Oct. 1, 1929. G. H. COULTER 1,729,610

BULB ADJUSTER

Filed May 18, 1925

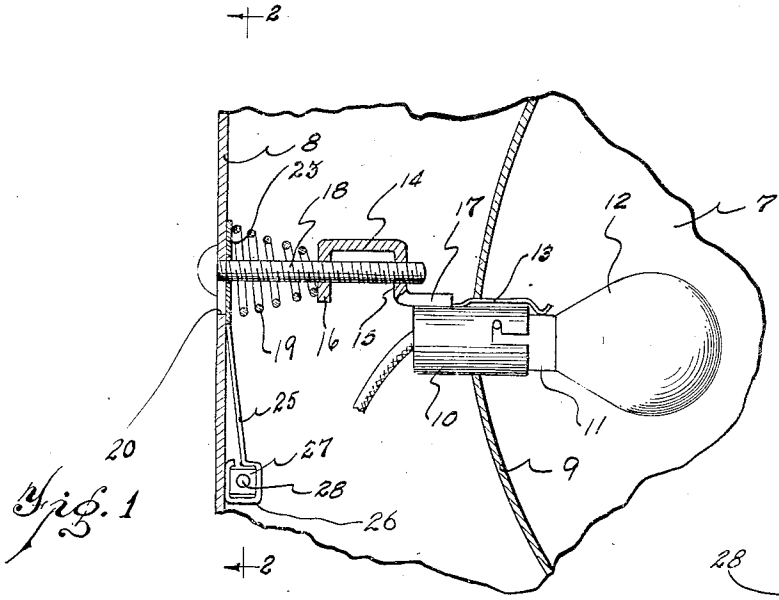


Fig. 1

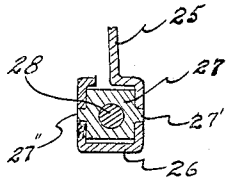


Fig. 3

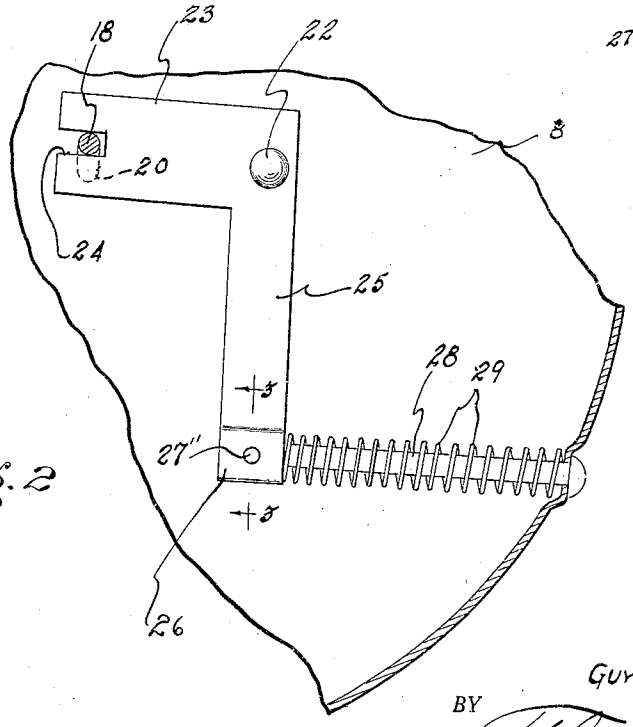


Fig. 2

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UNITED STATES PATENT OFFICE

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BULB ADJUSTER

Application filed May 18, 1925. Serial No. 31,236.

My invention relates to a new and useful improvement in a bulb adjuster and has for its object, the provision of a rockable member for effecting vertical adjustment of the bulb relatively to the reflector of the headlight with which used. In properly focusing the bulb relatively to the reflector, it is necessary that there be effected a longitudinal movement of the bulb relatively to the reflector, in order to properly position the bulb and the reflector in the desired relation. It is also desirable to adjust the bulb vertically relatively to the reflector. In the present invention, there is provided a means for axially adjusting the bulb and a rockable member for vertically adjusting the bulb. In a co-pending application of even date herewith, I have shown a rockable means for vertically adjusting the bulb in which the supporting means of the bulb, which are also used for axially adjusting the bulb, are not disturbed. In the present invention, the vertical adjustment is effected by a rocking member, but the axial adjustment means are moved bodily. The present arrangement is a simple one and adapted for use on various lamps in which a more expensive or complicated structure might not be desirable.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood from a reference to the accompanying drawings, which form a part of this specification and in which,

Fig. 1 is a side elevational view of the invention applied to a headlight, shown in fragment and in section,

Fig. 2 is a sectional view taken substantially on line 2—2 of Fig. 1,

Fig. 3 is a sectional view taken substantially on line 3—3 of Fig. 2.

