Dec. 28, 1926. 1,611,938

F. W. C. NEUNER

LAMP CONSTRUCTION

Filed Dec. 1, 1925

FIG. 1

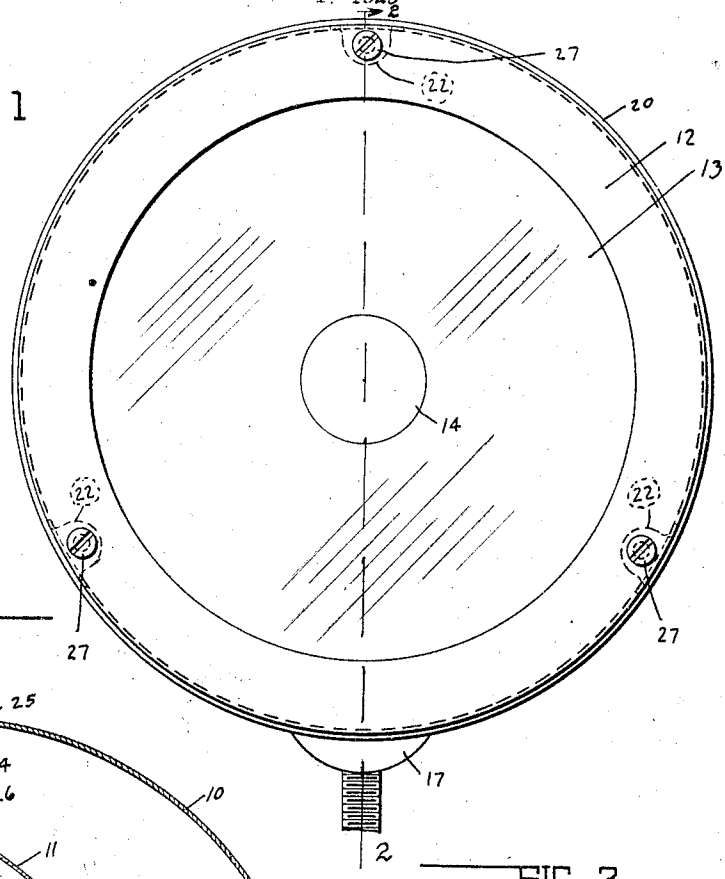


FIG. 2

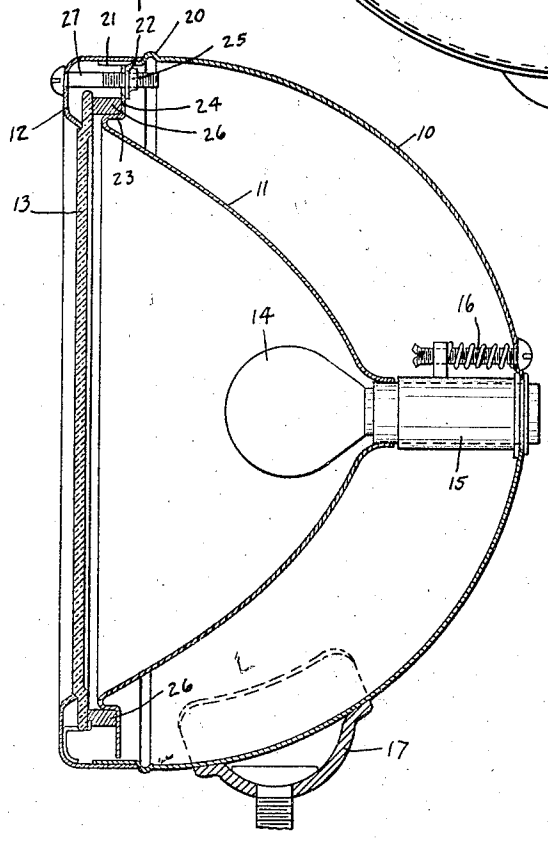
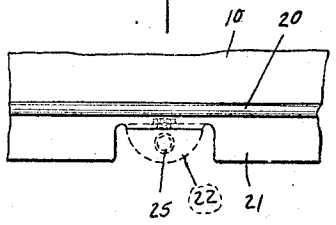


FIG. 3



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LAMP CONSTRUCTION.

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This invention relates to a lamp structure of the usual general character, and particularly that type of lamp commonly employed as an automobile headlight.

