W. S. MAYER.

LENS HOLDER.

APPLICATION FILED JUNE 26, 1920.

1,385,699. Patented July 26, 1921.

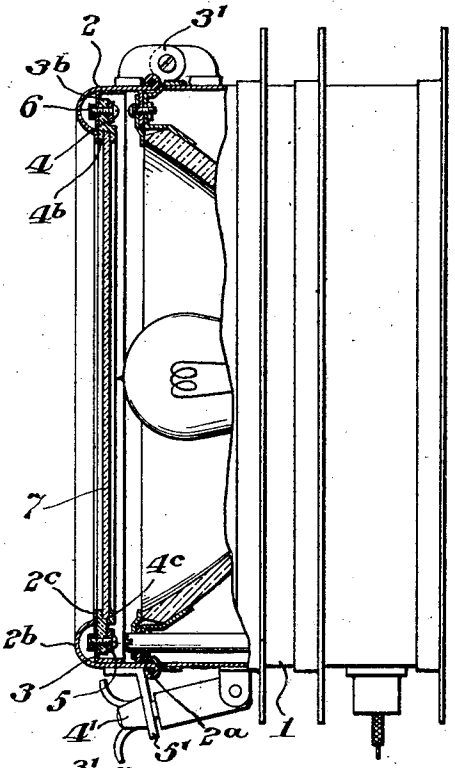


Fig. 1.

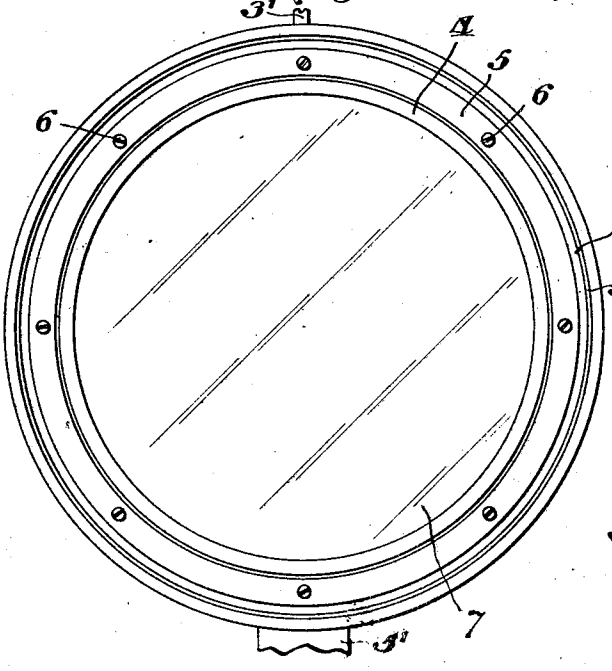


Fig. 2.

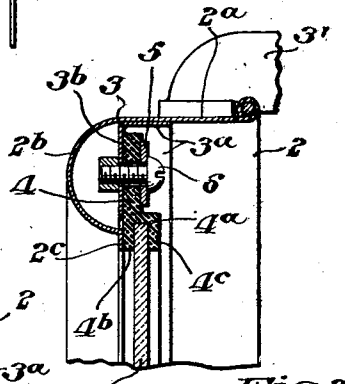
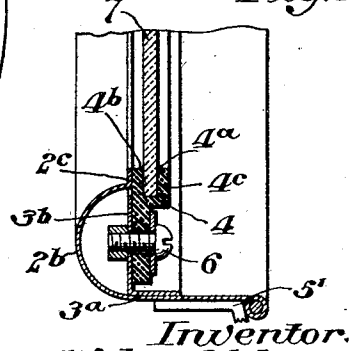


Fig. 3.



Inventor.
Walter S. Mayer;
By Chas. N. Butler
Attorney

UNITED STATES PATENT OFFICE.

WALTER S. MAYER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO ELECTRIC SERVICE SUPPLIES COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

LENS-HOLDER.

1,385,699. Specification of Letters Patent. Patented July 26, 1921.

