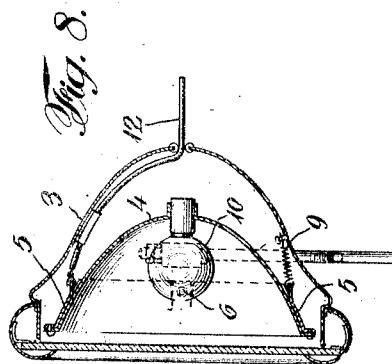
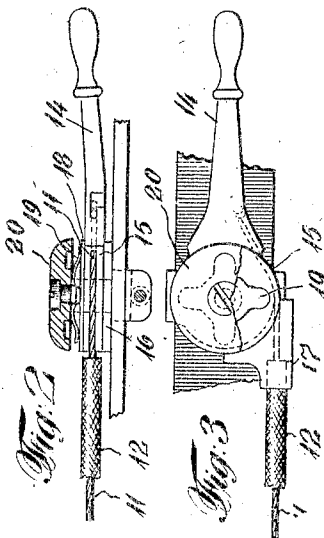
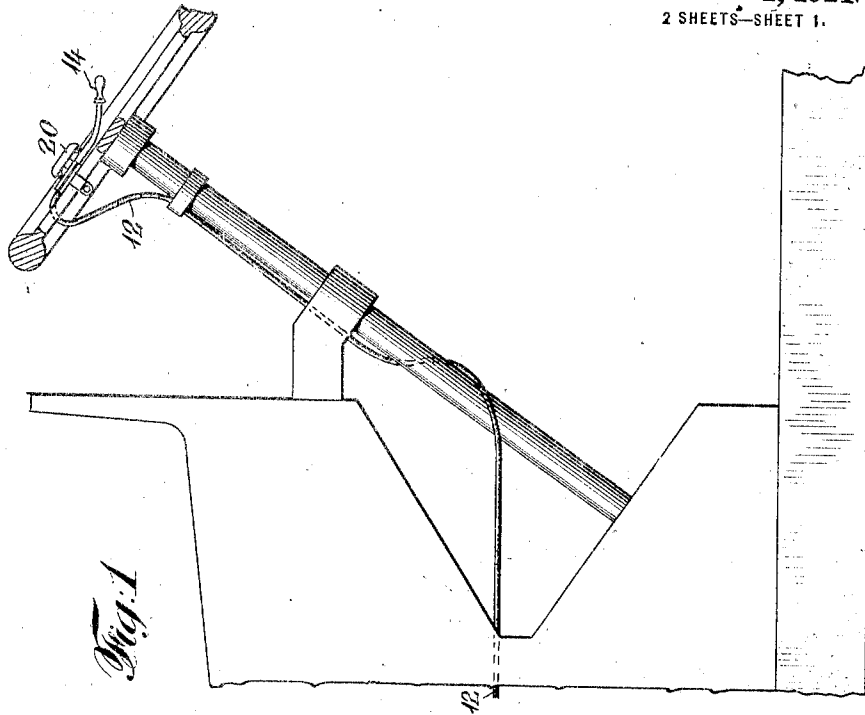


W. M. HORTON.
 AUTOMOBILE HEADLIGHT.
 APPLICATION FILED NOV. 21, 1916.

1,367,318.

