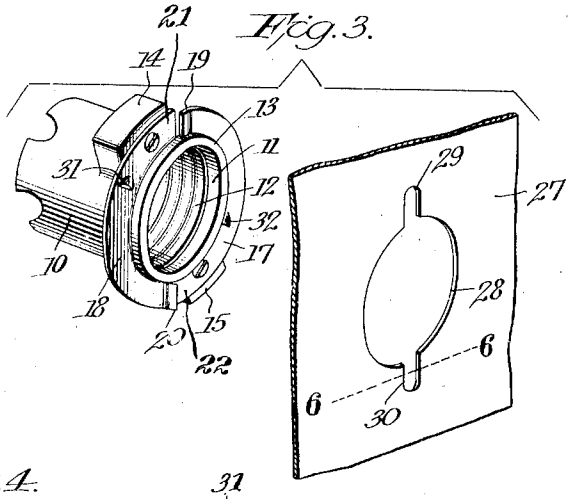


Fig. 6.

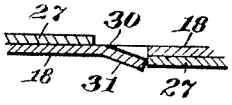
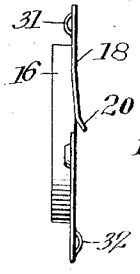


Fig. 4.



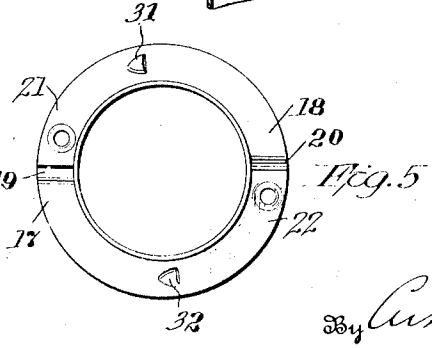


Fig. 5.

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UNITED STATES PATENT OFFICE.

WILLIAM G. DUNHAM, OF SCHENECTADY, NEW YORK, ASSIGNOR TO WEBER ELECTRIC COMPANY, OF SCHENECTADY, NEW YORK, A CORPORATION OF NEW YORK.

LAMP SUPPORT.

Application filed November 21, 1927. Serial No. 234,862.

The present invention relates to lamp supports, and particularly to means for supporting electric lamps or bulbs on electric signs. Heretofore the usual practice has been to secure the lamp socket to the frame plate of an electric sign by means of screws and nuts, the screws being put through from the front of the sign and the nuts applied at the rear, or vice versa. Consequently, it has been necessary for the workman to move back and forth from the front of the sign to the rear, thus causing a considerable loss of time.

The object of the present invention is to provide a lamp base and a frame plate so designed that the socket may be securely and entirely fixed to the plate by a workman at the rear of the latter.

The means by which this object is obtained will be described with reference to the accompanying sheet of drawings, wherein:—

Fig. 1 shows in front elevation a portion of a frame plate of an electric sign equipped with a number of the improved lamp sockets.

Fig. 2 is a section of a portion of a frame plate showing the lamp socket affixed thereto, the lamp base being shown partly in longitudinal section.

Fig. 3 is a perspective of a portion of the frame plate and the lamp socket, the latter being disconnected from the plate.

Fig. 4 is a side elevation of the novel attachment element with which the lamp socket is equipped.

Fig. 5 is an elevation of the same looking from the left of Fig. 4, and

Fig. 6 is a partial section on line 6—6 of Fig. 3, with the plate and attachment element in engaged position.

Referring now to the drawings, 10 indicates a lamp socket of cylindrical form provided with an axial opening 11, in which is disposed a threaded contact shell 12. A central contact is provided at the bottom of opening 11, and it and shell 12 are in connection with suitable binding posts, all in the usual manner. The end of the socket is somewhat reduced to form a collar 13, and below this collar the socket is provided with two radial ears 14 and 15.