As shown in the drawings, the invention is adapted for use with a headlight 7, having a rear wall 8, and provided with a reflector 9 having a centrally arranged opening formed therein, through which is projected the socket 10, adapted for the reception of the neck 11 of the light bulb 12. Mounted on the socket 10, is a resilient strap 13, which is adapted to project through the reflector 9 and to prevent undue vibrating or rocking of the socket 10 relatively to the reflector 9. A U-shaped supporting member having a bight 14 provided with legs 15 and 16 is used, the leg 15 having an angularly turned terminal portion 17, which is welded, soldered or otherwise suitably secured to the socket 10. The legs 15 and 16 are each provided with a threaded opening in which threads a screw 18, which is projected through the rear wall 8 of the headlight shell. Positioned upon the screw 18 in embracing relation, so as to engage, at one end, the leg 16 and at its other end, the inner surface of the wall 8, is a coiled spring 19. As shown in Fig. 1 and Fig. 2, the rear wall 8 is provided with a vertically extending slot 20, through which the screw 18 is projected. Pivotally mounted on the rear wall 8, by means of a rivet, or bolt, 22 is an L shaped member, the base 23 thereof being provided with a longitudinally extending slot 24 at the extremity thereof, in which is adapted to engage the screw 18. The leg 25 of this L-shaped member is doubled upon itself at its end, to provide a substantially O-shaped portion 26, in which is positioned a square nut 27, having trunnions 27′ and 27″ projecting from opposite sides thereof, and engaging in openings formed in the side wall of the O-shaped portion 26. Threaded into the nut 27, is a screw 28, which is projected through the side wall of the headlight shell, a coiled spring 29 being positioned on the screw 28 in embracing relation and adapted to engage, at one end, the side wall of the headlight shell, and at the opposite end, the nut 27 or the O-shaped portion 26, the spring 29 serving to prevent rattling or undue vibration of the parts. The spring 19 serves a like function.

In order to effect axial adjustment of the bulb 12, the screw 18 is turned thus serving to move the socket 10 longitudinally, so as to move the bulb 12 toward or away from the reflector 9. In order to effect a vertical adjustment of the bulb 12, the screw 28 may be threaded, which will cause a rocking of the L-shaped member on its pivot 22, so as

to move the screw 18 bodily vertically, to cause a tilting of the socket 10 in its position of mounting in the reflector 9.

The construction is a simple and durable one, efficient for its purposes and provided with a minimum number of parts. It is also apparent that the operation of the device is simple, the screws 28 and 18 being arranged, so as to thread into the legs 15 and 16, or the nut 27, as the case may be, to effect the desired adjustment.

While I have illustrated and described the preferred form of structure, I do not wish to limit myself to the precise form of structure shown, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. A light bulb adjusting mechanism comprising means for effecting axial adjustment of said bulb; an L-shaped member pivotally mounted and having a slot formed in one end, said slot being adapted for receiving a portion of said axial adjustment means, said L-shaped member being adapted upon pivotal movement for effecting a vertical adjustment of said bulb.

2. A light bulb adjusting mechanism adapted for use with a headlight having a casing, reflector, and a light bulb supporting member mounted therein, comprising: an L-shaped member rockingly mounted on said headlight, one end of said L-shaped member having a longitudinally extending recess formed therein and the opposite end being doubled upon itself to provide an eyelet, said eyelet having aligning openings formed therein; a nut; a pair of trunnions, each projecting from opposite sides of said nut and swingably mounted in said openings, said nut being positioned within said eyelet; means for moving said bulb supporting means axially, said means engaging in said longitudinally extending recess; a threaded member threaded into said nut and projecting exteriorly of said headlight casing, the threading of said threaded means effecting a vertical movement of said axial adjusting means and the rocking of said L-shaped member.

3. In a headlight, a casing; a reflector within said casing; a socket movably mounted in an aperture in said reflector; means to adjust said socket axially of said reflector, said means being maintained against angular displacement with respect to the socket; and means to adjust said socket in a plane through the axis thereof, said means comprising an arm pivotally mounted on the wall of said casing and engaging said axial adjusting means.

In testimony whereof, I have signed the foregoing specification.

GUY H. COULTER.