No. 897,194. PATENTED AUG. 25, 1908.

J. CRUIKSHANK.

LAMP SHADE HOLDER.

APPLICATION FILED FEB. 25, 1908.

Fig. 1

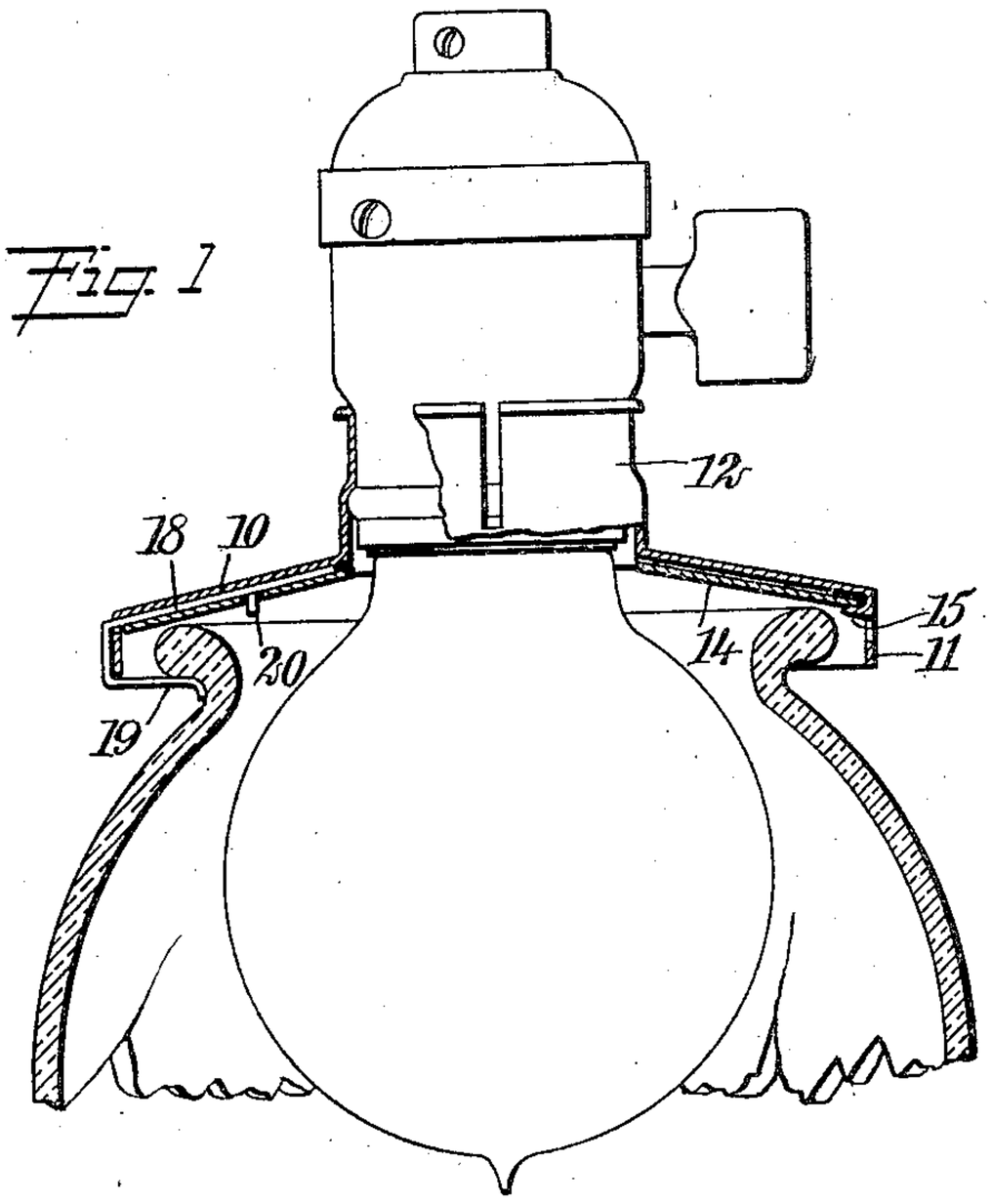


Fig. 2

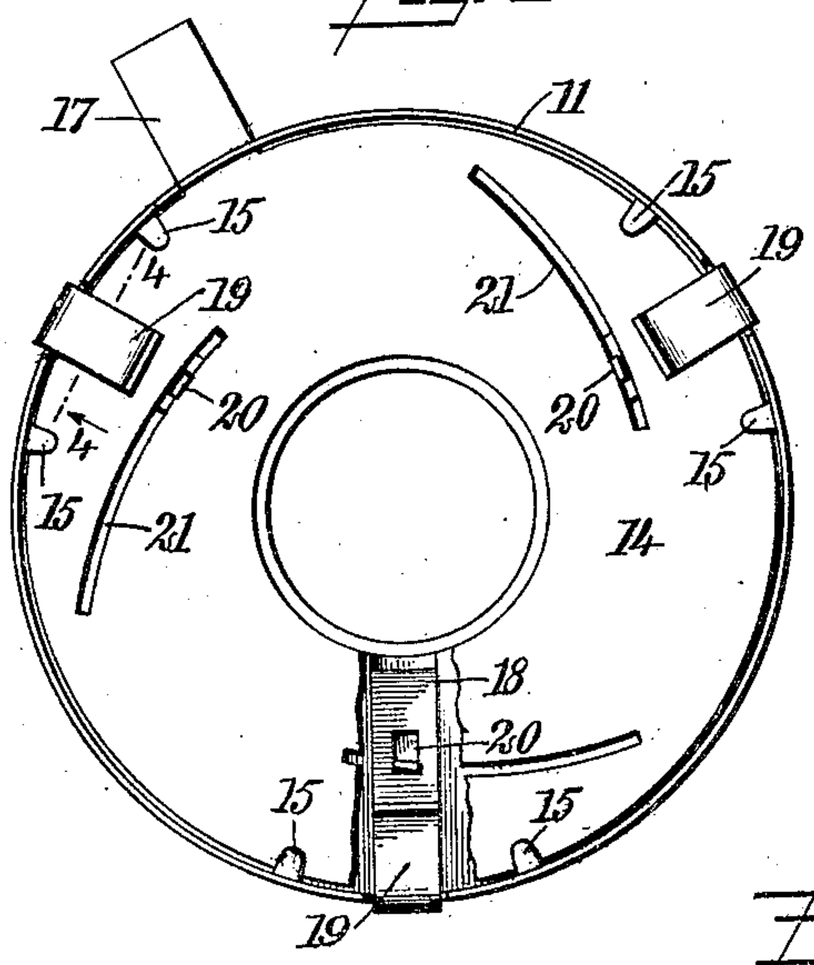


Fig. 3

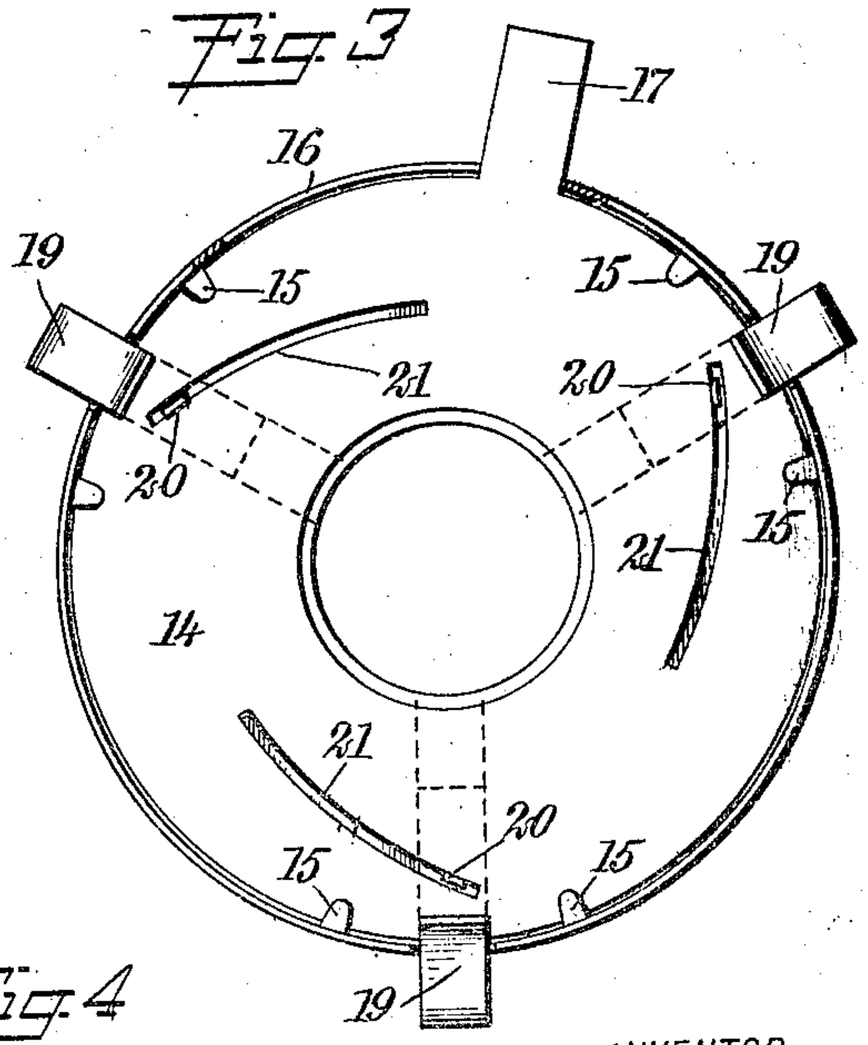
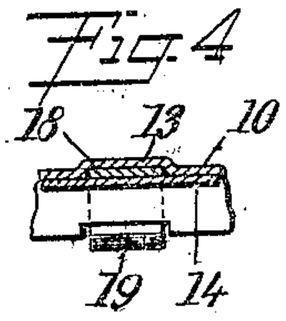


Fig. 4



WITNESSES

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LAMP-SHADE HOLDER.

No. 897,194. Specification of Letters Patent. Patented Aug. 25, 1908.

Application filed February 25, 1908. Serial No. 417,673.

REISSUED

To all whom it may concern:

Be it known that I, JOHN CRUIKSHANK, a citizen of the United States, and a resident of Shamokin, in the county of Northumberland and State of Pennsylvania, have invented a new and Improved Lamp-Shade Holder, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in holders for supporting lamp shades, and more particularly to a holder especially adapted for use in connection with an incandescent electric light. In the common form of construction, it is customary to provide a plurality of radially-disposed screws movable into and out of engagement with the shade, but in my improved construction, all screws are eliminated, all of the hooks which take their place are moved simultaneously, and a single movement of a single operating member serves for the operation of all of the gripping members.