Application filed June 26, 1920. Serial No. 391,866.

To all whom it may concern:

Be it known that I, WALTER S. MAYER, a citizen of the United States, residing in the city of Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented an Improved Lens-Holder, of which the following is a specification.

My invention is designed primarily for holding head light lenses securely by simple means adapted for preventing rattling and absorbing vibrations and shocks, thus avoiding objectionable noise and wear while preventing cracks and breaks in the lenses.

The improvements, in their preferred form, comprise a circular sheet metal bearing device provided with an inwardly turned resilient roll, a circular bearing device of angular cross section telescoped in the bearing device first named, and a rubber ring provided with an interior channel and a part exterior thereto clamped to an inwardly extending part of the bearing device second named, the channel being of larger diameter than and having a wall supported by an inwardly extending projection of the roll, in combination with a lens having its periphery set in the channel. But it will be understood that variations may be made in this preferred specific construction without departure from the spirit of my invention.

In the accompanying drawings, Figure 1 is a part sectional side elevation of a head light having a lens holder embodying my improvements; Fig. 2 is a detached rear elevation of lens holding means with the lens engaged thereby; and Fig. 3 is an enlarged broken sectional view taken through the center of Fig. 2.

The invention, as illustrated, is applied to the head light 1 which is provided with the lens frame 2 adapted to swing upon the hinge 3′ and to be held in the closed position by the latch bolt 4′ on the body of the head light and the lug 5′ on the frame.

The frame 2, preferably of sheet metal, has a cylindrical body 2^a provided with the inwardly turned roll 2^b having the inwardly extending flange 2^c, the flange and roll being resilient.

A ring 3, preferably of sheet metal and angular in cross section, has its cylindrical body 3^a engaged in telescoped relation and fixed in any suitable manner within the body 2^a and its inwardly extending flange 3^b disposed in the plane of the flange 2^c, as here shown.

A pliable ring 4, preferably of rubber, bears against the flange 2^c and is fixed to the flange 3^b, the outer part of the ring being clamped between the flange 3^b and a ring 5 by bolts 6 passing therethrough. The ring 4 is provided with an interior channel 4^a of larger diameter than the inner edge of the flange 2^c and engaging the periphery of the lens 7 between which and the flange lies the wall 4^b of the channel, the opposite channel wall 4^c being offset from the outer part of the ring with a reduction of the material otherwise required while providing sufficient support for the lens and for the more ready insertion thereof.

In use the lens is held securely, so that it can move without rattling. The resilient parts 2^b, 2^c, 3^b and 4 all act to absorb jars and shocks that would otherwise be liable to crack or break the lens.

Having described my invention, I claim:—

1. A lens holder comprising a frame having inwardly extending bearings, in combination with an internally channeled resilient ring having a wall of its channel supported by one of said bearings, and its part exterior to said channel clamped to the other of said bearings.

2. A lens holder comprising a frame having inwardly extending bearings, in combination with an internally channeled pliable ring clamped exterior to its channel to one of said bearings and a wall of said channel adapted to be supported by the second of said bearings, the walls of said channel being movable away from the second named bearing.

3. A lens holder comprising a frame having an inwardly extending resilient bearing, in combination with a resilient ring having an interior channel with a wall supported by said bearing, and means for fixing said ring exteriorly to said channel within said frame.

4. A lens holder comprising a frame having a cylindrical body provided with a resilient inwardly projecting rolled member, in combination with a rubber ring having an interior channel of larger diameter than the smallest diameter of said member, said

ring being supported by said member, and means exterior to said channel for holding said ring in said frame.

5. A lens holder comprising a frame having a cylindrical body provided with a resilient inwardly projecting rolled member having a flange thereon, a bearing member having a cylindrical body fixed in said body first named and an inwardly projecting flange, and a resilient ring fixed to said flange second named and having an interior channel with a wall supported by said flange first named.

Signed at Philadelphia, in the county of Philadelphia and State of Pennsylvania, this 24th day of June, 1920.

WALTER S. MAYER.