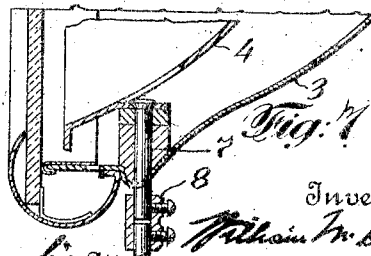
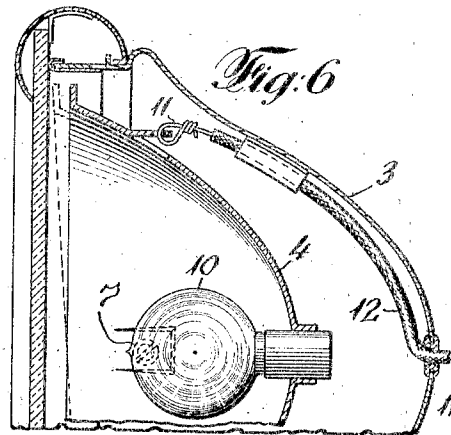
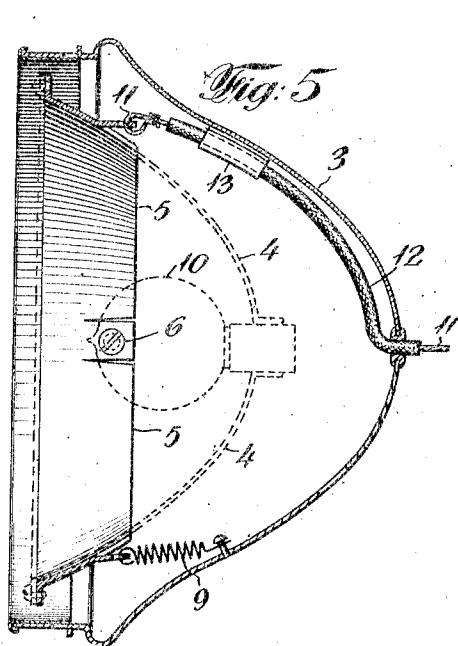
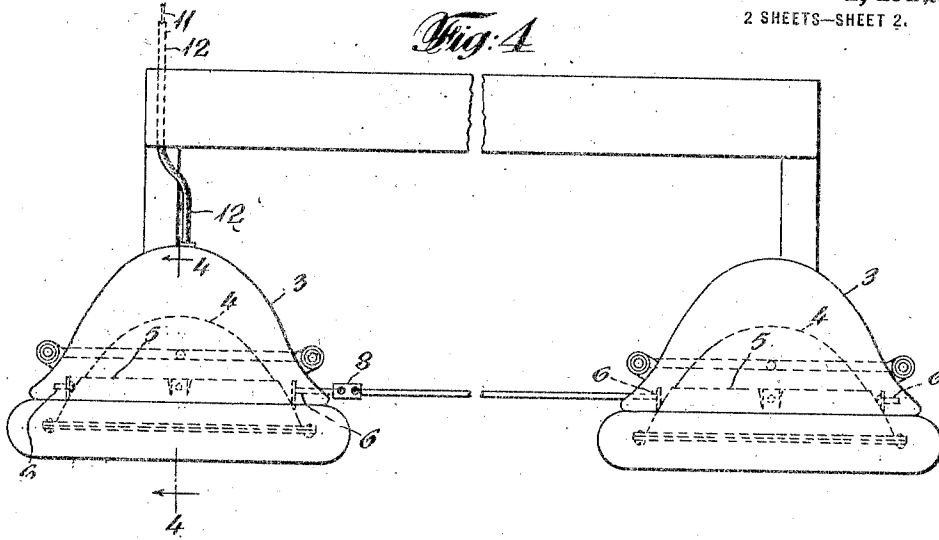
Patented Feb. 1, 1921.
 2 SHEETS—SHEET 1.



Inventor
 William M. Horton
 By his Attorney
 J. C. [Signature]

1,367,318.

Patented Feb. 1, 1921.
 2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

WILLIAM M. HORTON, OF CLEVELAND, OHIO, ASSIGNOR TO THE ADAMS-BAGWELL
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AUTOMOBILE-HEADLIGHT.

1,367,318.

Specification of Letters Patent.

Patented Feb. 1, 1921.

Application filed November 2, 1916. Serial No. 129,959.

To all whom it may concern:

Be it known that I, WILLIAM M. HORTON, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Automobile-Headlights, of which the following is a specification.

This invention relates to headlights, more particularly however, to that class of headlight adapted for use on motor vehicles, such for instance as automobiles, the object of the invention being to provide a very simple and efficient headlight, inexpensive to manufacture and in the use of which the reflector may be readily and quickly tilted into various angular positions by a very simple operating means, whereby the reflector can be shifted to throw the light upwardly or downwardly or in a horizontal position, as occasion requires.

As is well known, the average headlight now in use is dangerous by reason of the glare thereof, and various devices have been used with more or less success for the purpose of preventing this glare.

The object of the present invention however, is to utilize the ordinary reflector itself of the headlight, to do away with the glare and thus obviate the necessity of using independent devices, such as deflectors and shades and masks, etc., and to do this by providing a very simple means for supporting and shifting the reflector.