The principal feature of the invention resides in the door fastening means, wherein the metal forming the reflector flange, and the inturned lip of the casing flange provide a resilient seat for the lens and door rim for resiliently clamping the various parts together as will be hereinafter more fully set forth and described.

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

Fig. 1 is a front elevation of the lamp. Fig. 2 is a section taken on the line 2—2 of Fig. 1. Fig. 3 is a plan view taken on a portion of the casing before assembling, showing the inwardly turned ear formed therefrom in dotted lines.

In the drawings there is shown a lamp structure embodying a casing 10, a reflector 11, a door rim 12 and lens closure 13. The lamp is provided with the usual bulb 14, with a supporting sleeve 15 and focusing screw 16. It is supported by the member 17 rigidly connected to the casing.

The casing is stamped out with a peripheral bead 20 projecting outwardly from its surface a slight distance from the forward edge. This leaves a flange portion 21 adjacent the forward edge of the casing. The annular flange 21 is cut at three substantially equi-distant intervals so as to form a downwardly or inwardly projecting ear 22 bent inwardly from the flange 21. The reflector is provided about its peripheral edge with a rearwardly bent fold 23 terminating in an outwardly projecting flange 24 offset rearwardly therefrom. When the reflector is mounted in the casing, the flange 24 thereof is adapted to seat against the ears 22, said flange being formed with a plurality of openings registering with each of the ears 22 and with an internal screw threaded opening 25 formed therein.

In assembling the structure, the reflector is placed in position with respect to the casing so that the flange 24 thereof seats against the ears 22 within the flange 21 of the casing. A suitable cork packing ring 26 is then seated about the rolled edge 23 of the reflector and a lens 13 is mounted thereon. Said lens is engaged and clamped in place by the door rim 12 having an outer rim which fits snugly over the flange 21 of the casing so as to be supported thereby. The screws 27 are then inserted through suitable openings in the rim 12, passing through the corresponding openings formed in the flange 24 of the reflector so as to screw into the internally threaded openings or nuts 25 formed in the ears 22. As the screws are tightened, they cause the lens 13, the packing 26 and the reflector 11 to be rigidly clamped between the door rim 12 and the ears 22 of the casing. This will securely hold and clamp all the members together and make a seal between the lens and reflector through the medium of the packing rim 26.

Due to the resiliency of the reflector flange 24, as well as a slight resiliency in the ears 22, there will be a spring action or give when the screws are tightened, the flange 24 and ears being slightly contorted by the pressure exerted through the medium of said screws. This gives the same effect as the various types of springs heretofore employed in connection with such door closures, and assists in more effectively sealing the closure as well as resiliently supporting the various parts in position.

In this connection, it will be noted that the preferable arrangement is for the door rim 12 to extend inwardly adjacent the bead 20 but not be brought into engagement therewith. However, this is not essential since a greater contortion or spring action will be imparted to the ears 22 when the screws 27 are drawn up tightly with the rim engaging the bead, thus producing substantially the same effect as when there is no such engagement.

The invention claimed is:

1. In a lamp structure, the combination with a lens closure and a door rim, of a casing provided with a plurality of inwardly extending ears, a reflector mounted in said casing having outwardly extending spring metal portions adapted to seat against said ears, said spring metal portions seating against said ears at a substantial distance from the forward edge of said reflector, a packing member seated on said reflector and bearing against said portion in position to be engaged by said lens, and a plurality of screws extending through said rim and reflector portion so as to have a screw thread-

ed engagement with said ears for clamping said reflector intermediate said lens and casing and causing a resilient spring-like action therebetween.

2. In a lamp structure, the combination with a lens closure, and a door rim, of a casing provided with a peripheral bead spaced slightly from its outer edge, a plurality of inwardly extending spring-like ears bent inwardly from the peripheral edge thereof so as to extend at right angles thereto and leaving a flange portion extending forwardly therefrom, a reflector mounted in said casing formed with a rearwardly extending roll and a radially extending flange offset rearwardly of its peripheral edge by said roll, said flange being adapted to seat against said ears within the flange portion of the casing, said ears being each provided with an internally screw threaded opening, a packing member seated on said reflector in position to be engaged by said lens for providing a cushion seal therebetween, and a plurality of screws extending through said rim and reflector flange so as to have a screw threaded engagement with said ears for securing said parts together and causing a resilient spring-like action therebetween.

In witness whereof, I have hereunto affixed my signature.

FREDERICK W. C. NEUNER.