F. BUCHANAN.

HEADLIGHT.

APPLICATION FILED JUNE 13, 1907.

916,266.

Patented Mar. 23, 1909.

Fig. 1.

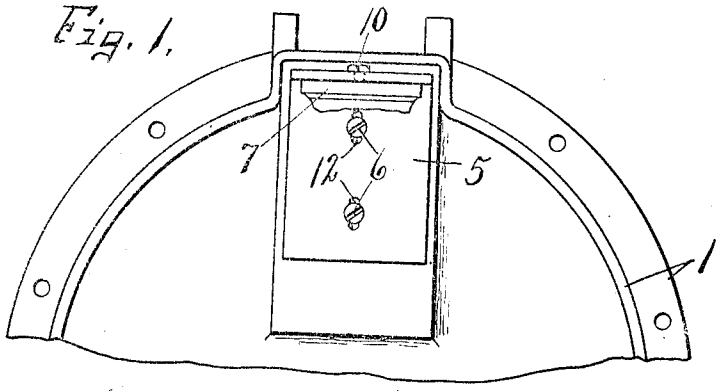


Fig. 2.

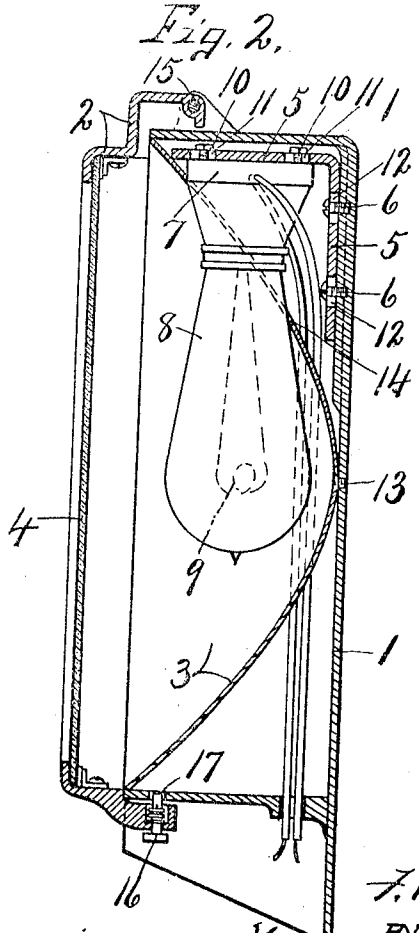
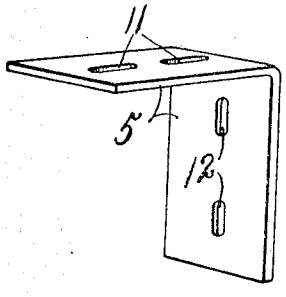


Fig. 3.



WITNESSES
Chas. H. Hughes.
H. C. Chase

INVENTOR
F. Buchanan
BY
Howard P. Denison
ATTORNEY

UNITED STATES PATENT OFFICE.

FRANK BUCHANAN, OF DAYTON, OHIO.

HEADLIGHT.

No. 916,266. Specification of Letters Patent. Patented March 23, 1909.

Application filed June 18, 1907. Serial No. 378,756.

To all whom it may concern:

Be it known that I, FRANK BUCHANAN, of Dayton, in the county of Montgomery, in the State of Ohio, have invented new and useful Improvements in Headlights, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to certain improvements in headlights and refers more particularly to an adjustable support for the socket for an incandescent lamp for the purpose of bringing the incandescent film in line with the focal axis of the reflector.

In other words, my object is to provide for the axial and radial adjustment of the lamp relatively to the reflector.

Other specific objects will be brought out in the following description.

In the drawings—Figure 1 is a front elevation of a portion of a headlight-case showing particularly my improved adjusting means for the lamp, a portion of the lamp socket being shown in operative position. Fig. 2 is a diametrical sectional view of the headlight showing the incandescent lamp in elevation. Fig. 3 is a perspective view of the detached lamp-supporting bracket.

This headlight comprises essentially a circular case —1— having a movable closure —2— covering the open side of a reflector —3— and provided with a transparent glass front —4— substantially co-extensive with the area of the open side of the reflector and co-axial therewith. An angular bracket —5— is secured by suitable fastening means, as screws —6—, to the back of the casing —1— near one side, and preferably near the hinged side of the door —2— for receiving and supporting the incandescent lamp socket —7— carrying an incandescent lamp —8— having an incandescent film-coil —9— adapted to be brought co-axial with the reflector by the adjustment of the bracket itself upon the back of the case —1—. The lamp socket —7— is adjustably secured by suitable fastening means, as screws —10—, which are passed through elongated slots —11— in the bracket —5— to permit the lamp and its supporting socket to be adjusted parallel with the axis of the reflector to bring the coil —9— into proper relation with said reflector. In like manner, the apertures through which the fastening means pass are elongated radially of the case and reflector having slots —12— to permit the radial adjustment of the bracket —5— with the lamp —8— thereon for the purpose of bringing the incandescent coil —9— into the axis of the reflector, it being understood that the intensity of the reflected light depends largely upon the position of the incandescent coil of the lamp with reference to the axis and apex of the reflector, and the essential feature of my invention resides in providing means whereby the lamp may be adjusted radially and axially of the reflector, and also in the separate bracket for supporting the lamp.

The reflector —3— is secured at its apex by a screw 13— to the central portion of the back of the case —1— and flares outwardly toward the closure —2—, its outer end terminating in substantially the same plane as the front of the casing —1— and is of substantially the same diameter as the interior diameter of said casing, thereby effectually concealing the bracket —5—, which is located between the reflector and casing. This reflector is provided with a radial opening through which the lamp socket —7— and lamp —8— project, the opening 14— being of somewhat greater diameter than that of the lamp socket or lamp to allow for a limited radial and axial adjustment of the lamp relatively to the reflector.

The lid or movable front —2— is hinged at —15— to suitable lugs upon the periphery of the case —1— and its diametrical opposite side is provided with a spring-catch —16— adapted to interlock with a recess —17— in the adjacent side of the case —1— to hold the door in its closed position and to permit it to be readily opened to obtain access to the interior of the casing for the repair or adjustment of the lamp, or other interior parts.

What I claim is:

1. A headlight comprising a casing, a hinged cover attached to the front of the casing, a conoidal-shaped reflector arranged within the casing and extending from the front to the rear thereof, said reflector abutting against the back wall of the casing, means for securing the reflector to the back of the casing, said reflector having an opening in the top thereof, an inverted L-shaped bracket arranged within the casing above the reflector and having the vertical arm thereof extending in parallelism with respect to the rear wall of the casing, means for

adjustably connecting the bracket to the rear wall of the casing, a lamp socket extending through said opening and carrying a lamp arranged within the reflector, and means for adjustably connecting the socket to the horizontal arm of said bracket.

2. A headlight comprising a circular casing having a movable closure, a reflector secured to and within the casing separate from the closure and provided with an opening through one side, a bracket within and adjustable radially relative to the casing and having a portion thereof extending across the opening in the reflector, means for securing the bracket in its adjustable position to the casing and an incandescent electric lamp extending through the opening in the reflector and adjustably secured to the portion of the bracket which extends across said opening.

In witness whereof I have hereunto set my hand this 8th day of June 1907.

FRANK BUCHANAN.

Witnesses:

H. E. CHASE,

C. M. MCCORMACK.