In the drawings accompanying and forming part of this specification, Figure 1 is a side view of a portion of a motor vehicle, the hood of which is shown broken away; Figs. 2 and 3 illustrate sectional and top views of the lever operating means herein-after referred to; Fig. 4 is a top view illustrating the present improvement applied to a pair of headlights; Fig. 5 is an enlarged vertical sectional view taken in line 5-5 of Fig. 4; Fig. 6 is also a vertical sectional view of a portion of a headlight illustrating the present improvement, this view however, showing the operating means attached directly to the reflector; Fig. 7 is a horizontal section of a portion of the improved headlight shown in Fig. 6, and Fig. 8 is a vertical cross-sectional view of one of the improved headlights.

Similar characters of reference indicate corresponding parts in the several figures of the drawings.

In the preferred form thereof herein shown and described, the lamp comprising the casing 3 and the parabolically formed reflector 4 having the usual bulb 10 supported therein and movable therewith, has this reflector supported for shiftable or tilting movement. In one form the means for supporting the reflector consists of an annular member or ring 5, pivotally connected to the sides of the lamp casing as at 6, and to this annular member, the reflector 4 is fastened by means of screws, whereby the reflector and annular member may be tilted as one member. In another form thereof, shown in Figs. 6 and 7, the reflector 4 is itself provided with the pivots 7, thus obviating the use of the annular member. In either form, the annular member or the reflector has one of its pivots,—the one nearest to the companion lamp when two thereof are used,—secured to a sleeve 8, and from such companion lamp a similar pivot rod of greater length extends into and is clamped by the same sleeve, whereby the reflectors of both lamps may move in unison. Secured to the annular member or to the reflector at one point thereof (preferably the bottom) is one end of a coiled spring 9, the opposite end being secured to the casing, and this assists the return of the reflector to, and the holding of it in, its tilted position to prevent the glare of the light, and in practice the reflectors of both lamps, when two thereof are used, may be provided, each with a coiled spring. In practice it has been found that the spring may be dispensed with, although it is of assistance in operating the reflectors in the manner described. In place of the coiled spring, a flat spring could be used if preferred. For tilting the reflectors, a flexible cable in the form of a wire cable 11, connected to one of the reflectors or to the annular member, preferably to the top thereof, this cable leading out through the back of the casing at any desired place, and to any desired point within the vehicle, usually to the spider of the steering wheel. This cable is shown inclosed within a suitable flexible casing or wrapping 12, in such manner that the wire is shiftable or movable

lengthwise within its casing. The casing itself is at suitable points along its length, both within the lamp casing and along the chassis or within the hood of the automobile wherever it is desired to locate it, maintained against movement by securing it in any desired way, by means of clamps or sleeves 13, or any other desired fastening means. To the end of the wire cable is secured suitable means for manipulating,—in other words for sliding,—it relatively to its casing. In the present improvement this means consists of a lever 14 having a grooved hub 15 pivotally connected in the form shown, to a base plate 16, which is provided with a suitable guide 17 for the wire, and to which guide one end of the wire casing 12 is secured, while the wire 11 passes through the guide and is attached to the hub for movement therewith. This base plate 16 may be secured at any desired point within the vehicle, but is shown secured to the spider of the steering wheel. On top of the hub is located a flat washer 18 and a spring washer held in place by a cap 20, whereby the lever is maintained in any of its shifted positions. When the lever is shifted the wire will be shifted relatively to the casing, thereby to shift and hold the tilting reflector in any desired position.

By means of the flexible cable it will be observed that it can be arranged in any desired position as, for instance, coiled around the steering column, while at the same time the use of universal joints and other flexible connections are entirely avoided, thus pro-

viding a very simple and inexpensive operating means for the reflector.

Of course it will be understood that the various details may be more or less modified without departing from the scope or spirit of the present improvement.

It will be observed that in the present improvement the two reflectors are connected by a two-part rod, each part of which in the present form of the improvement constitutes one pivot of a reflector, and this rod is located near the front of the reflector, and by means of this connecting rod one reflector is operated from or through the other, to which latter the flexible cable is directly connected as shown herein at a point substantially midway between the pivotal connections of the reflector with the casing.

I claim as my invention:

The combination of a pair of headlights, each comprising a casing and a reflector, a reinforcing member secured to each reflector and shiftably connected to the casing, a connection between said reinforcing members whereby both reflectors will move in unison in a vertical plane whereby the reflectors may be shifted downwardly to prevent the glare of the light without cutting off the rays thereof, and means for shifting said reflectors and comprising a casing-inclosed sliding member connected with one of said reinforcing members.

Signed at #1822 Park Row Building, in the city, county and State of New York, this 1st day of November, 1916.

WILLIAM M. HORTON.