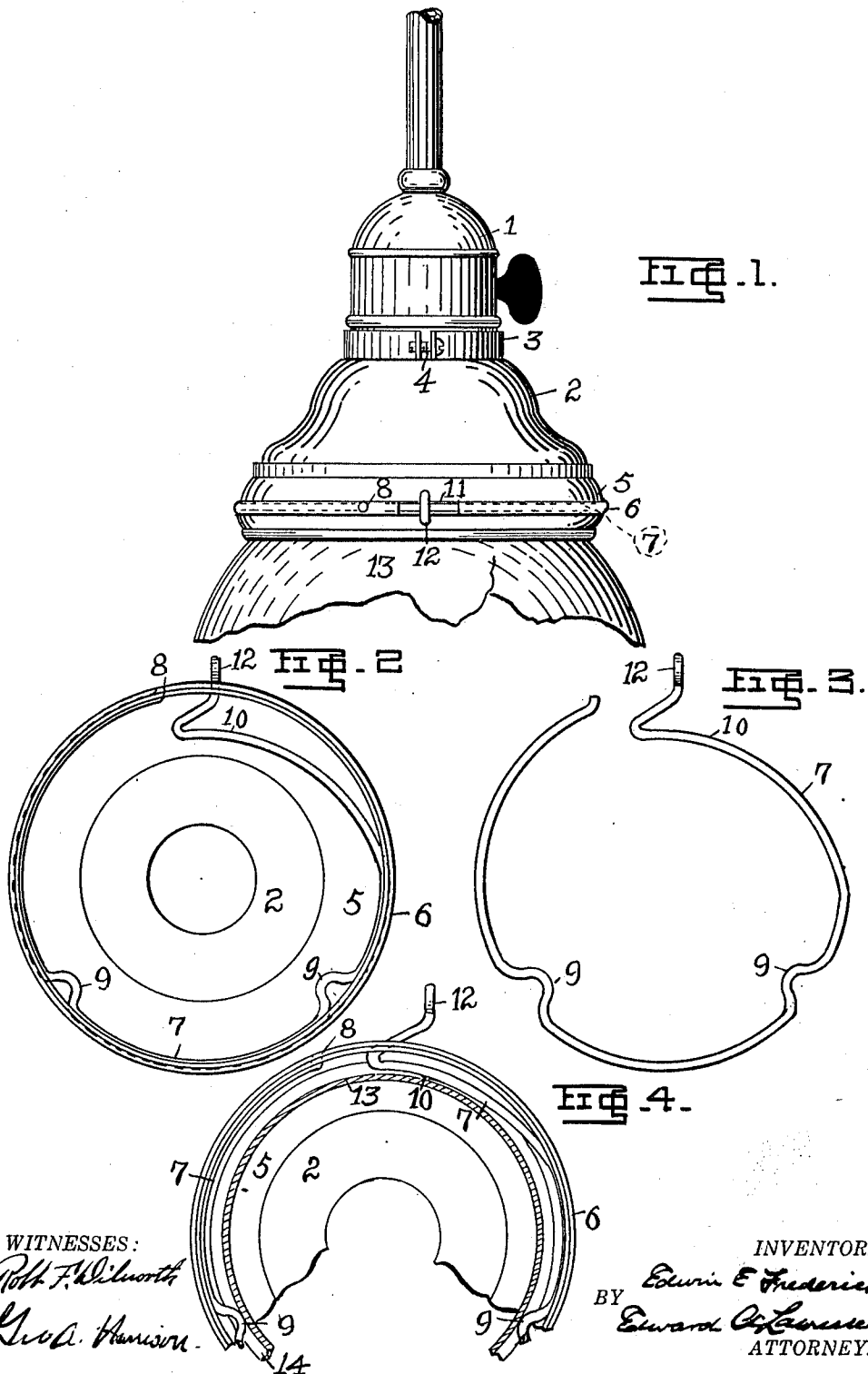


E. E. FREDERICK.
SHADE HOLDER.
APPLICATION FILED DEC. 22, 1911.

1,020,689.

Patented Mar. 19, 1912.



WITNESSES:
Robt. F. Whitworth
Geo. A. Harrison

INVENTOR.
Edwin E. Frederick
BY *Edward A. Lawrence*
ATTORNEY.

UNITED STATES PATENT OFFICE.

EDWIN E. FREDERICK, OF BRIDGEVILLE BOROUGH, PENNSYLVANIA, ASSIGNOR TO
THE FREDERICK-ELDER COMPANY, OF BRIDGEVILLE, PENNSYLVANIA, A CORPO-
RATION OF PENNSYLVANIA.

SHADE-HOLDER.

1,020,689.

Specification of Letters Patent.

Patented Mar. 19, 1912.

Application filed December 22, 1911. Serial No. 667,273.

To all whom it may concern:

Be it known that I, EDWIN E. FREDERICK, a citizen of the United States, and residing in the borough of Bridgeville, in the county of Allegheny and State of Pennsylvania, have invented or discovered new and useful Improvements in Shade-Holders, of which the following is a specification.

My invention consists of a new and improved holder or support for mounting shades, globes, reflectors and similar articles upon electric-, gas- or other lights. The word "shade" is hereinafter used to indicate generally all characters of such articles.

