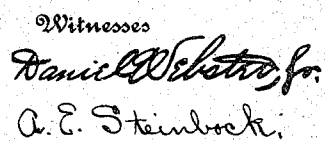


977,939.

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UNITED STATES PATENT OFFICE.

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ELECTRIC-LAMP REFLECTOR ATTACHMENT.

977,939.

Specification of Letters Patent.

Patented Dec. 6, 1910.

Application filed June 22, 1909. Serial No. 503,650.

To all whom it may concern:

Be it known that I, HENRY D'OLIER, JR., a citizen of the United States, residing at Rutherford, in the State of New Jersey, have invented certain new and useful Improvements in Electric-Lamp Reflector Attachments, of which the following is a specification.

My invention relates to improved means for attaching to the socket of an electric incandescent lamp a shade or reflector, particularly when the latter is relatively heavy, as when made of glass or other vitreous material.

It is the object of my invention to provide an attachment for the purpose above stated, which shall be simple, cheap to manufacture, and easily attachable to and detachable from the socket and reflector, means being provided for locking the parts.

For an illustration of some of the forms my invention may take, reference is to be had to the accompanying drawing, in which:

Figure 1 is a vertical elevational view of the lamp socket, reflector and the attachment. Fig. 2 is a side elevational view of the upper and smaller resilient ring member, showing the locking means in the open position. Fig. 3 is a side elevational view of the attachment having a modified locking means. Fig. 4 is a top plan view of the locking means shown in Fig. 3, when in closed or tightened position. Fig. 5 is a top plan view of the same, when in open or loose position. Fig. 6 is a vertical sectional view through the resilient ring members and the connecting member.

S is an incandescent lamp socket supported by the usual lamp cord *w* or by any other suitable means and having, when desired, the usual key *v*. The resilient split ring member *r*, shown in elevation in Fig. 2, has a bead *a* adapted to register with the socket bead *b* and has also a bead shoulder *c* between which and the lip or flange *d* is held or confined the inturned lip or flange *e* of the extension or connector member *f*.

The ring member *r* is split or has a gap as shown at *g*, Fig. 2, whereby the ring is circumferentially resilient so that it may be snapped into the position shown in Fig. 1

with respect to the reducing member or extension member *f* and may then be snapped over the socket bead *b*, a reinforcing or stiffening bead *h* being provided. Within this bead *h* is a wire ring whose ends are at the sides of the gap *g* and formed preferably into the eyes *s, s*, in which engage tightening or locking means of a type which draws the eyes *s* together to more firmly engage the split ring member *r* upon the socket, in effect drawing the bead *a* more closely over the socket *b*. This fastening or locking means is such as to limit the amount of separation between the eyes *s, s* when in the loosened position, and when in the tightened position, and to remain locked in such position. As shown in Figs. 1 and 2, this fastening means is an S shaped lock or member A having the outwardly turned ends *t* serving as small grips or handles for actuating the device.

In the position shown in Fig. 1, the S lock A is in the tightened or closed position, the eyes *s, s* having been drawn together thereby, and the arrangement is such that the lock A remains in this position. To unfasten the same, it is rotated in a counter-clockwise direction, as viewed in Fig. 1, and then it assumes the open position shown in Fig. 2. In this open position, the resilient ring member *r* may be snapped over the socket bead *b*. When in the closed position as shown in Fig. 1, it is impossible for the bead *a* to be snapped over or past the socket bead *b*, and in consequence the parts are firmly held or locked in the position shown.

At its lower end the connector or extension member *f* has a bead *j* forming an internal flange or channel in which is adapted to snap or spring the lip *k* on the split resilient ring member *m*. Beneath this flange or lip *k* is formed a bead *n*. And at the lower portion of the member *m* is formed a bead *o* adapted to embrace and engage the beadlike formation or projection *p* upon the shade or reflector R made of glass or other vitreous material of any suitable shape or form or design, or, in fact, of any desired material. The ring member *m* is reinforced by the wire *q*, which has its ends, at the sides of the gap *g*, formed into eyes *s, s* with

which engages an **S** shaped lock A, as heretofore described. When the locking or tightening member A is in the open position, the bead *o* can be snapped over the enlargement *p* on the reflector or shade R, and by closing or tightening the member A the bead *o* is drawn down tightly over the enlargement *p* to firmly hold and lock the parts in position.

