Dec. 6, 1938. L. C. DOANE 2,139,005

LIGHTING FIXTURE SCREEN

Original Filed March 25, 1936

Fig. 1.

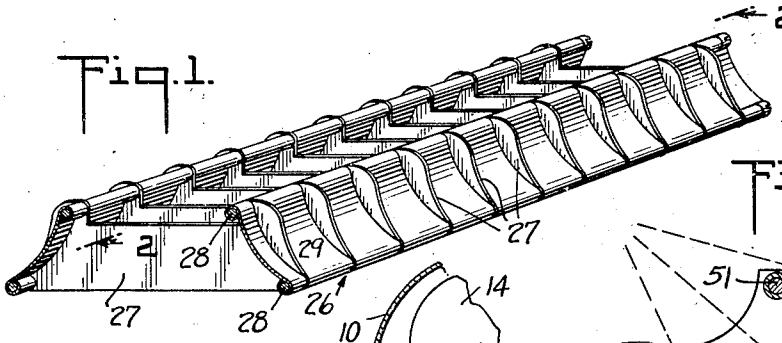


Fig. 5.

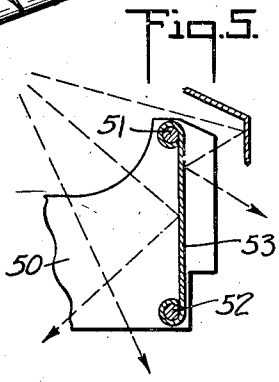


Fig. 4

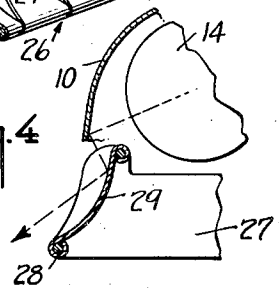
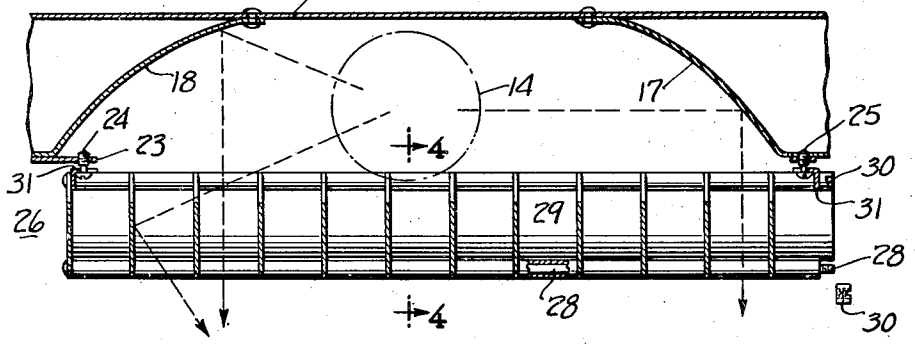


Fig. 2.



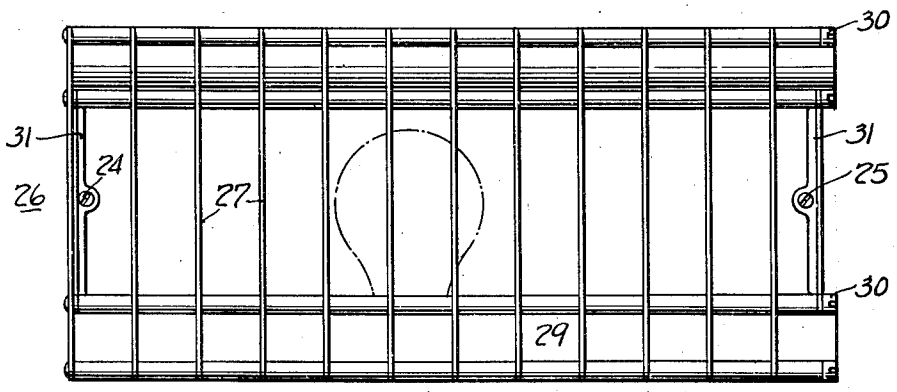


Fig. 3.

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LIGHTING FIXTURE SCREEN

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Original application March 25, 1936, Serial No. 70,816. Divided and this application November 23, 1937, Serial No. 176,050

4 Claims. (Cl. 240—78)

The present invention relates to lighting fixture screens, and is more particularly directed toward screens adapted for use with direct lighting fixtures having elongated troughs. It more especially relates to screens used with vehicle lighting fixtures which are placed over the rows of seats. Such fixtures are in the direct line of vision of occupants of distant seats, and the screens to which the present invention relate have transversely arranged screening members which obscure the light source at angles except near the vertical.

