

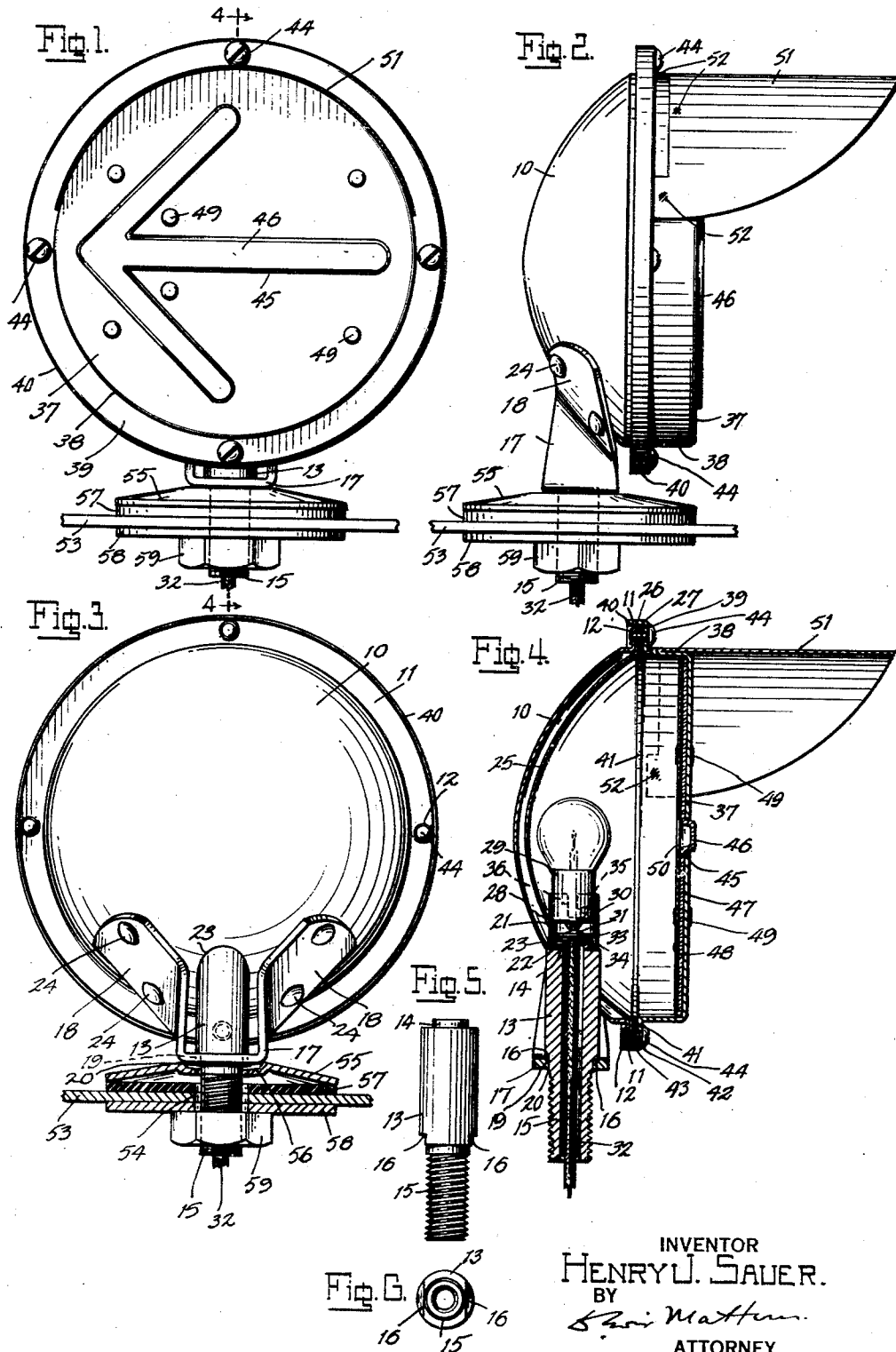
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DIRECTION SIGNAL LAMP

