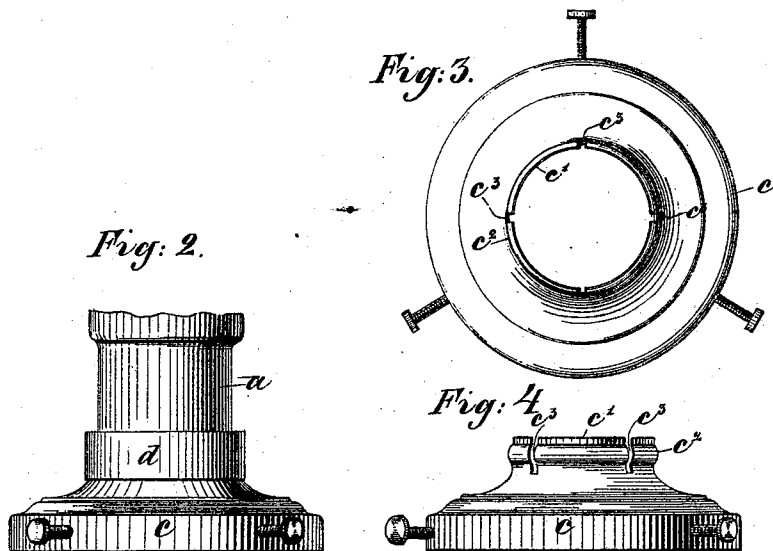
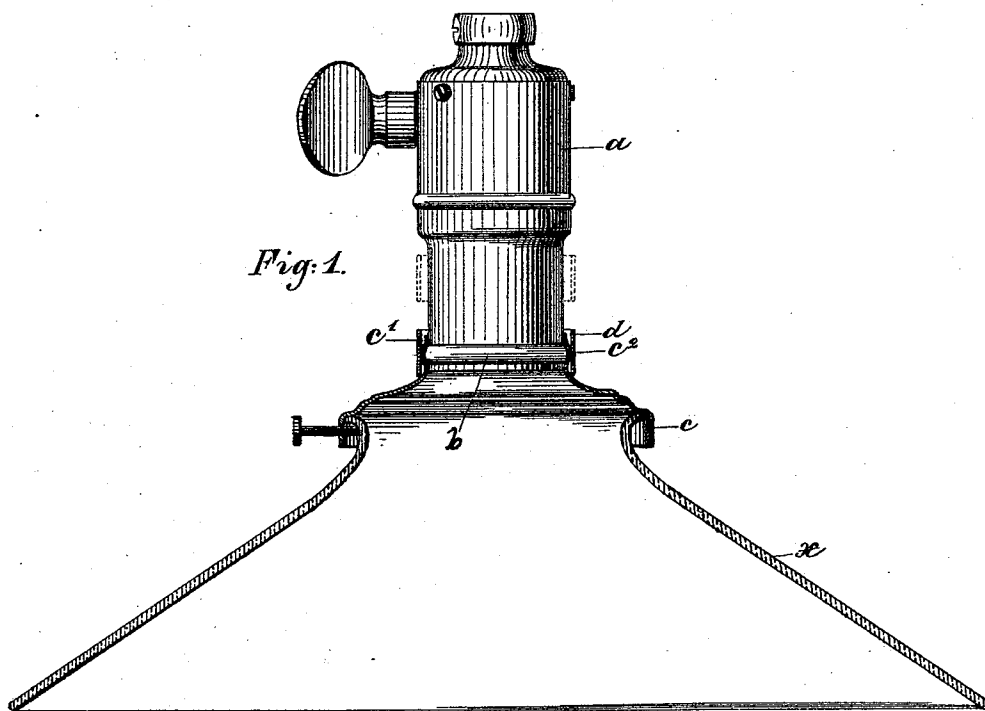


(No Model.)

C. REMHOF.
SHADE HOLDER FOR ELECTRIC LAMPS.

No. 499,470.

Patented June 13, 1893.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES REMHOF, OF BROOKLYN, NEW YORK.

SHADE-HOLDER FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 499,470, dated June 13, 1893.

Application filed February 13, 1891. Serial No. 381,352. (No model.)

To all whom it may concern:

Be it known that I, CHARLES REMHOF, a citizen of the United States, residing at Brooklyn, Kings county, New York, have invented certain Improvements in Shade-Holders for Electric Lamps, of which the following is a specification.

