March 26, 1929. F. W. C. NEUNER 1,706,459

LAMP MOUNTING

Filed June 19, 1926

FIG. 1

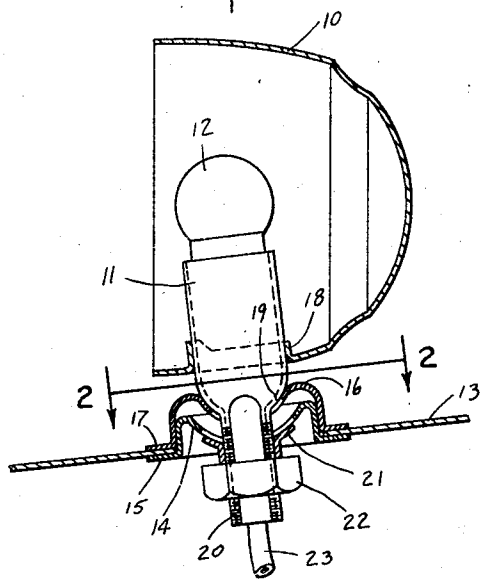


FIG. 2

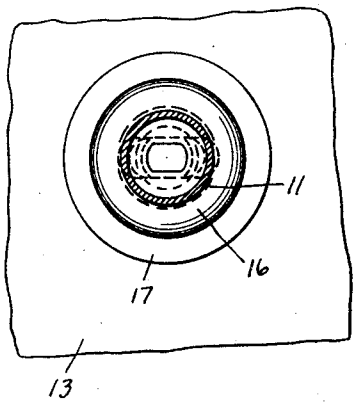


FIG. 3

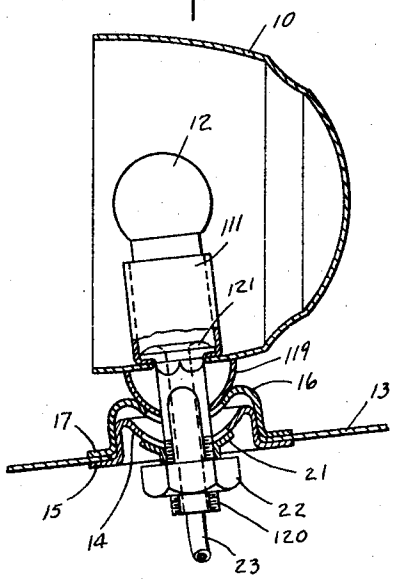
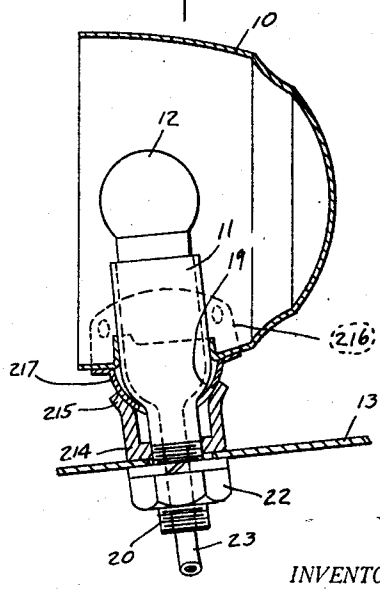


FIG. 4



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UNITED STATES PATENT OFFICE.

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LAMP MOUNTING.

Application filed June 19, 1926. Serial No. 117,066.

This invention pertains to an adjustable mounting for an automobile lamp, and particularly with respect to a side lamp. The principal feature of the invention resides in the provision of two spaced spherical members for providing a socket in which the corresponding lamp mounting is adapted to seat so as to be capable of universal movement with respect thereto for adjusting the position of the lamp, said members being so spaced apart and formed as to permit of a certain amount of flexibility or yielding as well as distortion for permitting the lamp to be securely clamped in adjusted position.

Another feature of the invention resides in the formation of the lamp socket, the spherical seating portion and the screw-threaded bolt-like projection and wire conduit being formed in a single integral piece for simplifying and stabilizing the construction.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims.

Fig. 1 is a central vertical section taken through the lamp with its mounting. Fig. 2 is a section taken on a line 2—2 of Fig. 1. Fig. 3 is a central vertical section through a lamp mounting showing a modified form thereof. Fig. 4 is the same as Fig. 3 showing a second modified form.

In the drawings there is shown a lamp structure having a casing 10 into which the lamp socket 11 extends for supporting a lamp bulb 12. The lamp is adapted to be mounted in adjusted position on a body of an automobile, and particularly the cowl which forms a support 13, said support having an aperture formed therein through which the mounting extends.

Clamped against the under side of the support 13 and about the opening therein there is provided a spherically surfaced spacing shell 14 provided with an elongated opening therein and having a radially extending flange 15 adapted to engage the surface of the support 13 surrounding the opening. Mounted above said shell and spaced therefrom there is a second or upper spherical shell 16 having a spherical curvature conforming to that of the shell 14 and having the radially extending flanges 17 adapted to engage the upper surface of the support 13 about the opening. The shell 16 is likewise provided with an elongated slot, and both of said shells are formed with corresponding concavo-convex seating surfaces having substantially the same center of curvature.

The lamp casing 10 is provided at its bottom with an upwardly extending flange 18 which embraces and is rigidly secured to the lamp socket 11 whereby said socket may be rigidly secured thereto. That portion of the socket 11 extending exteriorly of the casing is formed with a rounded seating portion 19 corresponding in curvature to the concave surface of the upper shell 16 so as to seat snugly therein. The socket 11 is provided with a hollow screw-threaded tubular stem 20 continuing from and formed integral with the seating surface 19 so as to project through the elongated opening in both of the seating shells 16 and 14.

