(No Model.)

M. D. GREENGARD.

SHADE HOLDER.

No. 588,984. Patented Aug. 31, 1897.

Fig. 1.

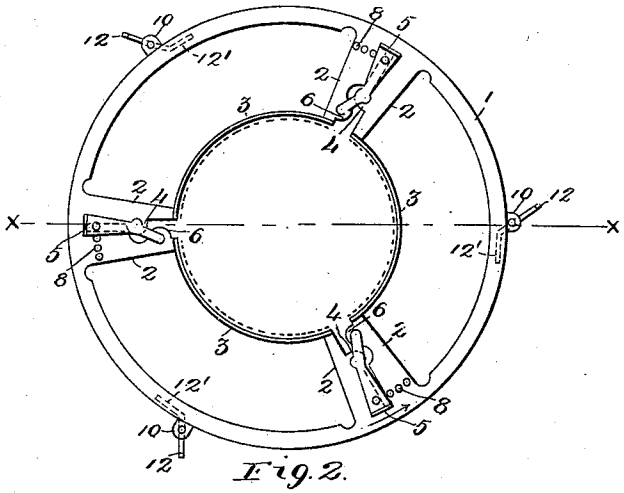


Fig. 2.

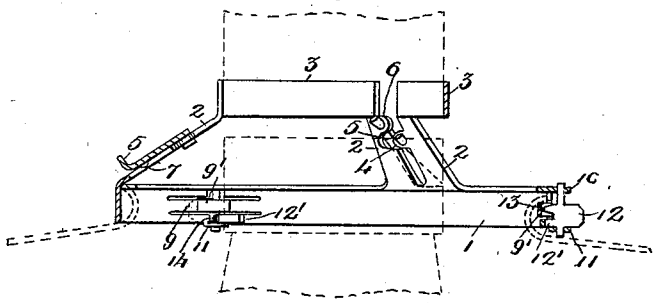


Fig. 3.

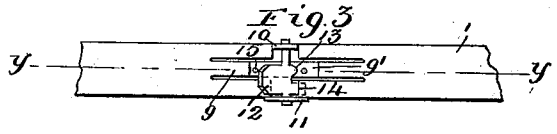


Fig. 4.

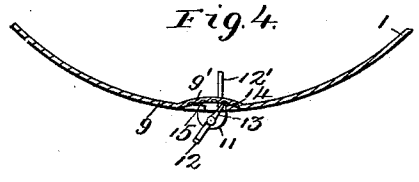
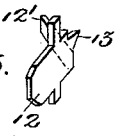


Fig. 5.



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MORRIS D. GREENGARD, OF ST. LOUIS, MISSOURI.

SHADE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 588,984, dated August 31, 1897.

Application filed November 12, 1896. Serial No. 611,880. (No model.)

To all whom it may concern:

Be it known that I, MORRIS D. GREENGARD, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Shade-Holders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in shade-holders for electric incandescent lamps; and it consists in the novel arrangement and combination of parts more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a top plan view of my invention. Fig. 2 is a vertical section on the line *x x* of Fig. 1. Fig. 3 is an elevation of a section of the outer face of the shade-ring. Fig. 4 is a section on line *y y* of Fig. 3, and Fig. 5 is a perspective detail of the shade-clamping wing.

The object of my invention is to construct a simple shade-holder whose frame shall be preferably constructed of a single piece of metal and the number of whose movable parts shall be reduced to a minimum, thereby producing a product which will be light, easy to construct, and cheap.

A further object is to simplify the general mechanical construction thereof, as will be better apparent from a detailed description of the invention, which is as follows:

Referring to the drawings, 1 represents the shade-ring—that is, the ring to which the shade is secured—the said ring having formed integrally therewith a series of pairs of webs 2, inclined to the general plane of the circle or perimeter of the shade-ring, one member of each pair of webs being connected at its yielding end, or that farthest removed from the shade-ring, with the nearest member of the next adjacent pair by a clamping-band section 3, the several sections forming collectively a clamping-band by which the socket of the lamp can be seized or embraced. The shade-ring, the clamping-band, and connecting-webs thus form a single integral frame, the said frame being cut or stamped from a single piece of metal. The members of each pair of webs are slightly separated from one another, this arrangement permitting their upper yielding ends—that is, the ends connected to the band-sections—to be drawn together, thus contracting the clamping-band and causing the latter to firmly embrace the lamp-socket introduced between the band-sections, the contracted position of the band-sections being indicated by dotted lines in Fig. 1.

Pivoted at a shoulder 4 of one member of each web is an operating or actuating lever 5, the free end of the short arm of which is pivotally secured to a lug 6, formed along the upper portion of the adjacent edge of the second member of the pair of webs, whereby upon tilting or swinging of the long arm of the several levers in the direction indicated by the arrow in Fig. 1 the yielding ends of the successive pairs of webs will be brought together, thereby drawing together the band-sections and reducing the diameter of the clamping-band (see dotted position of the same in Fig. 1) and firmly embracing or seizing the lamp-socket. To retain the lever in its position after the clamping-band has been contracted, or, in fact, in any position to which it may be tilted, and to thus prevent the clamping-band from expanding upon the release of the lever, I provide the long arm of the latter with a knob 7, which engages one of a series of depressions 8, formed at the base of the web carrying the lug 6, the resilient character of the said long arm always bringing the knob into engagement with said depressions. Of course any mechanical equivalent of this arrangement comes within the spirit of my invention.

