United States Patent

[11] 3,592,430

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[73] Assignee **Sylvania Electric Products Inc.**

[54] **STRAP SWIVEL MOUNT**
2 Claims, 2 Drawing Figs.

[52] **U.S. Cl.** **248/289,** 240/8.2
[51] **Int. Cl.** **B60q 1/00**
[50] **Field of Search** 248/286, 291, 284, 282, 289, 487, 485, 479, 316, 313; 240/8.1, 8.2, 8.3

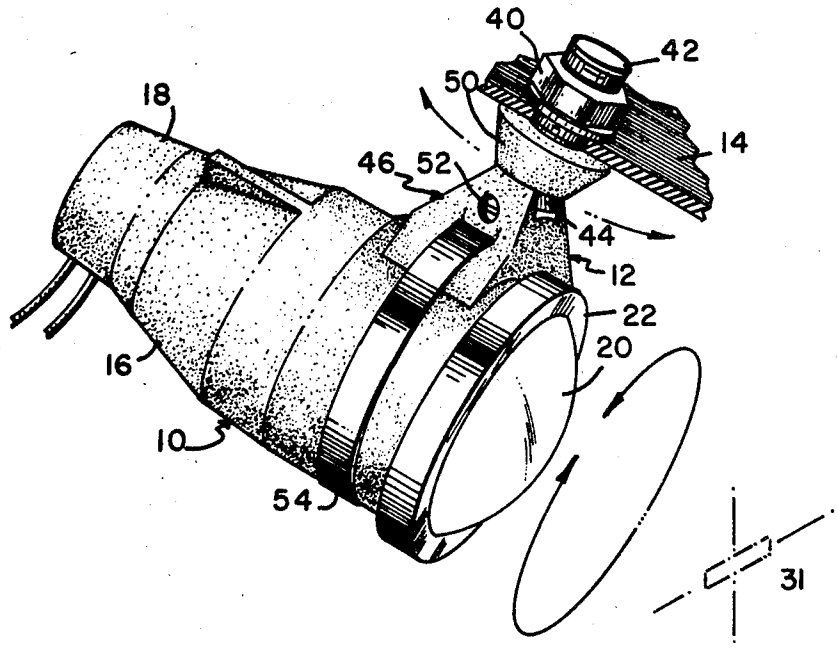
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Primary Examiner—J. Franklin Foss
Attorneys—Norman J. O'Malley and Laurence Burns

ABSTRACT: The invention involves an adjustable mounting arrangement for an automotive accessory driving light having a cylindrical shape. The mounting can be disposed on most any irregular surfaces and thereafter the light can be adjusted to produce a light pattern that conforms with acceptable safety light spreads.



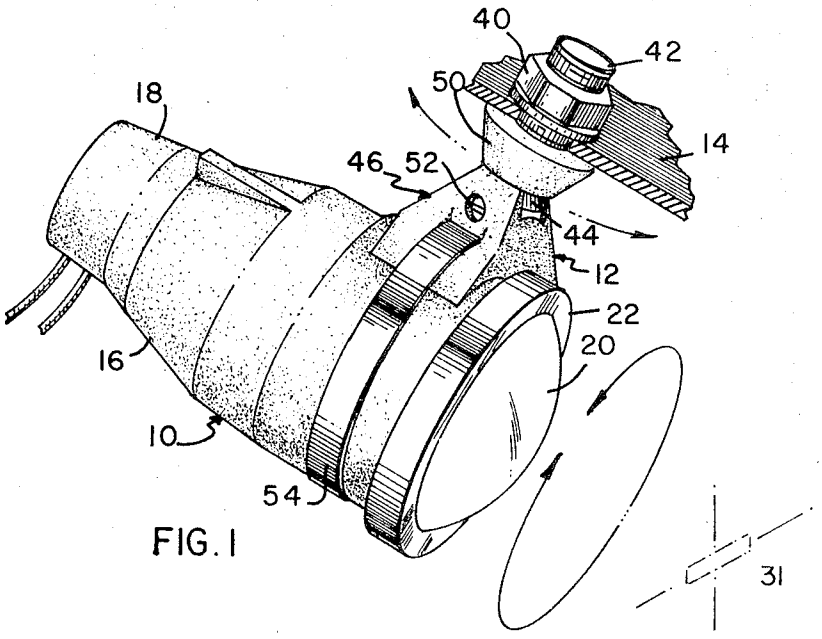


FIG. 1

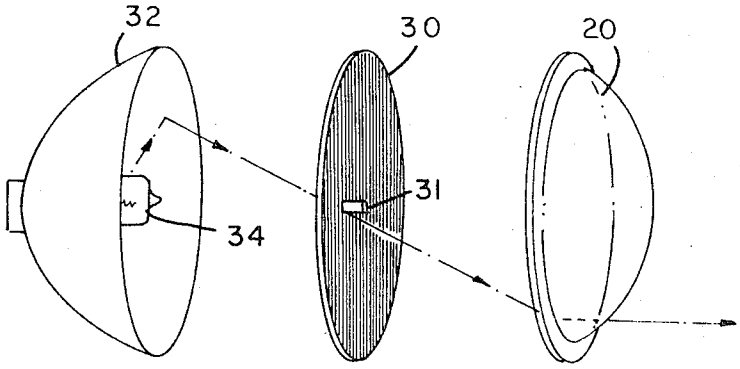


FIG. 2

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STRAP SWIVEL MOUNT

FIELD OF THE INVENTION

This invention relates, in general, to a mounting for a driving light and more particularly to an adjustable mounting for cylindrical automotive lighting fixtures. Accessory driving lights such as fog and driving lights are utilized as supplemental lighting to the standard headlamps and may be attached on various locations of the vehicle.

