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1,528,382

W. MATTEOLI
HEADLIGHT CONSTRUCTION

Filed Dec. 5, 1921

FIG. 1

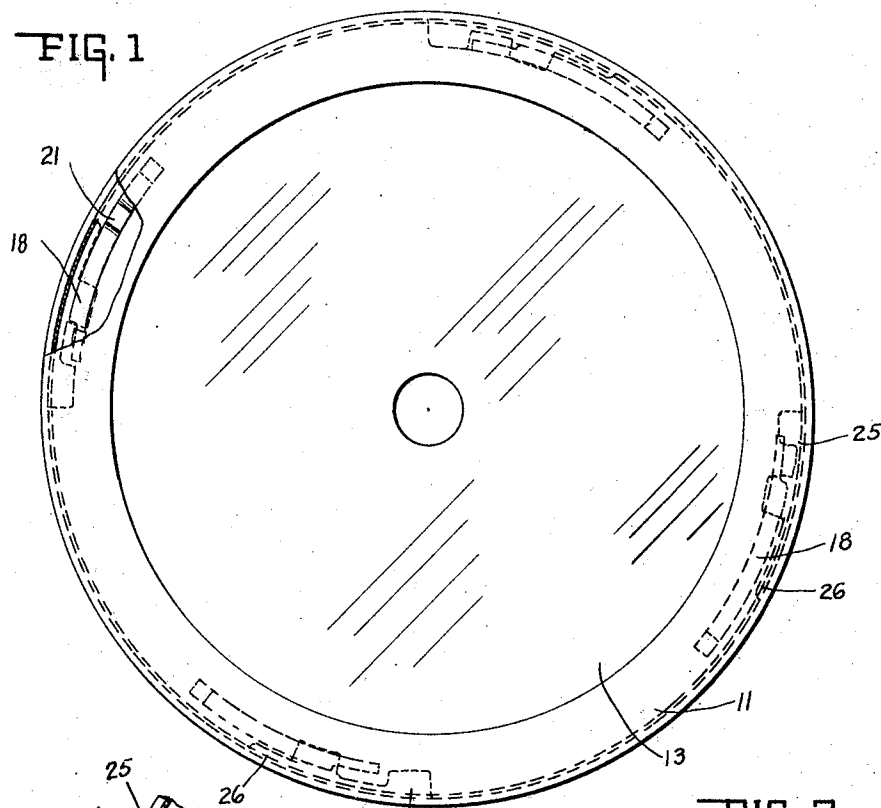


FIG. 2

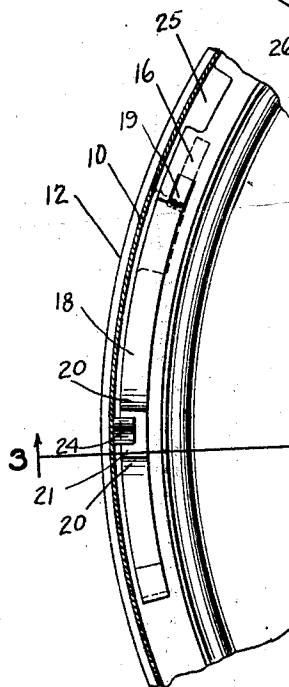


FIG. 4

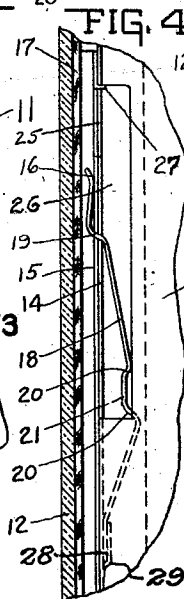
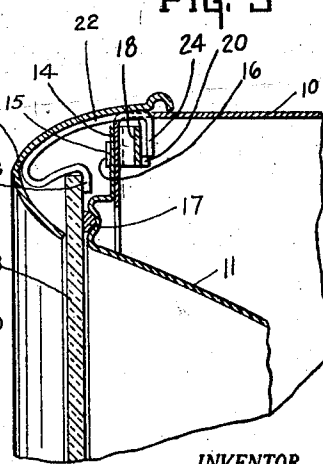


FIG. 3



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WILLIAM MATTEOLI, OF CONNERSVILLE, INDIANA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE THOS. J. CORCORAN LAMP CO., OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

HEADLIGHT CONSTRUCTION.

Application filed December 5, 1921. Serial No. 519,952.

To all whom it may concern:

Be it known that I, WILLIAM MATTEOLI, a citizen of the United States, and a resident of Connerville, county of Fayette, and State of Indiana, have invented a certain new and useful Headlight Construction; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

This invention relates to a lamp construction, and more particularly to the means for clamping the lamp door and reflector to the casing, whereby they will be maintained in position under spring tension and be readily removable therefrom.

The particular feature of the invention lies in a single spring construction for yieldingly securing the lamp door and reflector in position, and causing the lens to be clamped against the reflector or casing under spring tension in such a manner, that by a rotary movement, the spring will become disengaged and the lamp door and reflector may be removed.

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

In the drawings, Fig. 1 is a front elevation of a lamp with a portion thereof cut away to show one of the clamping springs mounted on the inside thereof. Fig. 2 is a section of the lamp showing a rear elevation with the back portion of the lamp removed for disclosing the clamping means. Fig. 3 is a section taken on the line 3—3 of Fig. 2. Fig. 4 is a side elevation of a portion of the lamp with the door rim removed.