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DIRECTION SIGNAL LAMP

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1 Claim. (Cl. 248—289)

The present invention relates to a direction signal lamp particularly for use upon trucks, busses or the like to indicate right and left turns, two such lamps, one indicating left turn and the other right turn, adapted to be mounted at the rear of the vehicle and two adapted to be mounted at the front upon the fenders. An object of the invention is to provide a lamp structure which will withstand the severe vibration and shock to which its use upon trucks and busses subjects it, and which will at the same time permit of easy and convenient opening of the lamp casing for the purpose of renewing the bulb when necessary.

A further object is to provide a lamp structure in which the bulb socket is mounted upon a vertically disposed post, which post is adapted to mount the lamp upon the fender or other supporting structure, and to provide in rigid non-rotatable relation with such post a bracket rigidly secured to the lamp casing in such relation that relative movement between the casing and post is prevented and the casing is effectually supported and reinforced against displacement or distortion.

A further object is to provide a lamp structure having reflector means within the lamp provided upon the inner surface of the front face and also upon the inner surface of the rear face, and so cooperating with the lamp bulb that the light rays will be multiplied within the casing thereby greatly increasing the illumination of the signal.

With the above and other objects in view, an embodiment of the invention is shown in the accompanying drawing, and this embodiment will be hereinafter more fully described with reference thereto and the invention will be finally pointed out in the claim.

In the drawing:

Fig. 1 is a front view of a direction signal lamp according to the exemplary illustrated embodiment of the invention.

Fig. 2 is a side elevation.

Fig. 3 is a rear elevation, the fender or other supporting structure and the securing means being shown in vertical section.

Fig. 4 is a vertical sectional view taken along the line 4—4 of Fig. 1, the securing nut and washers being removed.

Fig. 5 is a detail view of the mounting post employed.

Fig. 6 is a lower end view of the mounting post. Similar reference characters indicate corresponding parts throughout the several figures of the drawing.

Referring to the drawing, the signal direction

lamp according to the illustrated exemplary embodiment of the invention comprises a casing consisting of a back member 10 of substantially parabolic shape provided at its edge with a circular outwardly extending flange 11 provided at suitably spaced points with rearwardly flanged threaded holes 12 for receiving the cover attaching screws presently to be more fully referred to.

The mounting means for the back member 10 consist of a tubular cylindrical post 13 provided at its upper end with a reduced diameter shoulder 14 and at its lower end with a reduced diameter threaded stud portion 15, the post being provided adjacent the upper end of the stud portion 15 with oppositely disposed flattened shoulders 16—16. The post is rigidly secured to a bracket 17 formed of strap metal bent into U-shape and provided with outwardly bent diagonally disposed attaching ears 18—18, the base of the bracket being provided with an aperture 19 corresponding in shape to the cross-section of the flattened portion of the post, which portion is engaged in this aperture and rigidly secured by swedging against the lower surface of the bracket, as at 20. The post and bracket are thus rigidly and non-rotatably secured together.

Upon the upper end of the post a lamp bulb socket 21 is rigidly secured, its flanged base 22 being engaged with the shouldered portion 14 which latter is swedged over upon the flange as clearly shown in Fig. 4. The back member 10 is provided in its lower portion with an aperture 23 through which the upper end of the post is engaged, and the ears 18 of the bracket 17 are secured to the back member at each side of the post by means of rivets 24.

Within the back member 10 there is provided a parabolic reflector member 25 preferably spaced from the inner surface of the back member, provided with a circular outwardly extending edge flange 26 adapted to engage upon the forward side of the back member and having holes 27 registering with the threaded holes 12 of the flange 11, the reflector being provided in its lower portion with an aperture 28 through which the post 13 and socket 21 are engaged.