Mounted over the stem 20 so as to engage the under-convex surface of the shell 14 there is a washer 21 provided with a flared end so formed as to overlap the elongated opening in the shell 14, engaging and conforming to the curvature of the surface thereof. The nut 22 is screwed onto the stem 20 so as to engage the washer 21 and clamp said shells 14 and 16 intermediate said washer and the seating portion 19 of the socket. It will be noted that the wire connection 23 may extend upwardly into the lamp socket through the hollow stem 20 which forms a conduit therefor.

From the above it will be observed that the lamp may be adjusted with respect to the supporting member 13 by causing the spherical surfaces of the socket 19 and washer 21 to vary their relative positions with respect to the corresponding spherical surfaces of the shells 19 and 14. When adjusted in position, the lamp may be readily clamped by tightening up the nut 22 until the two members are drawn toward each other so as to become slightly distorted. Their distortion, as well as the friction created by the spring tension thereof will lock the lamp firmly in adjusted position.

As illustrated in Fig. 3, the modified structure is the same as Fig. 1 in all respects with the exception that the lamp socket 111 is positioned entirely within the lamp casing while the spherical base portion 119 is mounted with respect thereto separately of the socket. Furthermore the hollow screw-threaded stem 120 is provided with a head 121 which engages the lamp socket or the lower portion of the casing for securing the lamp in the casing. In other words, in this

modified form, these three units are formed and assembled separately, whereas in Fig. 1 they comprise a single unit formed integral.

In the modified form shown in Fig. 4, the lamp socket and hollow stem 20 as well as the seating surface 19 thereof are formed in the same manner as shown in Fig. 1. For adjustably supporting the lamp, a bracket member 216 is secured to the exterior surface of the casing and is provided with a spherical seating shell 217 conforming to the spherical portion 19 of the socket in which the latter is adapted to fit. The shell 217 is provided with an elongated slot through which the stem 20 extends, and is supported upon the spacing washer 214 having a flared periphery 215 upon which the shell 217 rests. In this structure, when the nut 22 is screwed tight, it clamps the shell 217 which is secured to the casing between the spherical socket portion 19 and the flared edges of the washer 214 whereby the lamp casing will be held rigidly in adjusted position.

The invention claimed is:

1. A lamp comprising a casing, a lamp socket extending therethrough and having a rounded surface formed thereon exteriorly of said casing, a tubular stem continuing from said socket, a support for said lamp, a pair of shells spaced apart and secured to said support, said shells having rounded surfaces substantially corresponding to the rounded surface of said socket and provided with an opening through which said stem may extend, a washer having a flared portion engaging the convex surface of one of said shells, and means for tightening said washer thereagainst and drawing the rounded surface of the socket against the rounded surface of the other shell for securing said lamp in adjusted position.

2. A lamp comprising a casing, a lamp socket extending therethrough and having a spherical surface formed thereon exteriorly of said casing, a tubular screw-threaded stem continuing from said socket, a support for said lamp, a pair of shells spaced apart and secured to said support, said shells having spherical surfaces substantially corresponding to the spherical surface of said socket, a washer having a flared portion adapted to engage the convex surface of one of said shells, and a nut adapted to screw on said stem in engagement with said washer for drawing the spherical surface of said socket into clamping engagement with the concave spherical surface of the other shell, whereby said shells will be drawn toward each other and clamped in distorted position for retaining said lamp in adjusted position.

3. A lamp comprising a casing, a lamp socket mounted therein, a rounded portion formed below said socket and casing, a pair of shells spaced apart having rounded surfaces substantially corresponding to said portion, and means for engaging and distorting one of said shells and drawing said rounded portion into seating engagement with the other shell whereby said shells will be clamped together for retaining said lamp in adjusted position.

4. A lamp comprising a casing, a lamp socket mounted therein, a rounded portion formed below said socket and casing, a support for said lamp and a pair of shells spaced apart having corresponding rounded surfaces conforming substantially to said rounded portion whereby said latter surface may seat in one of said shells and be adjustable with respect thereto, and means for clamping said lamp to the other shell whereby said rounded surfaces will be drawn together and slightly distorted for retaining said lamp in adjusted position.

5. A lamp comprising a casing, a lamp socket mounted therein, a rounded portion formed below said socket and casing, a support for said lamp and a pair of shells spaced apart having corresponding rounded surfaces conforming substantially to said rounded portion whereby said rounded portion may seat in one of said shells and be adjustable with respect thereto, a hollow threaded stem below said casing and extending through said spherical surfaces and capable of adjustable movement with respect to said shells, a flared washer mounted on said stem and engaging one of said shells, and a nut adapted to screw thereon for engagement with said washer and drawing said rounded portion against the surface of the other shell whereby said rounded surfaces will be drawn together and said shells distorted for clamping said lamp in adjusted position.

6. A lamp comprising a casing, a lamp socket extending therethrough and having a rounded surface formed thereon exteriorly of said casing, a tubular stem continuing from said socket, a shell having a rounded surface substantially conforming to the surface of said socket, a second shell spaced apart from said first mentioned shell, and means mounted on said stem for engaging and distorting the second shell and clamping said socket against the first shell for securing said lamp in adjusted position.

In witness whereof, I have hereunto affixed my signature.

FRED W. C. NEUNER.