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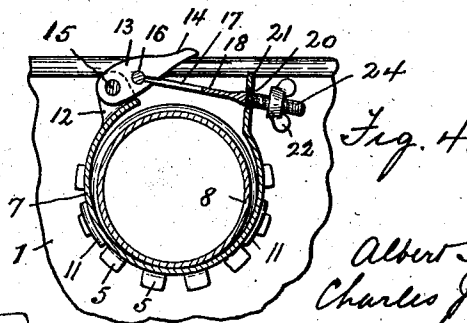
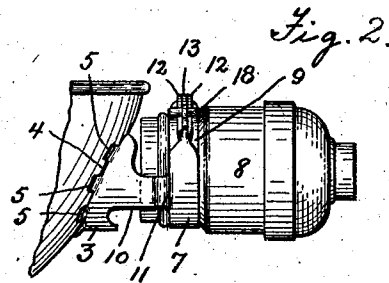
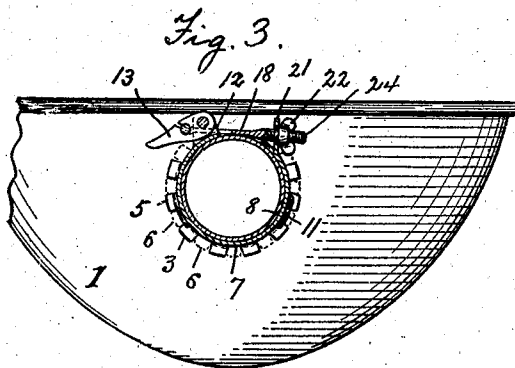
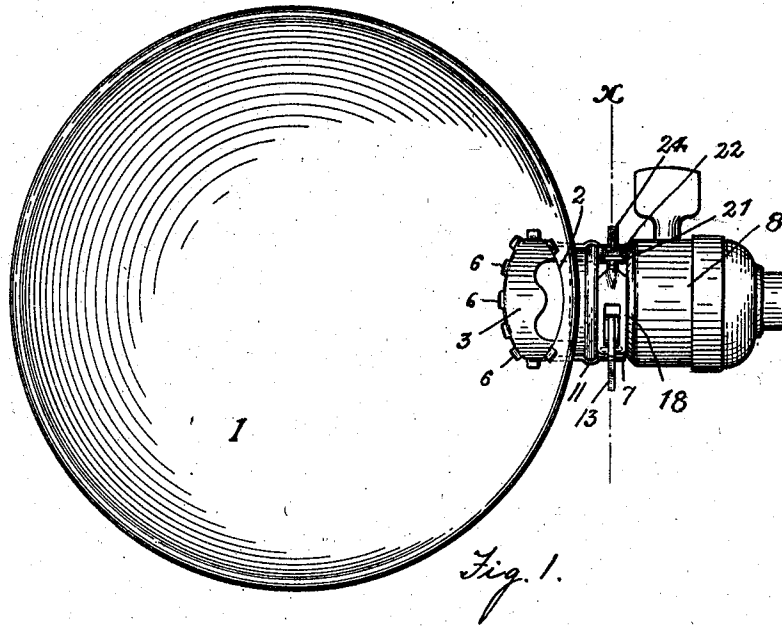
PATENTED MAR. 20, 1906.

A. S. MARTEN & C. J. EICHHORN.

SHADE HOLDER.

APPLICATION FILED FEB. 1, 1904.

4 SHEETS—SHEET 1.



WITNESSES:

