H. H. PALMER.

SHADE HOLDER FOR INCANDESCENT LAMPS.

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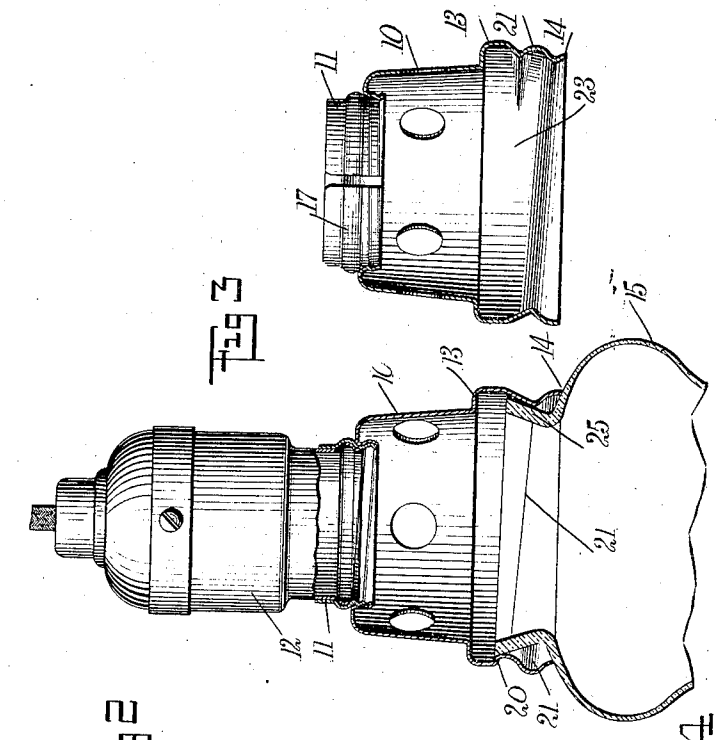

Fig. 2

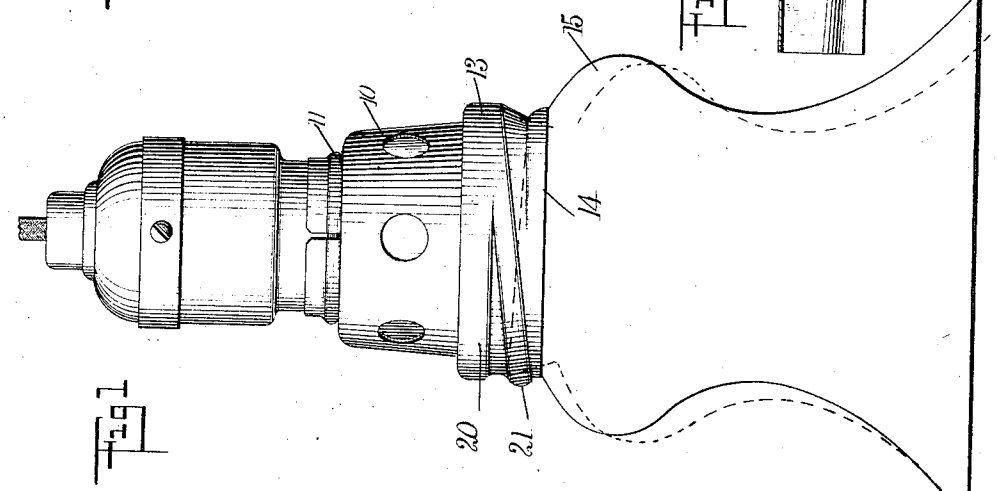

Fig. 3

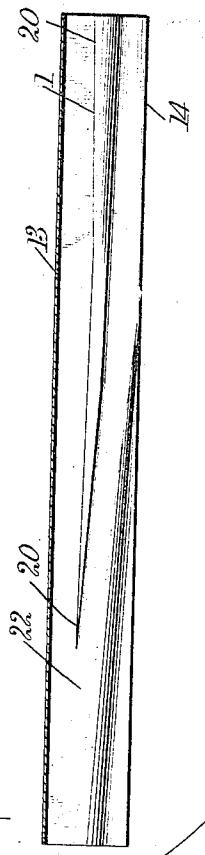

Fig. 4

WITNESSES

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SHADE-HOLDER FOR INCANDESCENT LAMPS.