In the drawings there is shown a lamp construction having a casing 10, reflector 11, door or lens rim 12 and lens 13. The casing 10 has an inwardly and radially extending flange 14 about its outer edge, and the reflector 11 is provided with a radially and outwardly extending flange 15, said flanges being arranged so as to be clamped together as hereinafter set forth. Between the flange 15 and the reflecting surface of said reflector, there is an outwardly projecting portion having a groove extending about the surface thereof to provide a seat for the cord 17 against which the lens 13 is pressed for sealing the reflector and pre-

venting dust and moisture from entering therein.

Secured on the inner surface of the flange 14, there is a spring clamping member 18 comprising a strip of spring metal having an end 16 reduced at 19 adapted to pass through a suitable opening in the flange 14 and extend therethrough to yieldingly engage and clamp the flange 15 of the reflector by the extended lip or end 16. The other end of said spring is secured by extending it through a suitable slot in said flange which forms a permanent seat therefor. The ends of said spring are, therefore, secured to said flange in such a manner as to cause the intermediate portion thereof to bow outwardly from said flange, as shown in Fig. 3. Said spring is formed with a saddle 21 comprising a comparatively small recessed portion included between adjacent shoulders 20 for forming a locking seat.

Rigidly secured upon the door or lens rim 12, there is a projecting member 22 having one end 23 thereof bent so as to loosely hold the lens 13 in position while the door is being mounted or dismounted, and the other end 24 being arranged to extend radially and inwardly from said rim so as to engage the spring 18 and slip into the saddle 21 for removably locking said door rim in position on said casing. In mounting the door rim and reflector upon the casing, the reflector is placed in position so that the flanges 14 and 15 lie adjacent each other, the reflector is then turned so as to cause the projecting lip 16 to extend through an opening therein and yieldingly engage said flange, thereby clamping it in fixed position under spring tension. The lens 13 is placed in said rim so as to be maintained therein by the ends 23 of the member 22. The rim is then mounted about the outer edge of the casing and rotated thereabout until the inwardly extending end 24 of the member 22 passes through a slot 25 in the periphery of the casing, engaging the upper surface of the spring 18, away from the door rim, and sliding thereover, causing it to be pressed downwardly against the spring tension thereof until said end falls into the saddle 21 between the adjacent shoulders. Further movement of said member 22 is then arrested by the end of the slot 26 being reached and its abutment against one of said

shoulders. The other shoulder maintains said member in the saddle so as to prevent it being rotated toward the opening 25. While said member is held in the saddle 21, the spring 18 is exerting a constant tension thereon which yieldingly draws the door rim against the front surface of the casing, pressing the lens against the cord 17 and reflector 11. Such tension on the bowed position of said spring causes the lip 16 to clamp the reflector securely against the flange 14. For removing said rim, it may be rotated in the opposite direction sufficiently to overcome the spring tension and cause said member to leave the saddle and move it to the opening 25 through which it may pass, and the reflector may then be slipped from under the lips 16.

For eliminating any possibility of the reflector rotating within the casing, there is provided a lip 27 on the reflector flange 15 arranged to extend inwardly into the opening 25 and abut the edge thereof, as shown in Fig. 4, thereby always assuring the proper positioning thereof.

By means of this construction both the reflector and door rim may be mounted on the casing and turned to locking position and releasably held in such position by the spring mounted within the casing, rather than on the outside or on the door rim.

The opposite end of the spring 18 from the lip 16 is provided with a locking tongue 28 arranged to be inserted in a pocket 29 stamped in the flange 14. This permits the spring to be readily inserted in place and held against movement at that end by pressure exerted thereby.

Upon mounting the door rim, it is turned clockwise, which causes the engaging end 24 of the member 22 to pass over said spring toward the fixed end thereof. This movement causes the spring tension to increase as the door rim is turned, and forces the

lip 16 against the reflector flange with increased pressure about the fulcrum point 19.

The invention claimed is:

1. A lamp construction comprising a casing, having an inwardly extending flange, a reflector mounted within said casing having an outwardly extending flange adjacent thereto, a closure for said casing, a spring member secured at one end to said casing flange and having its other end extending therethrough, the intermediate portion of said spring being bowed inwardly from said casing flange, whereby said free end extending therethrough will engage and yieldingly clamp said reflector within said casing, and means on said closure extending into said casing to engage said spring member for yieldingly locking said closure to said casing.

2. A lamp construction comprising an open ended casing having an inturned substantially annular flange surrounding the open end, a reflector mounted within the casing and having an outturned annular flange resting on the inturned flange of the casing, a closure for the casing, and means for securing the casing, reflector and closure together in closed position relatively to one another, said means consisting of a spring held at its ends upon the flange of the casing with the width of the spring extending transversely to the axis of the casing, the spring having lengthwise curvature concentric with the casing and adapted to be flexed between its ends, one end of said spring being adapted to retain the reflector in position relatively to the casing, the portion of said spring between its ends being adapted to retain the closure in position relatively to the casing and reflector.

In witness whereof, I have hereunto affixed my signature.

WILLIAM MATTEOLI.