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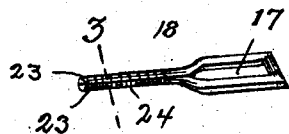
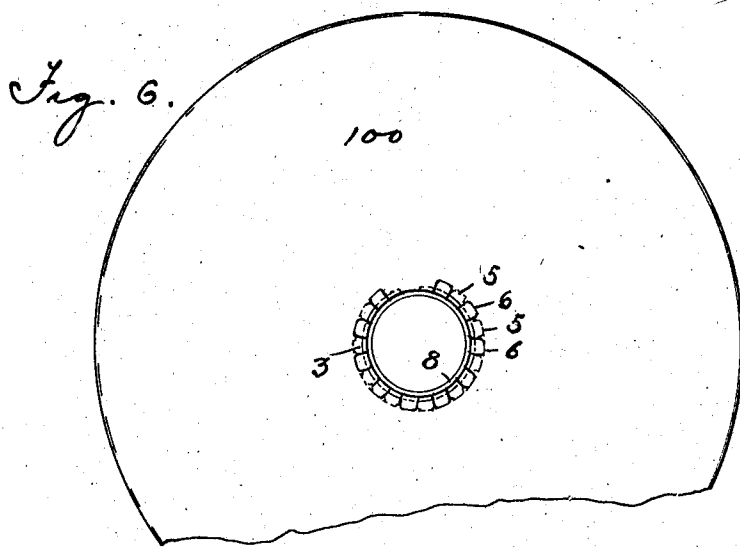
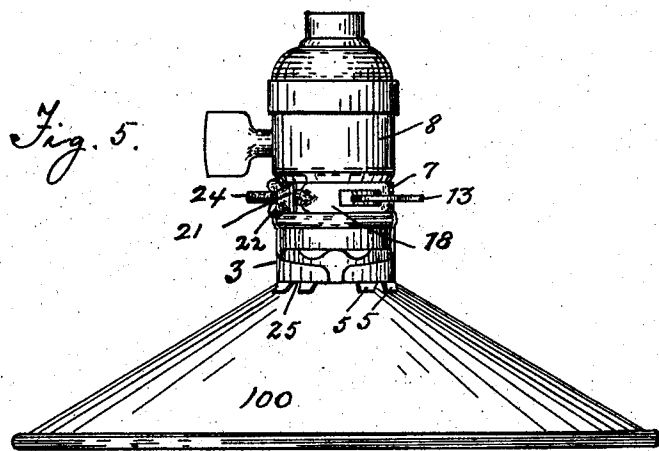
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SHADE HOLDER.

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4 SHEETS—SHEET 2.



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4 SHEETS—SHEET 3.

Fig. 9.

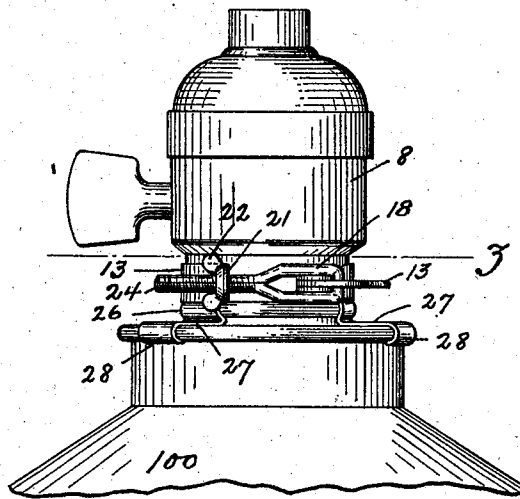


Fig. 10.

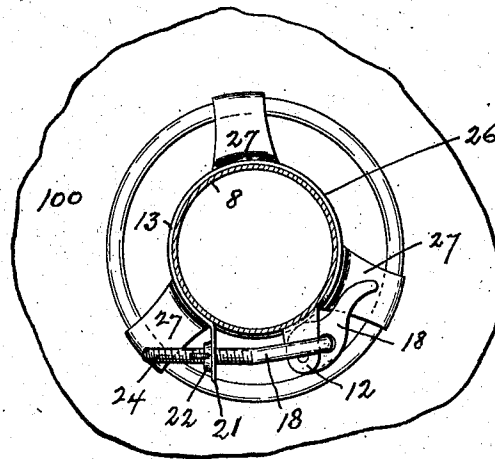


Fig. 8.



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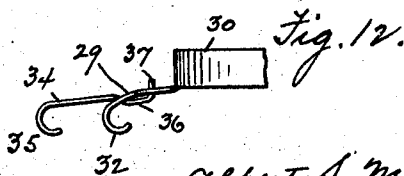
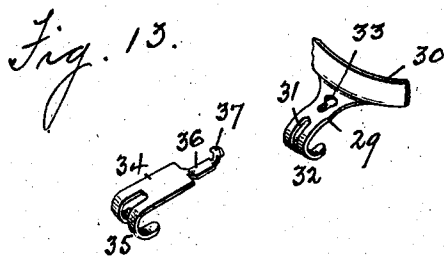
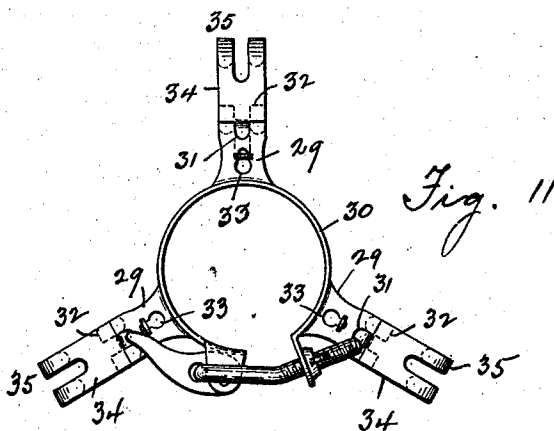
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4 SHEETS—SHEET 4.