DESCRIPTION OF THE PRIOR ART

In automotive accessory lighting, various mounting methods were used to properly fix a cylindrical body upon an irregular surface. In most cases, a metal strap was permanently attached to the cylindrical body by screws or rivets. The ends of the strap ere secured to an adjustable ball and socket arrangement to provide limited axial adjustment to the body of the fixture. With this type of mounting the cylindrical fixture could not be rotationally adjusted. With the use of Rivets or screws which were used for the attachment tended to allow water to enter the fixture and caused early lamp failure.

SUMMARY OF THE INVENTION

In our invention, we have designed a mounting arrangement for a driving light having a cylindrical body that allows unlimited adjustment, even after it has been secured in place. The importance of this feature can be appreciated when the most recent development in automotive lighting is considered, that is, a driving light having a controlled rectangular light beam spread. A fixture which provides this type is disclosed in a copending application, Ser. No. 758,328 of Hough et al. and assigned to the same assignee as the present application. In this advanced type of driving light, a rectangular gated aperture is utilized to produce a penetrating controlled light pattern for highway driving. The apertured gate is horizontally fixed at a predetermined distance between a lamp and a housing lens, and is so designed that a powerful, but controlled, rectangular light pattern is established on the roadway. Therefore it is important that the slit or aperture must be positioned horizontal to the road, with a sharp light cutoff directed to the oncoming vehicles. In a cylindrical fixture such as employed by the driving light of this design, the light pattern can be adjusted after the fixture body is secured to the vehicle. Most driving lights are initially installed in the grille or on the front of newer model automobiles. The present fixture however can even be installed on older vehicles as supplemental lighting. For this purpose, where the driving light is mounted on outside of a vehicle on an irregular surface, an adjustable mounting device that we now disclose can be utilized. The driving light is supported from a swivel mount which is axially adjustable by a flexible strap that can be expanded to free the fixture body for rotational adjustment and then tightened to permanently fix the fixture in one place.

DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective view of a driving light fixture showing its attachment to a surface of an automotive vehicle.

FIG. 2 is a schematic view of the main components of the driving light.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1 of the drawings, a driving light **10** is shown attached by way of an adjustable mounting **12** to a surface **14**. Principally the driving light comprises a main body casting **16**, the rear end of which is provided with a weathertight, pliable boot **18** that can be easily removed to replace a lamp if it fails. A lens **20** is securely attached by a bezel ring **22** to the front end of the fixture. Normally a driving light of the type can be permanently attached within a suitable frame in the grille adjacent the standard driving lights of a vehicle.

However, our invention relates to an adjustable mechanism for this type of d riving light. As mentioned previously, a fixture of this type comprises a gated aperture to produce a controlled light beam on the road surface. As seen in FIG. 2 the internal components of the driving light are shown where a gated apertured disc **30** having a rectangular slit **31** is positioned between the lens **20** and an elliptical type reflector **32**.

A lamp **34** is optically located within the reflector **32**. The spatial distance ratio between the lamp reflector **34**, **32** the apertured disc **30** and the lens **20** is such that a rectangular light pattern with sharply defined edges is established.

Basically the adjustment required for this type of fixture depends on the position of the rectangular aperture disc **30** disposed within the fixture. As seen in FIG. **1**, a rectangular image **31** is shown in phantom to depict the desired orientation of the light pattern.

The adjustable mounting **12** comprises a mounting standard **46**, shaped like a pyramid. The base of the standard **46** is concentric with the outside of the fixture body **10**. The standard **46** houses the ends of an expandable strap **54** that can be adjusted in an open or closed position by a set screw **52**. At the top end of the standard **46**, a bolt **42** having a radially shaped inverted head **44** is held captive in an elongated slot. A conically shaped spacer **50** is positioned on the bolt **42**, adjacent to the top end of the standard **46**. The end of bolt **42** is provided with a nut **40** that secures the entire adjustable mounting to a surface **14**.

To install the driving light the bolt **40** is first fitted through an appropriate hole provided in the vehicle body **14**. This hole can be placed on almost any surface of the vehicle, irregular or flat. The bolt **42** is then fitted in the hole and loosely secured by nut **40**. At this point of assembly, the fixture **10** is then loosely secured in strap **54** and the lamp can be lit to allow visual alignment of the light beam. Adjustment can be made in the various arrow directions shown i FIG. **1**. Thereafter bolt **40** and screw **52** are securely tightened. Further adjustment to the fixture can be made by loosing either the bolt **40** or the screw **52** depending on the type of adjustment needed.

We claim:

1. An adjustable mounting bracket for use with a gated cylindrical lighting fixture comprising:

a pyramid-shaped mounting standard;

adjustment means disposed within said mounting standard;

a strap extending from said adjustment means and adapted to encircle said fixture, the ends of said strap being disposed within said standard;

locking means for said adjustment means located on said pyramid-shaped mounting standard.

2. An adjustable mounting bracket according to claim **1** wherein said locking means is a locking screw adapted to lock said adjustment means of the said fixture.

UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,592,430 Dated JULY 13, 1971

Inventor(s) PETER M. COOMBS GEORGE D. LAWSON

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

[72] In the Title:

Change: Peter M. Coombs;
(N.H. Newton;) George D. Lawson, all of Georgetown, Mass.

To: Peter M. Coombs,
(-Newton, N.H.-)
George D. Lawson, Georgetown, Mass.

Signed and sealed this 11th day of January 1972.

(SEAL)
Attest:

EDWARD M.FLETCHER,JR.
Attesting Officer

ROBERT GOTTSCHALK
Acting Commissioner of Patents

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