

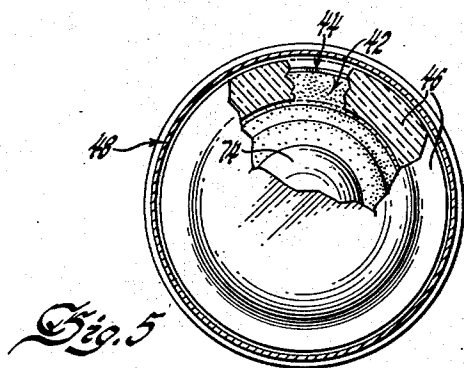
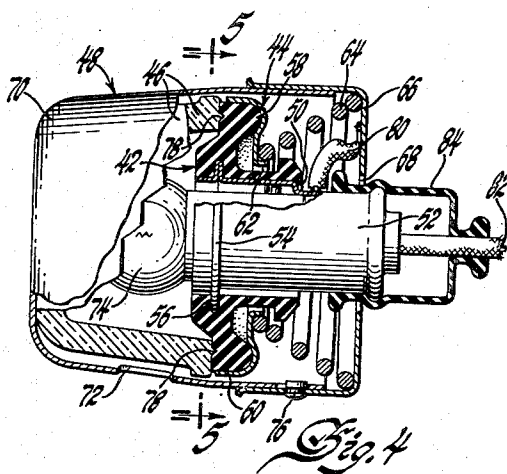
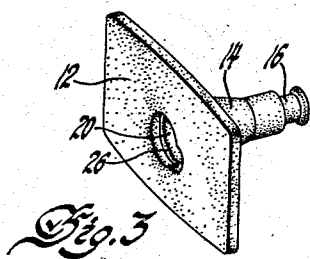
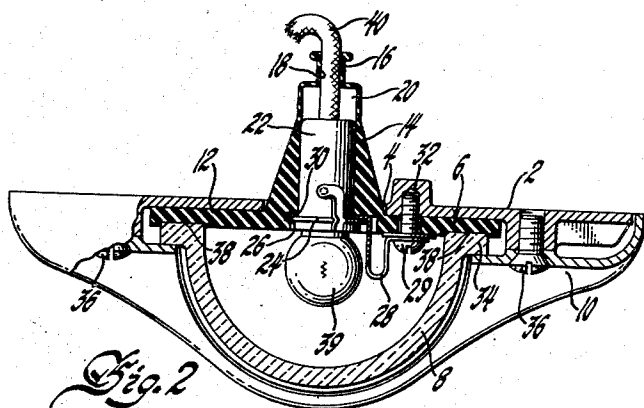
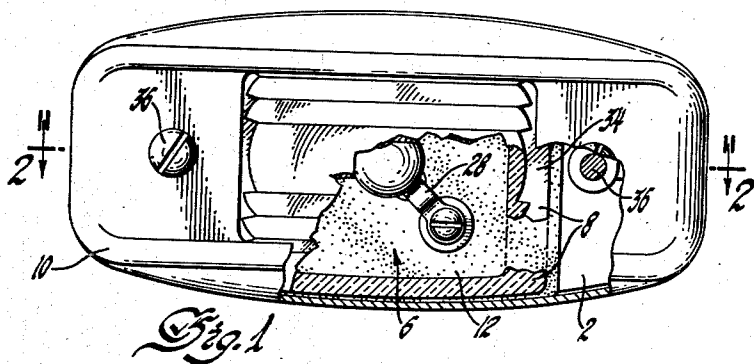
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VIBRATION ABSORBING LAMP MOUNTING

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VIBRATION ABSORBING LAMP MOUNTING

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The present invention relates to lamp mounting devices and especially devices employed in connection with automotive vehicles for mounting electric lamps having electrically energized lamp filaments of a relatively fragile character.

Automotive vehicles provided with electrical systems adapted for operation with an electrical power source of substantially higher voltage than the six volt systems commonly employed on vehicles at the present time require lamp filaments for lighting purposes which are more fragile and consequently less adapted to the severe usage vehicles are subjected to on rough terrain.

Accordingly, it is the object of the present invention to provide a mounting device so constructed and arranged as to insulate vehicle lamps employing such filaments from road shock.

This and other objects are attained in accordance with the present invention by providing a lamp mounting device in which the lamp is secured in resilient means adapted to absorb and dampen vibrations.

For a better understanding of the invention reference may be had to the drawing in which Figure 1 is a front view partly in section and partly broken away of a lamp mounting device embodying the present invention; Figure 2 is a top plan view partly in section and partly broken away of the mounting device taken on line 2-2 of Figure 1; Figure 3 is a perspective view of a lamp supporting means employed in the mounting device of Figures 1 and 2; Figure 4 is a side elevational view partly in section and partly broken away illustrating a modified form of lamp mounting device embodying the present invention and Figure 5 is a view partly in section and partly broken away taken on the line 5-5 of Figure 4.