The lamp bulb base 29 is engaged in the socket 21 in the usual manner, its center contact 30 engaging the button end 31 of a lead wire 32 extending through the passage of the post, the button end carrying an insulating washer 33, between which and the base of the socket 21 a spring 34 is disposed, the lamp contact 30 being thus engaged by the button end 33 under spring pressure and the lugs 35 of the lamp base being

yieldably retained in the bayonet slots 36 of the socket. It will be noted that the mounting structure for the lamp bulb is such that the lamp bulb will be disposed substantially centrally of the casing close to the reflector 25, and without any appreciable interference by the supporting structure with the reflection of the lamp rays by the reflectors.

The cover member of the lamp comprises a circular front face portion 37 having a cylindrical wall 38 provided with an outwardly extending flange 39 and a rearwardly extending rim 40, in which are received the flanges 11 and 26 of the back member and reflector with a resilient sealing gasket 41, preferably of cork, disposed between the flange 26 and the flange 39. The flange 39 and the sealing gasket are respectively provided with holes 42 and 43 registering with the threaded holes 12 of the back member, securing screws 44 being engaged therethrough and securing the cover member to the back member with the sealing gasket compressed between them. The rim flange 40 encloses the edges of the flanges 11 and 26 and the sealing gasket to protect the interior of the lamp from the entrance of water.

The front face 37 of the cover member is provided with an opening 45 preferably in the shape of an arrow, the arrow pointing to the left for a left turn signal lamp and pointing to the right for a right turn signal lamp, this opening being engaged by an embossed projecting portion 46 of a translucent plate 47 of Celluloid or the like, disposed at the inner side of the face and retained by an inner reflector plate 48 secured to the front face 37 by rivets 49. The reflector plate 48 is provided with an opening 50 corresponding in shape to and registering with the opening 46 of the front face, so that the arrow shaped embossed portion 46 of the translucent plate will be illuminated. The reflector plate 48 is preferably silvered at its inner surface, as is also the parabolic reflector 35, so that the light rays projecting forwardly from the lamp bulb will not be absorbed by the cover but will be reflected rearwardly to the parabolic reflector member 35, and the illumination within the lamp will thus be greatly multiplied.

The cover member is provided with a visor 51 which is preferably secured to the cylindrical wall 38 by spot welding as at 52, the visor being for the purpose of increasing the visibility of the signal lamp in daylight.

The lamp is mounted upon the supporting structure 53 of the vehicle, the fender in the case of the forward signal lamp and sheet metal brackets in the case of rear signal lamps, by engaging the threaded stud 15 in a hole 54 drilled in the supporting structure 53, a dished washer 55 having a circular recess 56 in its upper side being engaged beneath the lower end of the bracket 17, a rubber washer 57 being disposed between the washer 55 and the supporting structure 53, a washer 58 being disposed upon the stud at the under side of the supporting structure, and the stud being secured by a nut 59, which upon being tightened draws the bracket 17 into tight engagement with the recessed portion 56 of the washer 55. This arrangement is such that any burrs on the lower surface of the bracket 17 will not prevent solid seating of the bracket, and the tight engagement of the corner portions of the rectangular lower surface of the bracket with the circular edge of the recesses 56 produces a frictional connection which effectually prevents relative rotation between the parts.

I have illustrated and described a preferred and satisfactory embodiment of my invention, but it will be understood that changes may be made therein within the spirit and scope thereof as defined in the appended claim.

Having thus described my invention (what I claim and desire to secure by Letters Patent is:

In a lamp, a lamp casing having an aperture, a support for said casing comprising a bracket consisting of a U-shaped member having upright side portions, a base portion provided with an aperture downwardly spaced from said casing aperture in vertical axial alignment therewith, and outwardly extending ears at the upper ends of said side portions engaging the outer surface of said casing in outwardly spaced relation at each side of said casing aperture and rigidly secured to said casing, and a tubular post engaged intermediate its ends in said bracket aperture and rigidly secured therein against rotary and axial movement, the upper end portion of said post being loosely engaged through said casing aperture to the interior of the casing to support a lamp bulb within said casing, and the lower portion of said post below said bracket being provided with screw threads for the engagement of a securing nut.

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