Feb. 12, 1929. 1,701,908

F. BUCHANAN

HEADLIGHT CONSTRUCTION

Filed June 23, 1926

Fig. 4.

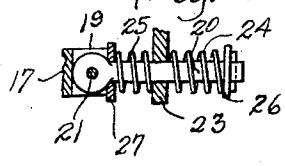


Fig. 1.

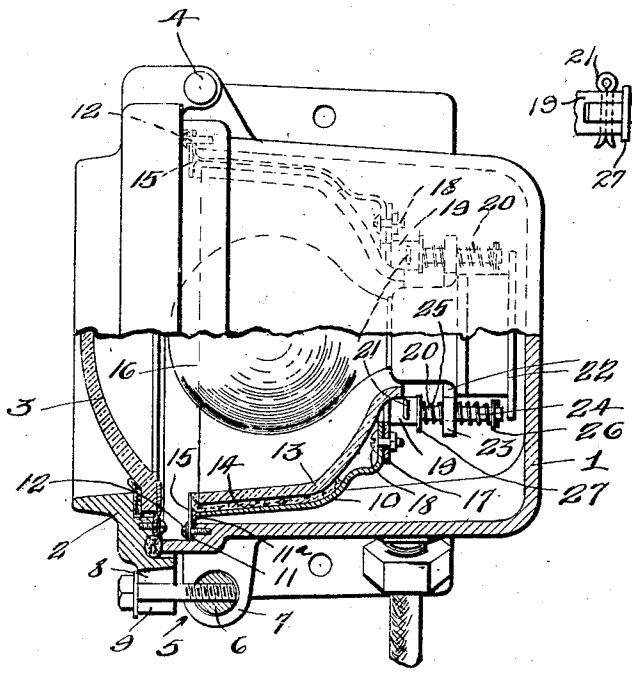
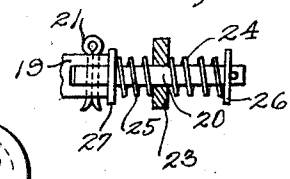


Fig. 5.



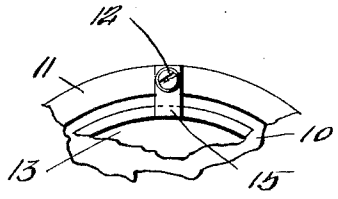


Fig. 2

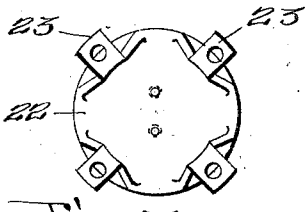


Fig. 3.

INVENTOR.

BY Frank Buchanan

Parsons & Bodell

ATTORNEYS.

Patented Feb. 12, 1929. 1,701,908

UNITED STATES PATENT OFFICE.

FRANK BUCHANAN, OF SYRACUSE, NEW YORK, ASSIGNOR TO CROUSE-HINDS COMPANY, OF SYRACUSE, NEW YORK, A CORPORATION OF NEW YORK.

HEADLIGHT CONSTRUCTION.

Application filed June 23, 1926. Serial No. 118,002.

This invention relates to head lights, and has for its object a particularly simple and efficient means of supporting the lamp and the reflector whereby they are a unitary structure.

The invention consists in the novel features and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention reference is had to the accompanying drawings in which like characters represent corresponding parts in all the views.

Figure 1 is a side elevation partly in section.

Figure 2 is a fragmentary detail view illustrating the means for holding the reflector in the casing.

Figure 3 is a fragmentary detail view of the lamp socket support. Figures 4 and 5 are fragmentary detailed views of the shock absorbing means for the lamp socket. This headlight comprises generally, a casing, a concave reflector supported at its front end in the casing and a lamp socket support carried by the support for the reflector at the rear end thereof and as a unit therewith.

1 designates the casing, which may be of any suitable form, size and construction, it being open at its front end and closed at its rear end. The front end is provided with a suitable door 2 carrying a lens 3, the door being hinged at 4 to the casing and held in position by a suitable latch mechanism 5.

The latch, as here shown includes a hinged bolt, the bolt threading radially into a rod 6, which serves as a hinge pin, this rod being journaled in lugs 7, formed on the casing. The bolt swings into and out of an open ended slot 8 formed in a laterally extending lug 9 on the door 2.

10 is the reflector support, it being a concave sheet metal body having a flange 11 at its front end abutting against a forwardly facing annular bearing surface 11^a and secured thereto by screws 12.

13 is the reflector, it being here shown as of glass fitting in the reflector support 10. Buffers as layers of felt 14 are interposed between the support 10 and the glass reflector 11. The reflector 13 is held in position by clamps 15 underlying the heads of the screws 12 and overlying the edge of the glass reflector 11.

16 is the lamp located coaxially with the reflector support 10 and carried by a support which in turn is carried by the reflector support 10 so that the lamp support is self contained with the reflector support and acts as a unit therewith. Hence the reflector and the support are removable from, and replaceable in, the casing as a unit. The lamp socket support also includes shock absorbing means.

The support here shown includes a base plate 17, rods pivotally connected to the base plate, a plate on the rods for supporting a lamp socket and vibration absorbing means or springs on the rods and acting on the plate on which the lamp socket is mounted. The base plate 17 is secured by screws 18 to the rear end of the reflector support 10. This plate is annular in general form and has lugs 19 projecting rearwardly therefrom. 20 are the rods which are connected to the reflector support, these rods being here shown as pivoted at 21 to the lugs. 22 is the plate on which the base of the lamp socket is mounted, the plate having forwardly extending arms for outwardly extending lugs 23 formed with passages through which the rods 20 extend. 24 and 25 are springs interposed between the lugs 23 and shoulders 26 and 27 located near opposite ends of the rods. Obviously owing to the arrangement of the springs and the pivotal movement of the rods 20 all movements of the lamp relatively to the reflector are against a yielding spring tension.

This head light construction is particularly advantageous in that the reflector and lamp can be assembled as a unit independently of the casing and inserted and replaced as a unit.

What I claim is:—

A head light construction comprising a supporting case, a reflector, a reflector support in the case and supported at its front end to the case, the rear end being free, a lamp socket support carried by the reflector support at the rear end thereof, and spring vibration absorbing means connecting the lamp support and the reflector support.

In testimony whereof, I have hereunto signed my name, at Syracuse, in the county of Onondaga, and State of New York this 12th day of June, 1926.

FRANK BUCHANAN.