1,027,888. Specification of Letters Patent. Patented May 28, 1912.

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To all whom it may concern:

Be it known that I, HERMAN H. PALMER, a citizen of the United States, and a resident of Charleston, in the county of Charleston and State of South Carolina, have invented a new and Improved Shade-Holder for Incandescent Lamps, of which the following is a full, clear, and exact description.

My invention relates to holders which are attachable by one end to the neck of an incandescent lamp socket, and have means at the other end for detachably engaging a shade and thus securing the shade to the socket.

My invention relates particularly to the means for securing the holder to the shade.

The term "shade" as used herein is to be understood as generic, and as including globes or spheres that completely inclose the lamp. Shades of the character in question are formed with outwardly projecting beads or flanges at the upper end, the flanges usually flaring, and the beads when employed, are commonly round; in any event there is an overhanging formation or shoulder exteriorly at the upper end of the shade, which formation precludes an ordinary threaded connection, for which reason set screws or sliding clamp devices of various forms are usually employed to bind the shade to the holder.

The invention has for an object the production of a holder of the indicated character that will permit of the ready attachment and detachment of the shade, while obviating the necessity of providing the holder with any adventitious shade-engaging devices in the way of screws, adjustable clamps, or like movable elements.

Another object of the invention is to so form the holder that it will effect a close contact between the lower edge of the holder and the opposed surface of the shade, so that neither dust nor insects will enter, a result which is of prime importance in the case of lamp-inclosing shades or globes.

The invention involves a special form of shade-engaging flange on the holder, which combines in a novel manner with the shade, to bring about a particular co-action and correlation between the holder and the flanged or beaded shade, to the end that the holder and said shade will be capable of a relative movement peculiar to the new combination, to effect the attachment and detachment of the shade.

The distinguishing features of the invention will be particularly explained in connection with the specific description hereinafter to be given.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is an elevation showing my improved holder in connection with a lamp socket and shade; Fig. 2 is a similar view with my improved shade holder and parts of the socket and shade in section; Fig. 3 shows my improved holder in section, except at the upper end, which is in side elevation; and Fig. 4 is a developed view of the lower portion of the holder.

The holder comprises a body 10, desirably of round form, and having at its upper end any suitable means 11 for connection with the shell of the lamp socket 12, and formed at the lower end with a depending flange or neck 13, the lower edge 14 of which, when the shade 15 is in place, has close contact with the opposed surface of said shade. The device 11 for connecting the holder to the lamp socket is of known form and need not be described. It is to be understood that in practice, the height of the body 10, or its distance between the flange 13 and the top of the holder is such that the socket may receive a lamp in the usual manner.

My invention resides in the novel features characterizing the neck or annular flange 13, which I form with an interior shoulder 20, and leading to said shoulder from the lower end or mouth of the flange or neck 13, there is a groove 21, which, as seen in the developed view, is diagonal to the shoulder 20, and to the lower edge 14, said groove 21 vanishing at the lower end in the edge 14, and extending at the upper end through the shoulder 20, as at 22, so that the said shoulder is non-continuous, it being only essential that the shoulder present several points in about the same horizontal

plane at a point above or inward from the upwardly ranging groove 21. In practice, the groove 21 is continued for approximately one half a convolution.

The shade 15 is shown with an outwardly flaring neck or annular flange 25, which is a known form of shade, the flange being of unbroken continuity. The conformation of the shade, with its flaring flange 25 or the equivalent overhanging exterior bead, as in some makes of shades, obviously precludes the employment of an ordinary threaded connection with co-acting threads on the shade and on the holder after the manner of the common screw joint or union.