- 10 In Fig. 3, a modified form of locking or tightening means is shown. Through the eyes *s*, *s* extends the locking or tightening member B which has a notch 1 in which engages one of the eyes *s*, such notch and eye preferably never disengaging. The right hand portion 2 of the member B is formed into a screw-like member of great pitch, a second notch 3 being formed to receive the right hand eye *s*, the rotation of the member B being secured by the crank or handle 4.

20 As shown in Fig. 5, the eyes *s*, *s* are separated. By turning downwardly on the handle or crank 4 the right hand eye *s* is moved along the portion 2 of the member B until the eye *s* drops into the notch 3, as shown in Fig. 4, in which position the parts are locked in the tightened or closed position. By again raising the handle or crank 4 the right hand eye *e* is restored to its position shown in Fig. 5. Thus, in both the loosened or tightened positions, the member B limits or determines the relative positions of the eyes *s*, *s*, and, therefore, the extent of opening of the ring member.

- 35 In place of the eyes *s*, *s* in all the figures, made of wire surrounded by a bead, such eyes may be replaced by ears, or projections of any sort made or attached in any suitable manner.

40 What I claim is:

1. The combination with an electric lamp socket, of an attachment comprising a resilient ring member adapted to embrace said lamp socket, a wire reinforcing ring carried by said ring member, ears upon said reinforcing ring, and a locking member engaging said ears.

2. The combination with an electric lamp socket, of an attachment comprising a ring member adapted to embrace said lamp socket, a reinforcing ring carried by and in fixed relation to said ring member, ears upon said reinforcing ring, and means engaging said ears for clamping said ring member to said lamp socket.

3. The combination with a lamp socket, of a resilient ring member adapted to embrace the same, a bead on said lamp socket and extending around the same, a bead extending around said ring member and adapted to register with said socket bead, and a locking member on said ring member, said locking member when in open posi-

tion limiting the opening of said ring member and allowing said bead to engage said socket bead, and said locking member when in closed position clamping said bead closely upon said socket bead.

4. The combination with a lamp socket, of a shade or reflector, an extension or connector member, a ring member secured at one edge to said extension or connector member and engaging said lamp socket at its other edge, a second ring member supported at one edge by said extension or connector member and engaging at its other edge said shade or reflector, and locks on each of said ring members on their edges remote from said extension or connector member.

5. The combination with a lamp socket, of a split resilient ring member adapted to engage the same, projections on the ends of said ring member, and an **S** shaped locking member engaging in said projections.

6. The combination with a lamp socket, of a locking attachment therefor comprising a split ring member embracing said lamp socket, ears upon said ring member, and an **S** hook engaging in said ears and movable in a plane substantially parallel with the axis of the lamp socket.

7. The combination with a lamp socket, of an attachment therefor comprising a split ring member, a wire ring surrounding said ring member and reinforcing the same, ears in said wire ring, and an **S** hook engaging in said ears.

8. The combination with a lamp socket, of a bead thereon, a resilient ring member having a bead adapted to register with said socket bead, a reinforcing wire ring for said resilient ring member, ears on said wire ring, and an **S** hook engaging in said ears.

9. The combination with a lamp socket, of a shade or reflector, and means for supporting said shade or reflector upon said lamp socket comprising a split ring member engaging at one edge said shade or reflector, a reinforcing ring for said ring member at said edge, a lock engaging the ends of said reinforcing ring, and means engaging said ring at its other edge for supporting the same upon said lamp socket.

10. In a shade attachment, a circumferentially yielding ring member, projections thereon, an **S** hook engaging said projections, and projections upon said hook serving as handles.

11. The combination with a lamp socket, of a shade or reflector, a ring member engaging at its one edge said shade or reflector, a lock for said ring member at said edge, an extension or connector member engaging said ring member at its other edge, and means supporting said extension or connector member upon said lamp socket.

12. The combination with a lamp socket,
of a bead thereon extending around the
same, a circumferentially continuous ring
member having a bead extending around the
5 same adapted to register with said socket
bead throughout substantially its entire cir-
cumference, projections upon said ring mem-
ber, and means engaging said projections
for locking said bead of said ring member

upon said socket bead throughout substan- 10
tially its entire length.

In testimony whereof I have hereunto af-
fixed my signature in the presence of the two
subscribing witnesses.

HENRY D'OLIER, JR.

Witnesses:

ELEANOR T. McCALL,
A. E. STEINBOCK.