Cut from the depending flange of the shade-ring and disposed in the general plane of the circle or perimeter of the ring, but still adhering to the body of the flange, are a series of yielding friction-bands 9, each having a medial inwardly bent or looped portion 9', provided with a series of indentations 15 on its outer surface, for a purpose to be presently described. Cut also from the flange of the shade-ring and located opposite the looped portion of each friction-band and deflected outwardly from the periphery of the ring are the lugs 10 11, between each pair of which is pivotally mounted a shade-clamping wing 12, having an inwardly-deflected member 12, passing inwardly into the ring through an opening of the flange cut from said flange at the base of lug 11, the said member 12' serv-

ing to engage the shade introduced into the ring. Forming a part of the wing 12 and located opposite the indentations of the friction-band 9 is a finger 13, adapted to ride over the indentations of said band, this arrangement serving to retain the wing 12 and its inner member 12′ in any position to which it is tilted and prevent accidental release of the shade from said wings. The means for effecting frictional engagement between the friction-band 9 and the finger 13 of the wing is only one of several constructions by which the said wing may be controlled, it being understood that any equivalent means comes within the spirit of my invention. When the clamping-wings are swung "open," their inner deflected ends or members 12′ normally bear along the inner surface of the shade ring or flange thereof, as seen in dotted lines in Fig. 1. The maximum distance to which the members 12′ can be swung inwardly (for gripping the shade) corresponds to the position when said members are substantially in line with the radius of the circle of the shade-ring, (see Fig. 4,) the wing being limited in its movement in that direction and being prevented from passing beyond this point by the base of the member 12′ coming in contact with the shoulder 14 of the opening cut at the base of the lug 11 for the passage inwardly of the said member 12′ of the oscillating wing.

It is apparent that my device might be altered in many details without departing from the spirit of my invention, and I do not limit myself to making the holder-frame of a single piece of metal.

Having described my invention, what I claim is—

1. In a shade-holder, a suitable shade-ring, a series of webs arranged in pairs carried by the ring, a series of clamping-band sections, connecting the free end of one member of each pair with the nearest member of the next succeeding pair of webs, a controlling-lever pivoted to one member of each pair and having the free end of one arm thereof secured to the free end of the other member of the same pair of webs, and means for retaining the said lever in any position to which it may be tilted, substantially as set forth.

2. In a shade-holder, a suitable shade-ring, a series of webs arranged in pairs the members of which are slightly separated from one another, a series of clamping-band sections connecting the free end of one member of each pair with the nearest member of the next succeeding pair of webs, a controlling-lever pivoted to one member of each pair and having the free end of one arm thereof pivotally secured to the free end of the other member of the same pair of webs, and means for retaining the said lever in any position to which it has been tilted, substantially as set forth.

3. In a shade-holder, a suitable shade-ring, a series of pairs of webs carried by the same, a series of clamping-band sections connecting the nearest members of each pair of webs, a lever pivoted to one member of each pair and having the free end of one arm thereof pivotally secured to the free end of the other member of the same pair, a knob carried by the actuating-arm of the lever, and a series of depressions formed along the second member of the pair of webs with which said knob engages, substantially as set forth.

4. In a shade-holder, a suitable shade-ring, means for securing the same to the socket of a lamp, a series of wings pivoted along the periphery of the ring for gripping the shade introduced thereinto, and suitable devices for frictionally holding the wings in any position to which the same have been tilted, substantially as set forth.

5. In a shade-holder, a suitable shade-ring, a series of wings pivoted along the periphery of the same for gripping the shade introduced thereinto, a finger forming a part of each wing, and a friction-band cut from the peripheral flange of the ring against the surface of which the said finger is adapted to ride, substantially as set forth.

6. In a shade-holder, a suitable shade-ring, a series of wings pivoted along the periphery thereof, an opening cut from the flange of the ring through which one member of each wing is adapted to be inserted for gripping the shade introduced into the ring, a friction-band cut from the ring opposite the wing, a series of indentations formed along the outer surface of said friction-band, and a finger carried by each wing for riding over said indentations and thus retaining the wing in any of its tilted positions, substantially as set forth.

7. In a shade-holder, a suitable shade-ring, a series of pairs of lugs formed along the same, a wing pivoted between each pair of lugs, each wing having two members, an opening cut from the body of the ring for the free passage of the inner member of the wing, a shoulder bounding each side of the said opening against one of which shoulders the inner member of the wing is adapted to come in contact for limiting the tilting of the wing in one direction, a friction-band having a medial resilient looped portion cut from the body of the ring, a finger forming a part of each wing adapted to ride over the said looped portion, the inner member of the wing serving to limit the tilting of the wing in the opposite direction, substantially as set forth.

8. In a shade-holder, a suitable shade-clamping wing comprising a pivotal axis, an outer actuating-arm, an inner deflected member adapted to seize the shade, and a finger projecting inwardly, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

MORRIS D. GREENGARD.

Witnesses:
ALFRED A. MATHEY,
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