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UNITED STATES PATENT OFFICE.

ALBERT S. MARTEN, OF EAST ORANGE, AND CHARLES J. EICHHORN, OF NEWARK, NEW JERSEY, ASSIGNORS TO THE TEA TRAY COMPANY OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

SHADE-HOLDER.

No. 815,545.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed February 1, 1904. Serial No. 191,461.

To all whom it may concern:

Be it known that we, ALBERT S. MARTEN, residing at East Orange, and CHARLES J. EICHHORN, residing at Newark, in the county of Essex and State of New Jersey, citizens of the United States, have invented certain new and useful Improvements in Shade-Holders; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

The objects of this invention are to provide for electric lights an improved shade-holder, to enable the same to be readily attached to and detached from the lamp-socket, to secure a firm and positive support of the shade, and to enable the holder to be adjusted to lamp-sockets which vary in size, to secure a construction which shall be simple and inexpensive to manufacture, and to obtain other advantages and results, some of which may be referred to in connection with the description of the working parts.

The invention consists in the improved shade-holder and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like numerals of reference indicate corresponding parts in each of the several figures, Figure 1 is a view of a side shade or reflector mounted upon a lamp-socket by means of a holder of my improved construction. Fig. 2 is a similar view along a line at right angles to that of Fig. 1. Fig. 3 is a section upon line *x*, Fig. 1, showing the holder clamped; and Fig. 4 is a sectional view similar to Fig. 3, showing the parts of the holder in released or loosened position. Fig. 5 is a side view of my improved holder applied to a conical shade. Fig. 6 is a reverse plan of the same. Fig. 7 is a detail perspective view of a certain adjustable connecting-link. Fig. 8 is a cross-section of said link as upon line *y*, Fig. 7. Fig. 9 illustrates a modified attachment of the holder to a shade; and Fig. 10 is a sectional view upon line *z*, Fig. 9. Fig. 11 shows in plan the said modified attaching

means adapted for both the two-and-a-quarter and three-and-a-quarter standard metal and porcelain shades. Fig. 12 illustrates in side view one of the extensible arms of said attaching means, and Fig. 13 is a perspective view showing one of said arms with its sections separated.

In said drawings, 1 indicates a shade of the type commonly applied to the sides of lamps, said shade being perforated near one edge, as at 2, to receive the end of our improved holder and provide a tubular entrance for the neck of the lamp. (Not shown.) Said holder in its preferred form comprises a piece of sheet metal bent up into a body portion 3 nearly of complete cylindrical form, its end being beveled, as at 4, and provided with outwardly-bent lugs 5 6, adapted to lie alternately inside and outside the edges of the opening 2 of the shade, so that when the whole is pinched tight together a firm union is secured.

At its outer end the body portion 3 of the holder provides a curved band 7, adapted to extend partly around the lamp-socket 8, lying in a groove 9 thereof. Between said band 7 and the beveled end portion 4 the body portion 3 is cut away in order to save stock, leaving only arms 10 10 to connect the said parts, and, furthermore, said arms are bowed outwardly, as at 11, to enable the band 7 to fit nicely into the groove 9 of the lamp-socket. For securing said band 7 of the body of the holder firmly about the lamp-socket one end thereof is provided with lateral outwardly-bent ears 12 12, between which is pivoted a lever 13, adapted to swing in the plane of said band. Said lever at a point between its handle end 14 and pivot 15 is perforated, as at 16, to receive the eye 17 of a link 18, the opposite threaded end 24 of said link extending loosely through a perforation 20 of the outwardly-bent extremity 21 of the opposite end of the band 7 and receiving beyond the same a wing-nut 22. In use, therefore, the wing-nut 22, having been adjusted to the proper point for the lamp-socket in hand, it is obvious that if the lever 13 is swung to throw its handle 14 farthest away from the wing 22, as in Fig. 2, the band 7 will be drawn tight about the lamp-socket because of the eccentric action of the lever. On the other hand, when the lever 13 is thrown backward or toward

the other end of the band from that carrying said lever the link 18 is relaxed and the band 7 allowed to slacken away from the lamp-socket sufficiently so that the shade-holder can be removed therefrom, as will be understood from the drawings.

