Oct. 27, 1964 R. V. GUTH 3,154,253

COUNTER-BALANCED LIGHT SHIELD AND REFLECTOR FOR EXTENSION LIGHTS

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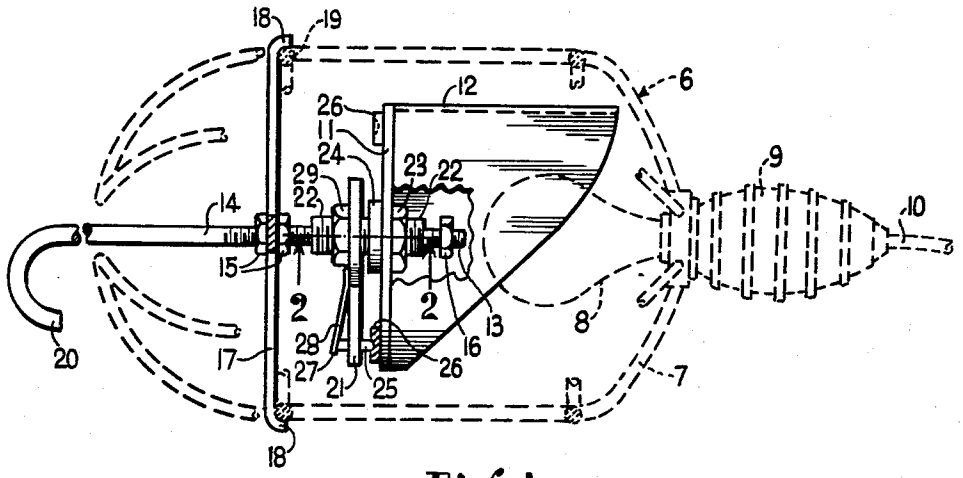


Fig. 1

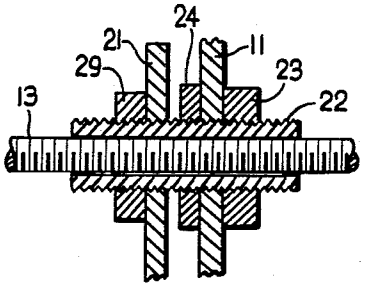


Fig. 2

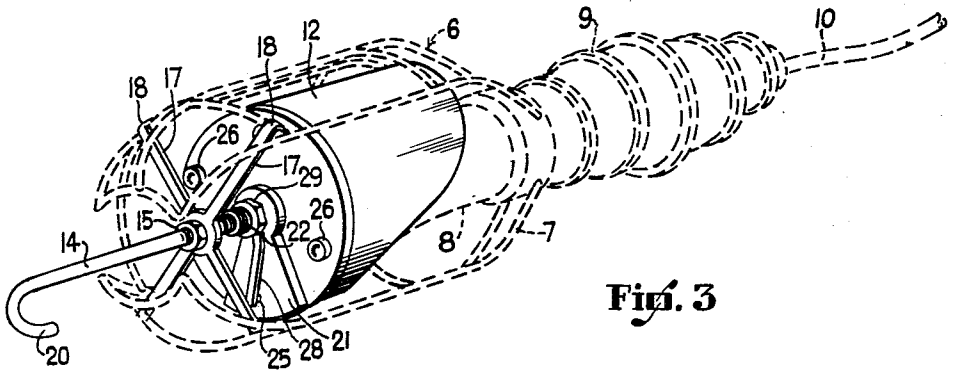


Fig. 3

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COUNTER-BALANCED LIGHT SHIELD AND REFLECTOR FOR EXTENSION LIGHTS

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1 Claim. (Cl. 240—54)

This invention relates to electric lights and more particularly to that kind of an electric light known as an "Extension Light" which is generally used the most in garages, factories and the basements of private homes and can of course be used any place one desires to extend their range of vision by artificial light.

The one big difficulty most people have with extension lights is keeping the glare from one's eyes while they work. The usual remedy for this effect of extension lights is the insertion of a piece of tin or cardboard under the frame of the light and over its electric bulb. This temporary cure for glare is both time consuming to set up and seldom, if ever, completely satisfactory. This is particularly true if one has to move the light about while they work.

It is therefore an object of this invention to provide a counter-balanced light shield and reflector for extension lights that will automatically adjust itself and keep the light from one's eyes no matter in what position the extension light is placed or how often it is moved.

Another object of this invention is to provide a counterbalanced light shield and reflector for extension lights that will not only shield the light from one's eyes but also reflect the same to the desired place of vision with but a minimum loss of light.

Another object of this invention is to provide a counterbalanced light shield and reflector for extension lights that can readily be adapted to any existing light guard of the wire cage type.

Another object of this invention is to provide a counterbalanced light shield and reflector for extension lights that can be used with any size of electric bulb.

Another object of this invention is to provide a counterbalanced light shield and reflector for extension lights that is fully automatic in operation.