I so form and proportion the groove 21 and the mouth of the flange 13, as well as the interior conformation at the top or shoulder 20, that the shade and holder are assembled and the shade clamped as follows: The shade is entered through the mouth defined by the lower edge 14 and moved axially into said mouth, but with its axis at an angle to the axis of the holder, as indicated by dotted lines in Fig. 1. The diameter of the neck at the guide groove 21 relatively to the greatest perimeter of the flaring flange 25 of the shade, is such that the upper edge of the flange 25 will engage at one side in the groove 21, so that by turning the holder 10 and its flange 13 relatively to the shade 15, while maintaining the shade with its axis at an angle as described, the engaging part of the flange 25 of the shade will be guided upwardly in the said groove until the flange 25 escapes from the groove and can assume a position properly co-axial with the holder 10, after which the vertical dimension of the flange 13 between the horizontal seat or shoulder 20 and the edge 14, is such that the said lower edge will be pressed into close contact with the opposed surface at the shoulder of the shade, while the exterior portion of the flange 25 at the upper edge will be subjected to a slight upward pressure by reason of the contact therewith of the shoulder 20.

It is understood that the groove 21 and the shoulder 20 are formed by bending the material constituting the flange 13, and that the said shoulder 20 is not formed with points absolutely in the same horizontal plane. Advantageously the formation of the seat provided by the shoulder 20 is such as to have in effect a slight cam action to press upwardly on the flange 25 of the shade sufficiently to tightly press the lower edge 14, which in practice is a feather edge, against the outer surface of the shade as described.

To detach the shade from the holder a slight turning and tilting of the shade will bring its axis at an angle to the axis of the holder 10, as when entering, and the shade upon continued turning will be guided downward out of the groove 21, the shade following the groove 22 downward. The mouth of the holder defined by the feather edge 14 is for the most part flaring, which facilitates the entrance of the shade to the mouth of the holder and permits the tilting of the shade to engage a side thereof in the guide groove.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent,—

1. The combination with a shade having an attaching neck formed with an exterior annular overhanging portion at its upper end, of a shade-holder having a depending flange presenting an open mouth, the edge of the flange defining the mouth being flaring for a portion of said edge, a substantially horizontal shoulder on said flange at a point within the mouth and against which the overhanging member of the neck may seat with the shade coaxial with the holder, the said depending flange having a guide groove forming approximately one-half a convolution, the said groove extending at its upper end to and through the mentioned shoulder and vanishing at its lower end at the mouth of the flange, the said groove of the holder flange and the annular overhanging upper edge of the shade being so proportioned that the overhanging edge of the shade will engage at one side in the mentioned groove with the axis of the shade at an angle to the holder, and the shade and holder being capable of relative turning movement with the axes at an angle, the overhanging annular edge of the shade furthermore fitting the seat on the depending flange and the edge of the said flange co-acting with the exterior surface of the shade when the overhanging edge is moved onto the horizontal seat of the holder.

2. A shade-holder having a depending flange formed at its mouth with an edge flaring for a portion of the circumference, a substantially horizontal shoulder within the mouth and against which the overhanging edge of a shade may seat itself with the shade and shoulder co-axial, the said depending flange of the holder having a guide groove for approximately one-half a convolution, and the said groove extending from the mouth of the flange to and through the mentioned shoulder.

3. A means for securing to a lamp socket a shade having an overhanging member disposed in a circular line, said means consisting of a shade-holder having an open-mouthed flange formed with a substantially horizontal interior shoulder inward from the mouth and against which the overhanging edge of a shade may seat, the said flange having an edge to contact tightly with the exterior surface of the shade, when the overhanging edge of the shade seats against said

interior shoulder, the said flange furthermore having a guide groove making approximately one-half a convolution from the edge to the said shoulder and of a height to permit tilting and turning of the shade relatively to the holder.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HERMAN H. PALMER.

Witnesses:
J. A. JOHNSTON,
W. DEWAR GORDON.