The attachment element, as clearly shown in Figures 4 and 5, consists of a short sleeve 16 of such diameter as to permit the sleeve to pass over collar 13. One edge of sleeve 16 is provided with radial flanges or wings 17 and 18 of semi-circular extent. These flanges or wings, as indicated in Figure 4, are bent somewhat out of their normal plane so as to form interrupted spirals of small pitch, while the leading ends are more abruptly bent to form lips 19 and 20. The wings are preferably integrally connected with sleeve 16, with the exception of the short distance at their leading ends necessary to the formation of the lips. In assembling the socket and attachment element, sleeve 16, as above indicated, is slipped over collar 13 and the trailing ends 21 and 22 of the wings brought against ears 14 and 15, arcuate slots 23 and 24 being provided intermediate the ears and collar 13 for the reception of the sleeve. The wings and ears are secured together by screws and nuts 25 and 26.

The frame plate 27 of the electric sign is provided with a number of apertures 28, through each of which the collar 13 of a lamp socket is adapted to be passed from the rear of the sign. Adjoining the edges of apertures 28 are slots 29 and 30, which are spaced apart an angular distance equal to the distance between the lips 19 and 20 of wings 17 and 18. Thus when the socket is positioned with collar 13 extending through aperture 28 lips 19 and 20 will enter slots 29 and 30, and upon rotation of socket 10 about its axis, the wings will be caused to engage the margins of aperture 28 at the front of the plate. When the socket has been rotated through a certain angular distance, projections 31 and 32, the former extending rearwardly of wing 18, and the latter extending forwardly of wing 17, will enter slots 30 and 29, respectively. Both of the projections are wedge-shaped, as shown in Figure 6 in particular, and are so faced that projection 31 will limit the above mentioned rotational movement of socket 10, while projection 32 will lock base 10 against reverse rotation. The wings and frame plate are of sufficiently elastic material so that projection 32 may be disengaged when necessary.

It will be understood that the described details are not intended to be restrictive of the invention, the scope of which is determined in the following claims:

I claim:—

1. In combination, a plate having an aperture therein and a slot adjoining the edge of said aperture, a lamp socket at one side

of said plate having a socket opening registering with said aperture, means carried by said socket at the side of said socket opening adapted to enter said slot and to engage the other side of said plate upon rotation, whereby the socket is secured to the plate, and means engaging in said slot to lock the socket against reverse rotation relative to the plate.

2. In combination, a plate having an aperture therein and spaced radial slots opening into said aperture, a lamp socket at one side of said plate having a socket opening registering with said aperture, interrupted flanges carried by said base, said flanges being adapted to enter said slots and engage the other side of said plate upon rotation of said socket about an axis perpendicular to the plate, whereby the socket is secured to the plate, and a stop on one of said flanges adapted to engage one of said slots to prevent reverse rotation of said socket.

3. In combination, a plate having an aperture therein and spaced radial slots opening into said aperture, a lamp socket at one side of said plate having a socket opening registering with said aperture, interrupted flanges carried by said base, said flanges being adapted to enter said slots and engage the other side of said plate upon rotation of said socket about an axis perpendicular to the plate, whereby the socket is secured to the plate, a stop on one of said flanges adapted to abut an edge of one of said slots to limit such rotation, and a stop on one of said flanges adapted to abut an edge of one of said slots to prevent reverse rotation.

4. In combination, a plate having an aperture therein and spaced radial slots opening into said aperture, a lamp socket at one side of said plate having a socket opening registering with said aperture, a sleeve fixed to said socket coaxially with said opening, integral interrupted flanges extending outwardly of said sleeve, said flanges being adapted to enter said slots for screw engagement with the margins of said aperture upon rotation of the socket about the axis of said opening, whereby the socket is secured to the plate, and projections on said flanges adapted to enter said slots for the purpose described.

5. In combination, a plate having an aperture therein and spaced slots opening into said aperture, a lamp socket at one side of said plate having a socket opening registering with said aperture, flanges carried by said socket, said flanges having ends adapted to enter said slots and engage the other side of said plate upon rotation of said socket about an axis substantially perpendicular to the plate, whereby the socket is secured to the plate, and a stop on one of said flanges adapted to project into an opening in said plate to prevent reverse rotation of the socket.

In testimony whereof I have hereunto set my hand.

WILLIAM G. DUNHAM.