Still another object of this invention is to provide a counter-balanced light shield and reflector for extension lights that can readily be manufactured by any manufacturer of extension lights with little, if any, additional increase in machinery and personnel.

Other and further objects and advantages of this counterbalanced light shield and reflector for extension lights will be hereinafter described, and the novel features thereof defined in the appended claim.

Referring to the drawing:

FIGURE 1 is a side view of a typical extension light with this invention secured to the same. The extension light is shown in phantom lines.

FIGURE 2 is a sectional view of this invention taken substantially along line 2—2 of FIGURE 1 as viewed in the direction indicated by the arrows.

FIGURE 3 is a pictorial view of a typical extension light with this invention secured to the same and ready for use. The extension light is shown in phantom lines.

Similar reference characters refer to similar parts throughout the several views of the drawing.

Having reference now to the drawing in detail, there is generally indicated by the character 6 a typical extension light comprising a guard 7 in the form of a rigid wire cage encircling a light bulb 8 which is screwed into a socket in the front end of the insulated handle 9 from the rear end of which extends the electric cord 10. A metal disk 11 having a shade 12 is adjustably secured to one end 13 of the shaft 14 as will be hereinafter described. The aforesaid end 13 of the shaft 14 is threaded for the reception of the holding nuts 15 and lock nuts 16 as clearly shown in FIGURE 1 of the appended drawing. The aforesaid shaft 14 is horizontally placed within the aforesaid guard 7 where it passes through a centrally located opening in the spider type of bracket 17 which has its outer ends 18 terminating in a hook that encompasses in part one of the rigid wire rings 19 of the aforesaid guard 7. The securement of the aforesaid shaft 14 to the aforesaid spider type of bracket 17 is of course by the already mentioned nuts 15, there being one nut on each side of the spider type of bracket 17 as best shown in FIGURE 1 of the appended drawing. The shaft 14 has its outer end terminating in a hook 20 by which the aforesaid extension light is hung on any desirable projection or the like while the light is being used in the normal manner.

A metal counterweight 21, which I personally call a counter-balance and which has the basic configuration of a circular sector, is provided with an opening through which is placed an externally threaded bushing 22 which also passes horizontally through the center of the aforesaid metal disk 11 to which it is secured by the holding nut 23 pressing the aforesaid metal disk 11 back up against the boss 24. The aforesaid counter-balance 21 is provided with a lock pin 25 passing horizontally through its lower extremity and having one end terminate in a concaved recess in any one of the flat washers 26 which are secured in radial and equal spaced relation to each other around the periphery of the aforesaid metal disk 11 as best shown in FIGURE 3 of the appended drawing. The other end of the aforesaid lock pin 25 rests against the outer end 27 of the flat spring 28 which has its other end firmly secured to the aforesaid counter-balance 21 as clearly shown in FIGURE 1 of the appended drawing where it is also seen that the counter-balance is held horizontally in place on the bushing 22 by means of the nut 29.

It is obvious from the above described construction of this novel counter-balanced light shield and reflector for extension lights that the light shield will automatically be held at whatever angle this device is set by reason of the counter-balance 21. The angle is of course controlled by the setting of the lock pin 24 in concaved recess in whichever one of the flat washers 26 on the metal disk 11 that one may desire.

From the foregoing it will now be seen that there is herein provided a counter-balanced light shield and reflector for extension lights which accomplishes all of the objects of this invention, and others, including many advantages of great practical utility and commercial importance.

As many embodiments may be made of this inventive concept, and as many modifications may be made in the embodiment hereinbefore shown and described, it will be understood that all matters herein are to be interpreted merely as illustrative, and not in a limiting sense.

In accordance with the provisions of the United States patent statutes, as stated in the United States Code, Title 35, Patents, I have now described the principle of construction and operation of my invention of a counterbalanced light shield and reflector for extension lights in the form which I personally consider the best embodiment thereof, and what I now claim as my invention and desire to secure by Letters Patent is:

An invention of the character described, comprising a one piece light shade and reflector having one end secured to the periphery of a vertically disposed metal disk through the center of which is located an externally threaded bushing slidably fitted on a horizontally disposed

shaft having one end threaded for the reception of a plurality of nuts, and the other end terminating in a hook outside the rigid wire guard in which the said light shade and reflector is placed, and secured by means of a spider type of brace through the center of which passes the said bushing and said shaft and a plurality of nuts securing the said disk and said bushing to the said spider type of brace and a counter balance having the basic configuration of a sector being rotatably mounted on the said bushing and forward of the said metal disk, which is provided with a plurality of flat washers on the forward flat surface thereof, and in equal radial spaced relation to one another, around the periphery of the said surface and each of the said flat washers having a concaved recess therein for the reception of one end of a normally horizontally disposed lock pin slidably

projecting through the lower extremity of the said counter balance, and extending beyond the forward surface of the said counter balance and terminating against the lower end of a flat spring, that is rectangular in plan form, the said flat spring having its upper end firmly secured to the said counter balance thereby providing a counter balanced light shield and reflector for extension lights.

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