Nov. 26, 1957 J. J. MARTIN 2,814,720

VEHICLE LAMP

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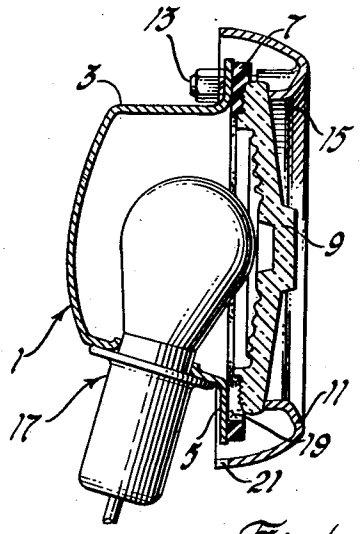

Fig. 1

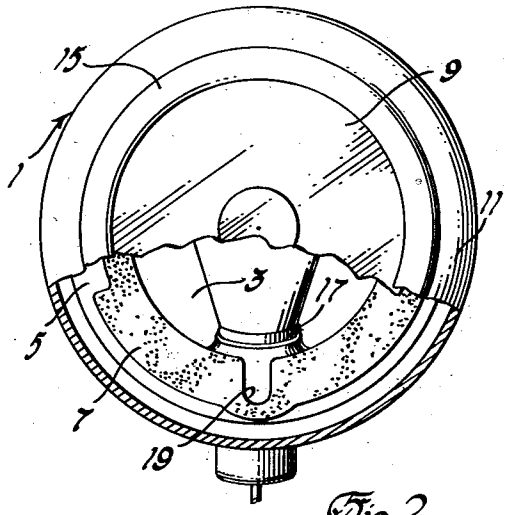

Fig. 2

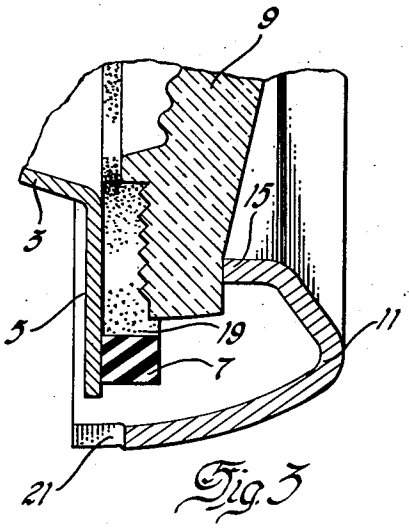

Fig. 3

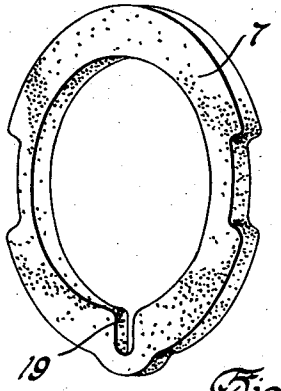

Fig. 4

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VEHICLE LAMP

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6 Claims. (Cl. 240—41.55)

The present invention relates to vehicle lamps and more particularly to a lamp having novel means for draining water from the lamp casing.

One of the problems associated with vehicle lamps is that of providing suitable drainage for removing water from the lamp casing, the water being present by reason of condensation and leakage about the several lamp openings. As a solution to this problem, it has become standard practice in the art to provide one or more drain holes in the lowermost portion of the lamp casing. It is obvious, however, that this expedient also tends to aggravate the problem in that access is provided for the entrance of splash water, road dust and road salts to the casing. Likewise, this expedient requires an additional operation in forming the casing as well as requiring special care to provide the casing about such drain holes with a protective coat of paint to inhibit corrosion, all of which adds to the complexity and cost of production.

It is therefore an object of my invention to provide a vehicle lamp having simple and inexpensive means for water drainage. It is another object of my invention to provide means for draining water from the lamp casing which means is effective to preclude entrance of splash water.

To attain these objects, I provide means in the lowermost portion of the lens sealing gasket interconnecting the casing with the space between the lamp lens and door which means is adjacent to a drain notch provided in the lowermost portion of the lamp door.

Further objects and advantages of the present invention will be apparent from the following description, reference being had to the accompanying drawing, wherein a preferred form of the present invention is clearly shown.

In the drawing:

Figure 1 shows a vertical sectional view of a back-up lamp embodying the features of my invention;

Figure 2 shows a front elevational view with parts broken away of the lamp shown in Figure 1;

Figure 3 shows an enlarged sectional view of the lower lamp portions shown in Figure 1;

Figure 4 shows a perspective view of the sealing gasket formed in accordance with the teachings of my invention.