Preferably the link 18 is formed of half-round material, doubled or bent to form the eye 17, and having the two ends 23 23 laid flatwise together to form a round shank 24, which is then threaded, all as shown particularly in Figs. 7 and 8. Obviously by having the said threaded end 24 of suitable length adjustment of the step-nut 22 will enable the band to be made to fit lamp-sockets of various sizes, and this last-mentioned point is one of the leading features of our invention. We secure a shade-holder which will fit any lamp-socket in use and will fit the same tightly, so that the shade is sure to be held rigidly. The degree of clamping action may also be adjusted as conditions require.

In Figs. 5 and 6 we have shown our improved holder applied to a conical shade apertured at its apex to receive the lamp; but obviously the construction is the same, except that the end 25 of the holder is not beveled, as at 23, in the construction for side shades.

Under some conditions the shade end of the holder may be secured to the shade in other ways than the one shown in Figs. 1 to 6, inclusive, and the holder may, indeed, be made removable from the shade as well as from the lamp-socket, if desired. To illustrate this, we have in Figs. 9 and 10 shown the shade end of the holder 26, providing radially-projecting arms 27, preferably three in number, adapted at their extremities to hook over the rim or bead of the lamp-shade. In this construction the said extremities or fingers 28 are clamped upon the shade by the clamping of the holder proper upon the lamp-socket, or they may be permanently bent onto or otherwise secured to the shade. Said means for clamping the holder to the lamp-socket are preferably, as shown, the same as above described in connection with Figs. 1 to 8.

In order to accommodate our holder to both the two-and-a-quarter and three-and-a-quarter standard metal and porcelain shades, we may under some conditions make the arms of the holder extensible, as shown in Figs. 11 to 13. Here 30 indicates the body of the holder, having arms 29, similar to the arms 27, described above, except that each has a longitudinal slot 31 at the bend of its finger 32, and between said slot and the body portion has a keyhole-slot 33, with its large end next said body portion. Extension-pieces 34 are then provided for the arms 29, each of which extensions has at its outer end a finger 35, to engage a shade and at its opposite end has a narrowed tongue 36, with an

enlarged head 37 at its extremity. When, therefore, the holder is to be employed for a larger size shade, these extensions are applied each by thrusting its tongue 36 through the slot 31 of the arms 29, inserting the headed end 37 into the keyhole-slot 33, and pulling the extension outward to bring said head into the narrow end of the keyhole-slot. The holder is then applied to a shade in the usual manner, the inner fingers 32 being idle.

Having thus described the invention, what we claim as new is—

1. A shade-holder having a curved resilient band adapted to extend partially around a lamp-socket, a lever fulcrumed upon one end of said band to swing in the plane of said band, and a link having one end connected to said lever at a point eccentric to its fulcrum and the other end adjustably connected to the end of said band not having said lever.

2. A shade-holder having a curved resilient band adapted to extend partially around a lamp-socket, one end of said band being bent outward and perforated, a lever fulcrumed upon the other end of said band to swing in the plane thereof, and a link having one end connected to said lever at a point eccentric to its fulcrum and its other end threaded and extending loosely through the said perforated end of the band, and a nut on said threaded end.

3. A shade-holder having a curved resilient band adapted to extend partially around a lamp-socket, one end of said band having lateral ears bent upwardly outward and the other end being bent upwardly outward at its extremity and perforated, a lever pivoted between said ears, and a link extending from a point of said lever eccentric to its fulcrum to the said perforated end of the band and being adjustably secured there.

4. A shade-holder having a body portion providing a curved resilient band adapted to receive a lamp-socket, a lever pivoted upon one end of said band to swing in the plane thereof, and a link extending from the other end of the band to a point of said lever eccentric to its pivot and being laterally bent to pass said pivot and lie nearer to the band than does said pivot when the lever is closed against the band.

5. A shade-holder comprising a curved resilient body portion adapted to extend partially around a lamp-socket, arms projecting radially outward from said band and being adapted to engage a shade, extension-arms adapted to be removably attached to said arms and being adapted to engage a shade, and means for connecting the ends of said band and clamping the same around a lamp-socket.

6. The combination with a shade-holder having radial arms bent at their ends to form shade-grasping fingers, each of said arms being longitudinally slotted at its bent end and

having between said end and the body portion of the holder a keyhole-slot arranged with its large end next said body portion, of extension - arms each being adapted at its
5 outer end to engage a shade and having at its other end a tongue adapted to pass through the said end slot of an arm and at the end of said tongue a head to engage said keyhole-slot.

In testimony that we claim the foregoing 10
we have hereunto set our hands this 26th day
of January, 1904.

ALBERT S. MARTEN.
CHARLES J. EICHHORN.

Witnesses:

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CHARLES H. PELL.