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 figures, and in which

Figure 1 is a section through a shade holder constructed in accordance with my invention and illustrated as being applied to an incandescent lamp and shade therefor; Fig. 2 is a view of the under side of the holder with the gripping members or hooks in their operative or gripping position; Fig. 3 is a view similar to Fig. 2, but showing the gripping members in their inoperative or outer position; and Fig. 4 is a sectional detail on the line 4—4 of Fig. 2.

My improved holder is extremely simple in construction, the entire device being preferably formed of two plates of sheet metal cut and stamped to the desired form, and supporting a plurality of gripping members, which are brought into or out of position by the movement of one of said plates in respect to the other. In the specific form illustrated, one of these plates 10, constitutes the base and is substantially annular in form. At the outer edge of this base there is a depending flange 11, and at the opposite edge there is a collar 12, slotted and beaded to adapt it to the socket of an incandescent electric light, so as to be resiliently held in place. It is evident that the collar may be fastened to the socket in any suitable manner desired. The base is stamped to form a plurality of radially-disposed beads or grooves 13 for the reception of the radially-movable gripping members or hooks hereinafter described.

The grooves or beads are of a depth and width substantially equal to the thickness and width of the gripping members, as is clearly shown in Fig. 4, whereby after the gripping members are inserted in place their outer surfaces will lie substantially flush with the inner surface of the plate 14. The other sheet metal plate 14 is annular in form and disposed adjacent the under surface of the plate 10. The plate 14 is held in close engagement with the plate 10 or base in any suitable manner, as, for instance, by small lugs 15, stamped out of the annular flange 11 and extending inwardly into engagement with the under side of the plate 14. These lugs hold the plates in engagement with each other but permit the free rotation of one in respect to the other. The flange 11 for a limited distance is provided with a slot 16, through which extends a handle 17, by means of which the plate 14 is rotated, and which also serves to limit the extent of said rotation.