My invention relates to shade-holders for the sockets of incandescent electric lamps, in the main, the object being to provide a means for attaching the shade to the socket which shall be absolutely secure and at the same time so simple that the shade may be attached and detached with great ease and facility, and without the use of screws.

The invention will be fully described hereinafter and its novel features carefully defined in the claim.

In the accompanying drawings, serving to illustrate my invention—Figure 1 is a side elevation of a socket for an incandescent electric lamp, showing my shade-holder attached thereto and in section. Fig. 2 is a side elevation of the attached shade-holder and a portion of the lamp socket. Fig. 3 is a plan and Fig. 4 is a side elevation of the shade holder, detached. The locking ring is omitted from these views. Fig. 5 is a perspective view of the locking ring, detached. These views are drawn to a uniform scale.

a represents an ordinary "U. S. Key" socket for an incandescent electric lamp. This socket is provided with a bead *b*, at or near its end.

c is the shade-holder, and *a* is a shade secured removably in the holder by screws in the usual manner. The holder *c* is of sheet metal, and has an upturned attaching sleeve *c'*, formed on it, and constructed to fit over the bead *a'*, on the socket *a*, said sleeve having a concavo-convex bead *c''*, forming a circumferential recess, which takes over the bead *a'*, when the holder is in place, as seen in Fig. 1. In order that the sleeve may expand to allow it to be slipped over the bead on the socket *a*, said sleeve is slitted at *c''*, whereby the segments or fingers thus formed are permitted to spring outward a little. The holder *c* thus constructed may be forced onto the socket *a* by a moderate pressure, the segments of the sleeve yielding until the bead *a'* enters the concavity of the bead *c''*. The same force applied to the holder will disengage it

from the socket, however, and to secure it firmly in place so that it cannot be removed by a pull, I provide means for preventing the expansion of the sleeve without which it cannot be removed.

On the socket *a* is a locking ring *d*, which when the attachment of the shade is being effected is slipped up or back on the socket to the position for example, indicated by dotted lines in Fig. 1. After the slitted sleeve *c'* has been slipped over the socket until the salient bead on the latter enters the hollow of the bead on the sleeve, the locking ring *d* is slipped down over the sleeve, as seen in Figs. 1 and 2. This locking ring fits snugly over the sleeve at the point where the engaging beads are situated and effectually prevents the expansion of the sleeve. It also serves to hide the slits in the sleeve, which are somewhat unsightly.

When the shade holder is to be removed, it is only necessary to slide the locking ring *d* up or back until it is clear of the sleeve, when the holder may be readily pulled off. The locking ring will fit snugly enough to be held in place by friction only.

The form of the shade-holder is not material to my invention; such holders are very common. Nor is it material to my invention that the lamp shall be an incandescent electric lamp; but as herein shown it is especially adapted to the socket of such a lamp. It is only necessary that the lamp socket shall have a bead or other projection on it to engage a recess in elastic or spring fingers on the shade holder. As here shown, these fingers are formed by slitting the circumferentially recessed sleeve, three or more of such slits being usually employed.

I am aware that it is old to provide a shade holder with spring fingers curved outward at their ends and having grooves on their inner faces to engage a bead on the socket; but these holders are easily detached by a slight pull and may be accidentally pulled off. I am also aware that it is old to provide a shade holder with arms having on their extremities, which embrace the socket above the bead, outwardly turned hooks, and an open clamping ring, which embraces the arms within the curved or hooked extremities, and is tightened with a screw. This device employs an

open clamping ring and tightening screw, which I do not use; it does not prevent the slipping upward of the holder on the socket, and it requires more time and trouble to apply it than my holder. These devices differ from mine in both construction and purpose.

Having thus described my invention, I claim—

The combination with a lamp-socket having a circumferential bead or projection *b*, of a shade holder having an expansible slitted sleeve provided with a circumferential recess in its inner face which takes over and embraces the bead *b* when the holder is in place, whereby the holder is stopped by spring press-

ure against slipping up and down on the holder, and a solid or uncut locking ring *d*, which embraces and slides on the socket and is adapted to snugly embrace the slitted sleeve at the point where it engages the bead *b*, and thus prevent expansion of said sleeve, as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

CHARLES REMHOF.

Witnesses:

HENRY CONNETT,
JOHN D. CAPLINGEN.