Referring now to the drawing and particularly to Figures 1, 2 and 3, there is illustrated a lamp mounting device embodying the present invention and comprising a support member 2 provided with a central passage 4, a lamp mounting member 6 of resilient material such as rubber or the like, a lens 8 and a frame 10 securing the lens and lamp mounting member in assembled relationship. The lamp mounting member 6 is formed with an oblong section 12 having a centrally disposed portion 14 of substantially conical form extending rearwardly and terminating in a reduced end portion 16 provided with a passage 18. The centrally disposed portion 14 is provided with a central passage 20 communicating with passage 18 and adapted to receive a lamp or bulb socket 22. The bulb socket 22 is

provided with an annular collar 24 adapted to engage an annular groove 26 in the wall of passage 20 for retaining a grounding strap 28 with an annular collar 30 in contact with collar 24 as shown. A grounding electrical connection is provided to the base 2 by a threaded member 29 which passes through the oblong section 12 and engages a threaded recess 32 in the support member 2. The lamp mounting member 6 is secured to the support 2 by passing the rearwardly extending portion 14 through the passage 4 until the oblong section 12 engages the support. The lens 8 with its outwardly extending flange 34 engaging the oblong section 12 is clamped in the assembly by the frame 10 which is secured to the support by threaded members 36. A projection 38 extending around the flange 34 is pressed into the wall of the lamp mounting member 6 and provides means for sealing the chamber formed by the lens and the lamp mounting member from the outer atmosphere. An electrical circuit is made to the lamp 32 through the conductor 40 which is passed through passage 18. The reduced end 16 provides a substantially air-tight seal against the admission of atmosphere through passage 18.

The lamp mounting modification illustrated in Figures 4 and 5 comprises a mounting member 42, clamped between an annular support member 44 and a lens 46 with the respective parts secured in assembled relationship in a metal housing 48. The mounting member 42 is of suitable resilient material such as rubber and is provided with a central passage 50 adapted to receive a bulb socket 52. The bulb socket is retained in the passage 50 by an annular collar 54 extending outwardly of the bulb socket into an annular groove 56 in the wall of passage 50. A flange 58 extending radially of the mounting member provides means for engaging the end of the lens 46 to seal the chamber formed by the lens and mounting member from the outer atmosphere. The annular supporting member 44 is provided with axially extending flanges 60 and 62 which respectively surround the flange 58 of mounting member 42 and provide a seat for one end of a helical spring 64. The metal housing 48 comprises a base 66 having a central passage 68 and a cover member 70 having an aperture 72 for transmitting light from the bulb 74 for illumination of a predetermined area. The base 66 and cover 70 are secured together by a connection 76 of the well-known bayonet type.

In assembling the mounting device of Figures 4 and 5, spring 64 is placed in the base 66 with

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the supporting member 44 engaging the opposite end of the spring. The mounting member 42 with the bulb socket 52 assembled therein is then secured in the support member 44. The lens 46 is positioned to engage the flange 58 and the cover 70 is secured to base 66 clamping the parts in assembled relationship with the spring 64 yieldingly urging the flange 58 to seat on the lens through the support 44. A projection 78 extending from the lens is pressed into the flange 58 of the mounting member to seal the interior from the atmosphere. An electrical grounding connection is provided by a conductor 80 the ends of which are soldered to the base 66 and socket 52. An electrical circuit to the bulb 74 is provided through a conductor 82 which passes through a cap 84 which is passed over the end of the bulb socket to form a seal against atmosphere entering the end of the bulb socket passing through the base 66.

Mounting devices such as I have described are especially suitable for mounting lamp bulbs having the small diameter fragile filaments generally employed in electrical lighting systems utilizing a twenty-four volt source of supply. With such mounting devices the bulbs are protected from road shock and the interior of the lamp mounting devices are effectively sealed from the outer atmosphere.

What I claim as new and desire to obtain by Letters Patent of the United States is:

1. In a lamp mounting device, a vibration absorbing member having a passage therein, said member being provided with an outwardly extending portion and an annular groove in the wall of said passage, a bulb socket disposed in said passage, said bulb socket having an annular flange recessed in said groove, a rigid support for said member, said support having a flange for engaging said outwardly extending portion adjacent its edge, a lens and means for clamping said portion between said lens and support to provide a sealed chamber for a lamp bulb disposed in said socket.

2. In a device for mounting lamp bulbs in vibration damping means, a bulb socket mounting member of vibration damping material, said member having a passage therein and an integral flange extending outwardly thereof and around said mounting member, an annular groove in the wall of said passage, a bulb socket disposed in said passage, said bulb socket having an annular flange recessed in said groove, a supporting base adapted to engage said integral flange on one side thereof, a lens having a peripheral

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surface adapted to engage the other side of said integral flange, and a projection extending along and axially from said surface, and means for clamping the integral flange of said mounting member between said supporting base and said lens with said axially extending projection impressed in said mounting member to provide a sealed chamber.

3. In a device for mounting lamp bulbs in vibration damping means, a bulb socket mounting member of vibration damping material, said member having a passage therein and an integral flange extending outwardly thereof and around said mounting member, a bulb socket disposed in said passage, an annular support engaging one side of said integral flange, a lens having a peripheral surface in engagement with the other side of said integral flange, a housing base member, a spring having one end in engagement with said annular support and the other end in engagement with said housing base member, and an apertured lens cover detachably connected to said housing base member, said cover clamping said mounting member between said lens and said annular support with said spring yieldingly urging said annular support against said integral flange to provide a chamber sealed from the atmosphere.

4. In a lamp mounting device, a vibration absorbing member having a passage therein, said member being provided with an outwardly extending portion and an annular groove in the wall of said passage, a bulb socket disposed in said passage, said bulb socket having an annular flange recessed in said groove, a grounding strap held in electrical contact with said annular flange by said member, a rigid support for said member, said support having a flange for engaging said outwardly extending portion adjacent its edge, a lens and means for clamping said portion between said lens and support to provide a sealed chamber for a lamp bulb disposed in said socket.

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