Referring now to the drawing, there is shown a vehicle lamp **1** of the type commonly used on automobiles which lamp is generally located in an area immediately adjacent the rear wheels and/or gravel pans of the vehicle. The lamp **1** comprises a generally cup-shaped casing **3** having an outwardly extending flange **5** on which there is positioned a sealing gasket **7** formed of a resilient material such as rubber or rubber-like plastics. A lens **9** is positioned over the open front face of casing **3** with its inner peripheral surface contacting gasket **7** thereby sealing the lens on the lamp casing. The lens **9** is retained in position on the gasket **7** by the lamp door **11** removably secured to casing **3** by a plurality of bolts **13**. The door **11** is formed with an inwardly turned portion **15** in contact

with the outer peripheral surface of lens **9** which portion serves to clamp the lens on the gasket. A lamp bulb and socket **17** is positioned within the casing **3** as the source of illumination.

Lamps of the type shown on the drawing are generally located adjacent the wheels of the vehicle and thus are subject to being impacted by the water, road dust and road salts encountered under normal operating conditions. It is therefore readily understood that the drain holes normally provided in the casing **3** of the lamp while serving to drain water from the casing, at the same time provide access to the lamp for the entrance of contaminants which may be thrown up against the lamp by the wheels.

In accordance with my invention I provide drainage means through that portion of the lamp which is exterior of the vehicle surface, which means forms an elongated and tortuous channel. As shown on the drawing, I provide a notch **19** in the lowermost portion of the sealing gasket **7** which notch extends radially outward from the inner edge of the gasket to a point adjacent the outer edge. The length of the notch, as is clearly shown on the drawing, is such as to extend beyond the periphery of the lens **9**, the lens being positioned thereover in overlapping relationship. The door **11** is provided with a notch **21** in its lowermost portion in a position adjacent the notch **19**. In this manner, it can be seen that the drainage holes provided in the lamp are shielded from the wheels by the vehicle surface and that an elongated and tortuous path is provided which likewise tends to substantially eliminate the entrance of any contaminating material to the lamp body. While I have shown my invention as applied to an automotive lamp, it should be understood that my teachings are equally applicable to lamps of other types. Likewise, the notch **19** may be extended the full width of sealing gasket **7** to present an elongated drainage channel.

While the embodiment of the present invention as herein disclosed constitutes a preferred form, it is to be understood that other forms might be adopted as defined by the scope of the claims which follow.

What is claimed is:

1. In a vehicle lamp comprising a casing, a flange formed on said casing, a sealing gasket on said flange, a lens positioned on said gasket, and a lamp door about said lens, the improvement comprising said gasket being provided with means in the lowermost portion thereof providing an elongated passage interconnecting the interior of said casing and the space between said lens and said door, and a drain opening in the lowermost portion of said door adjacent said means to enable water drainage from said casing.

2. A vehicle lamp comprising a casing, a flange formed on said casing, a sealing gasket on said flange, a lens positioned on said gasket, and a lamp door about said lens, characterized by the fact that said gasket is provided with an elongated notch in its lowermost portion extending from the inner edge to a point adjacent the outer edge providing a passage interconnecting the interior of said casing and the space between said lens and said door, and said door being provided with an opening in its lowermost portion adjacent the notch in said gasket to enable water drainage from said casing.

3. In a lamp having an elongated path for water drainage, the combination of a lamp casing having a flange formed thereon, a sealing gasket positioned on said flange, said gasket having an elongated notch in its lowermost portion, a lens positioned on said gasket, a lamp door secured to said casing and positioned about said lens, said door having an opening in its lowermost portion adjacent the notch in said gasket, and a light bulb

positioned within said casing, the notch in said gasket providing a connecting channel between said casing and the space between said lens and said door.

4. In a lamp having an elongated and tortuous path for water drainage, the combination comprising a lamp casing having an outwardly extending flange, a sealing gasket positioned on said flange, said gasket having an elongated notch in its lowermost portion extending from the inner edge to a point adjacent the outer edge, a lens positioned on said gasket overlapping said notch so as to permit free drainage therethrough, a lamp door secured to said casing and positioned about said lens, said door having an opening in its lowermost portion adjacent the notch in said gasket, and a light bulb positioned within said casing.

5. In a lamp having an elongated and tortuous path for water drainage, the combination comprising a generally cup-shaped lamp casing having an outwardly extending flange formed on its open front face, a resilient sealing gasket positioned on said flange, said gasket having an elongated notch in its lowermost portion extending radially from the inner edge to a point adjacent the outer edge, a lens positioned on said gasket overlapping said notch, the peripheral edge of said lens being short of the outer end of said elongated notch, a lamp door secured to said flange and positioned about said lens, said door

having an opening in its lowermost portion adjacent the notch in said gasket, and a light bulb positioned within said casing.

6. In a vehicle lamp comprising a casing, a flange formed on said casing, a sealing gasket on said flange, a lens positioned on said gasket, and a lamp door about said lens, the invention residing in said gasket being provided with means in the lowermost portion thereof forming a tortuous passage interconnecting the interior of said casing and the space between said lens and said door, the peripheral edge of said lens overlapping said means and being contiguous therewith, and a drain opening in the lowermost portion of said door to enable water drainage from said lamp.

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