According to the present invention the screens are in the form of completely assembled elongated units adapted to be mounted horizontally and have a plurality of transverse screening elements and laterally disposed side screening elements which intercept laterally directed light and screen the source against occupants of seats across the aisle without interfering with the direct and reflected light emitted in more vertical directions.

The present application is a division of my copending application filed March 25, 1936, Serial No. 70,816 (now Patent No. 2,102,944 granted December 21, 1937).

The accompanying drawing shows, for purposes of illustrating the present invention, two embodiments in which the invention may take form, together with modifications of certain parts, it being understood that the drawing is illustrative of the invention rather than limiting the same.

In the drawing:

Figure 1 is a perspective view of one form of screen;

Figure 2 is a longitudinal sectional view through the screen, taken on the line 2—2 of Figure 1 and showing adjacent parts of a lighting fixture;

Figure 3 is an inverted plan view of the screen;

Figure 4 is a fragmentary transverse sectional view on the line 4—4 of Figure 2; and

Figure 5 is a view similar to Figure 4 of a modified form of construction.

In the drawing a suitable elongated open mouthed reflector is indicated at 10, 17 and 18 and a lamp bulb at 14. The mouth of the reflector is occupied by a screen 26 which employs a number of vertically disposed aluminum plates 27 held together by four longitudinally extending rods 28. Between each pair of adjacent plates the rods carry spacer members indicated at 29. These spacer members are made of sheet metal and have upper and lower eyes through which the rods pass. The assemblage is held together by nuts 30 threaded onto the ends of the rods. The upper rods also carry bridging members 31 adjacent the ends of the screen. These bridging members are notched to receive screws 24 and 25 to fit the tapped holes in the straps 23 or extension of reflector 17.

The spread of direct light in longitudinal planes is controlled by the transverse plates 27, and the light source is screened against observation by the passengers. The reflected light is projected down between the plates, as will be apparent from the drawing.

The longitudinally extending members 29 which act as spacers also act as supplemental reflectors. They receive light reflected downwardly by the marginal portions of the trough and reflect this light outwardly at high angles, as shown in Figure 4. Owing to the diffusing nature of the reflecting surfaces employed, this light is scattered so as to illuminate the ceiling. These light-deflecting members and spacers also function as screens to limit the lateral spread of light. Where there is no need to build up ceiling illumination on one side of the lighting equipment, the longitudinally extending reflecting members 29 may be omitted and the transverse plates held in position by any suitable form of spacing means.

The screen which has been described is made up out of a plurality of identical stamped parts and may readily be made to a particular size; but, if conditions require, the length of the screen may be readily altered by trimming off the side edges of the spacers.

In the arrangement diagrammatically shown in Figure 5, the transverse plates 50 are held together by two rods 51 and 52 in the same vertical plane, and the spacers 53 are secured to these rods in the same way as previously indicated.

It is apparent that, within the scope of the invention, modifications and different arrangements may be made other than is herein disclosed, and the present disclosure is illustrative merely, the invention comprehending all variations thereof.

What is claimed is:

1. A screen for direct lighting fixtures comprising a plurality of spaced, vertically disposed, transverse plates, longitudinally extending tie rods passing through all the plates adjacent their ends, spacers about each of the tie rods, the spacers along one side edge supporting longitudinally extending downwardly and outwardly disposed side reflecting plates, the ends of the transverse plates projecting beyond the side plates.

2. A screen for direct lighting fixtures comprising a plurality of spaced, vertically disposed,

transverse plates, longitudinally extending tie rods passing through all the plates adjacent their ends, spacers about each of the tie rods, and side reflectors disposed between adjacent transverse plates and integral with the spacers which separate said plates.

3. A screen such as claimed in claim 2, wherein the longitudinal reflectors diverge downwardly and outwardly.

4. A screen for direct lighting fixtures comprising a plurality of spaced, vertically disposed, transverse plates, longitudinally extending tie rods passing through all the plates adjacent their ends, the tie rods at the top being closer together than the tie rods at the bottom, and side reflectors disposed between adjacent transverse plates and integral with the spacers which separate said plates.

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