Disposed within each of the radial grooves in the under surface of the base or plate 10, I provide a plurality of gripping members or hooks 18, each of which is preferably formed of a sheet metal strip lying within the groove and extending through an aperture in the base of the flange 11. The outer end of each strip extends down adjacent the outer surface of the flange and is bent inwardly to form a hook or operating end 19. Each strip is provided with a lug 20, preferably integral with the strip and formed by stamping upwardly a portion thereof, and each of these lugs extends through a corresponding slot or groove 21 in the plate 14 or operating member. The slots are symmetrically disposed in respect to the center of the shade holder, and each extends diagonally from adjacent the periphery of the plate to adjacent the center thereof. The slots or grooves may be of any form desired, that is, either straight or curved, but their inner ends preferably extend substantially tangentially of the collar 12. By means of the handle 17, the plate 14 may be rotated, and due to the shape of the slots or grooves and their engagement with the lugs 20 of the

gripping members, the latter are moved simultaneously either inwardly or outwardly during said rotation.

The plates 10 and 14 are preferably conical in form, so that as the gripping members are drawn inward longitudinally, the inwardly-turned hook ends 19 will be drawn toward the plate 14, as well as into engagement with the shade. Thus, the shade is not only grasped between the ends of the hooks but is also grasped between the hooks and the inner surface of the plate 14, as the latter is rotated by the handle 17. The hooks may be retained in operative position by any suitable means, as, for instance, a slight depression may be provided at the end of the slot 16 into which the handle 17 may enter.

As will be noted, the holder is very simple in construction, and composed of a minimum number of parts. The base serves not only for the attachment of the device to the socket, but also serves as guideways for the gripping members, and serves for locking the operating plate thereto and limiting its rotation. The operating plate or member is formed with its handle integral therewith, and due to its shape and its engagement with the gripping members, the latter are operated simultaneously. The operating member is also very simple, as the guiding portion, the gripping portion and the operating lugs are all formed from a single piece of metal. The grooves are so formed that the ratio of the radial movement of the gripping members to the rotary movement of the operating member, varies, so that the movement of the gripping members is slower the nearer they approach the center, and thus a greater leverage is obtained and the liability of the gripping members working loose is made impossible.

Various changes may be made in the construction of the device, and within the scope of the appended claims, without departing from the spirit of my invention.

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

1. A shade holder including two relatively movable conical plates, means for securing one of said plates to a lamp, a plurality of gripping members each having a guiding portion interposed between said plates and radially movable in respect thereto and a gripping portion disposed at an angle to said guiding portion, one of said conical plates having a plurality of slots therein and each of said guiding portions having a lug extending through the corresponding slot and means for rotating one of said plates in respect to the other, whereby said gripping members are moved radially simultaneously.

2. A shade holder including a conical plate having a collar at the apex thereof for engagement with a lamp and having an annular flange adjacent the base thereof, said plate being stamped to form a plurality of radially-disposed grooves in its inner surface and extending from said collar to said flange, and said flange being provided with apertures adjacent the ends of said grooves, a second conical plate disposed adjacent the inner surface of the first-mentioned plate and rotatably mounted in respect thereto, a plurality of gripping members each having a guiding portion intermediate said plates and within the corresponding groove in the first-mentioned plate and extending through the opening in said flange and having a hook extending inwardly in substantially the plane of the lower edge of said flange, and means whereby the rotation of the second-mentioned plate simultaneously moves said gripping members radially in their grooves.

3. A shade holder, comprising two substantially conical plates, one of said plates having a plurality of radially-disposed grooves in the surface thereof adjacent the other plate, means for securing one of said plates to a lamp, a plurality of gripping members, each having a guiding portion disposed intermediate said plates and within one of said grooves and a hook portion, all of said hook portions lying in substantially the same plane, and means whereby the rotation of one of said plates in respect to the other, moves said gripping members radially and raises said hook portions toward said conical plates to grip a shade between said hook portions and between said plates and said hook portions.

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

JOHN CRUIKSHANK.

Witnesses:
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JOHN J. W. SCHWARTZ.