Shades are commonly held in place in a flanged holder by means of set-screws threaded in the wall of the holder and engaging the flaring flange of the shade. The material of the holder must either be of sufficient thickness to permit threaded holes therethrough or threaded thimbles must be fixed in said holes to accommodate the screws. As the material used for such purposes is generally brass, the cost of material is thus increased in goods which are usually sold in competition at a small profit. The shades in this case are held rigidly and unyieldingly by the screws, so that their expansion, when heated, frequently results in cracking. If the screws be not tightened, to allow for expansion, the shades rattle upon vibration and may drop out of the holder. The screws become hot, so that the shade cannot be mounted or dismantled without scorching the fingers, and, at best, the screws are inconvenient and tedious to adjust. The material being soft, the threads soon wear so that the screws loosen, are unable to hold the shade and frequently are lost.

My holder grasps the flaring flange of the shade by means of an open annulus of resilient material provided with indents which impinge against the waist or contracted portion of said flange. One end of the annulus is secured to the holder, while the other or free end is first curved or bent to form an inwardly extending spring finger and then bent outwardly to pass through a slot in the holder and form a catch to be actuated by the finger of the user of the device. By means of the catch, the annulus is expanded to permit the wider portion of the flaring flange to pass beyond the annulus, whereupon the catch is released, permitting the annulus to contract and firmly grasp the

waist of the shade flange. By again expanding the annulus by means of the catch, the shade may be released and dismantled. I thus do away with the inconvenient and unsatisfactory set-screws and form my holder of very light and inexpensive material, thus cheapening the cost of manufacture. The grip of the annulus on the shade is resilient, snugly embracing the flange of the shade and securely holding the shade in place without looseness or rattling, but at the same time allowing for free expansion or contraction. The shade may be installed or dismantled while the light is burning without danger of scorching the fingers, and the operation of installing or dismantling the same is quickly and conveniently accomplished.

Other novel features and advantages will appear from the following description.

In the accompanying drawings, Figure 1 is an elevation showing a shade, partially broken away, supported on a light fixture by means of one of my improved holders, the fixture being shown for illustration as an incandescent electric light socket although my holder may equally well be applied to any sort of lighting fixture or device; Fig. 2 is a bottom plan view of the holder; Fig. 3 is a plan of the resilient annulus, and Fig. 4 is a view similar to Fig. 2 but showing the flaring flange of the shade grasped by the annulus, the body of the shade being cut away for the sake of clearness.

The following is a detailed description of the drawings.

1 is an electric light socket. 2 is the holder secured thereon by any convenient means. I have shown, for the sake of illustration, a split ring, 3, integral with or attached to the holder and clamped about the socket 1 by means of a screw 4. The outer or lower edge of holder 2 is provided with an inclosed flange 5, usually annular, and preferably provided with a circumferential groove or seat 6. I prefer to make the flange 5 of the concaved interior form shown in Fig. 1.

Mounted in flange 5 and preferably seated in seat 6 is an open annulus of resilient material, such as spring wire, 7. One end of said annulus is fixed in a hole 8 in the flange 5.

9-9 are indents or projections formed in the annulus intermediate of its ends, pref-

erably two in number, and preferably made by bending the material of the annulus. The free end of the annulus is first bent or curved inwardly to form the spring finger 10 and then bent sharply outwardly to pass through a slot 11 in the flange 5 to without the holder 2 where it is provided with a loop 12 which acts as a finger catch.

13 represents the shade and 14 the usual flaring flange thereof.

To mount the shade on the holder, the operator's finger is pressed against the catch 12 to expand the annulus, as in Figs. 1 and 2 moving the catch 12 toward the right. This causes the spring finger 10 to retreat into the seat 6 and permits the wider portion of the shade flange 14 to pass inwardly in the holder 2 beyond the annulus 7. The catch 12 is now released, permitting the annulus to contract and gripping the waist of the flange 14 between the projections 9—9 and the spring finger 10, holding said shade resiliently yet firmly in place. To dismount the shade, the catch 12 is again pressed, reexpanding the annulus and permitting the wider portion of the flange 14 to pass outwardly beyond the same.

What I desire to claim is:—

1. In combination with a shade having a flaring flange, a holder mountable on the light fixture, an inclosed flange on said holder, an open annulus of resilient material mounted in said last mentioned flange, one end of said annulus being fixed to said last mentioned flange while the other end thereof extends outwardly without said flange to form an operative catch, and in-

wardly extending projections on said annulus.

2. In combination with a shade having a flaring flange, a holder mountable on the light fixture and provided with an inclosed flange, an open annulus of resilient material mounted in said flange, inwardly extending projections on said annulus, one end of said annulus being fixed to said holder while the other end thereof is first bent inwardly to form a spring finger to coöperate with said projections to grasp the waist of said shade flange and then bent outwardly to pass without said holder and form an operative catch.

3. In combination with a shade having a flaring flange, a holder mountable on the light fixture and provided with an inclosed flange, said flange being provided with a circumferential seat and a slot, an open annulus of resilient material mounted in said seat, inwardly extending projections on said annulus, one end of said annulus being fixed to said holder while the other end thereof is first bent inwardly to form a spring finger to coöperate with said projections to grasp the waist of said shade flange and then bent outwardly to pass through said slot and form an operative catch.

Signed at Pittsburgh, Penna., this 20th day of December 1911.

EDWIN E. FREDERICK.

Witnesses:

THOS. E. FINLEY,
EDW. A. LAWRENCE.