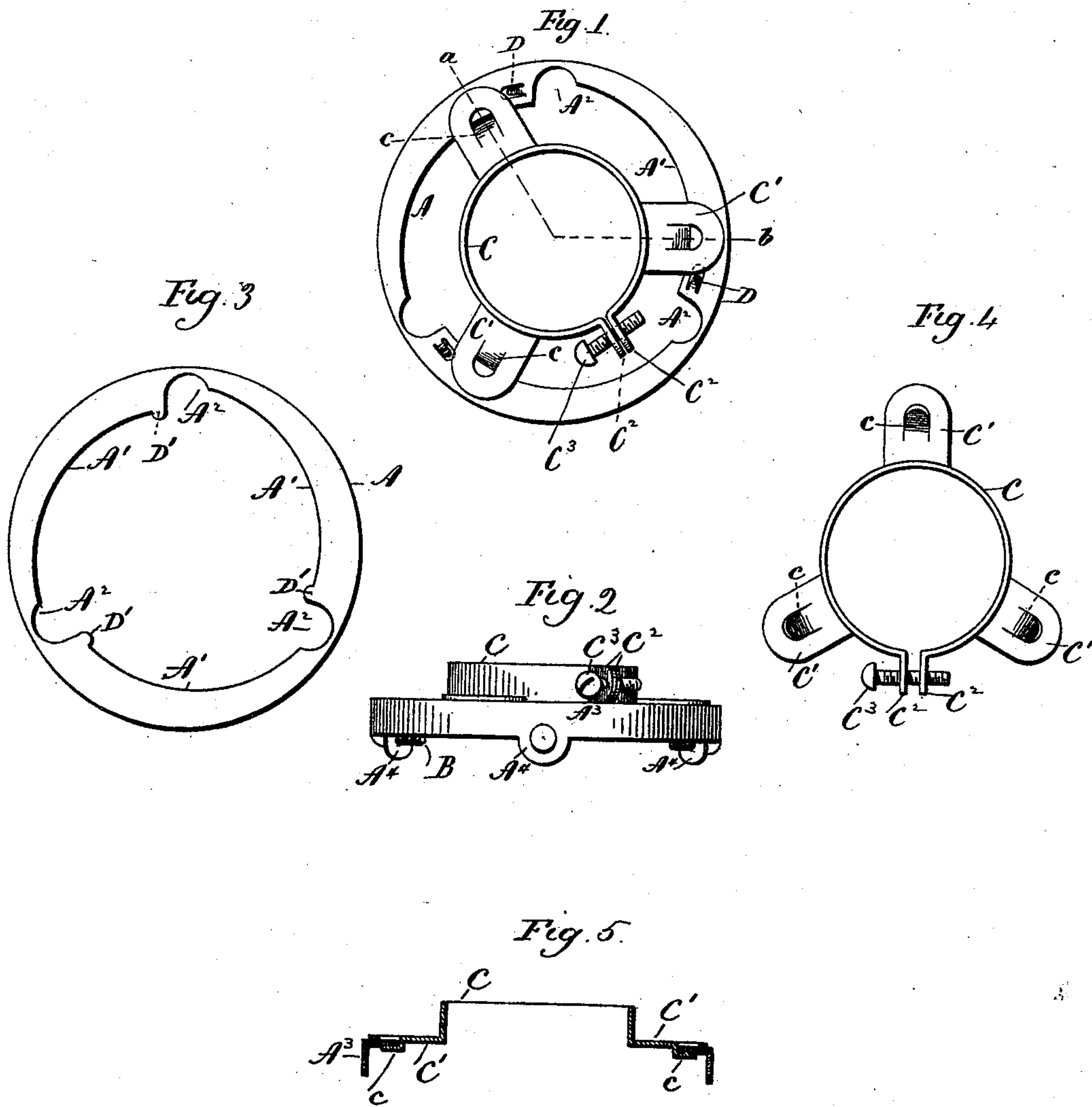


(No Model.)

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SHADE HOLDER FOR INCANDESCENT LAMPS.

No. 527,623.

Patented Oct. 16, 1894.



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# UNITED STATES PATENT OFFICE.

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## SHADE-HOLDER FOR INCANDESCENT LAMPS.

SPECIFICATION forming part of Letters Patent No. 527,623, dated October 16, 1894.

Application filed May 31, 1894. Serial No. 512,953. (No model.)

*To all whom it may concern:*

Be it known that we, EDGAR A. RUSSELL and NATHAN W. CRANDALL, of Wallingford, in the county of New Haven and State of Connecticut, have invented a new Improvement in Shade-Holders for Incandescent Electric Lamps; and we do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a plan view of a shade-holder constructed in accordance with our invention; Fig. 2, a view thereof in side elevation; Fig. 3, a detached plan view of the shade-ring; Fig. 4, a corresponding view of the clamping-ring; Fig. 5, a sectional view of the two rings when combined together, on the line *a—b* of Fig. 1.

Our invention relates to an improvement in shade-holders for incandescent electric lamps, the object being to provide an article of superior simplicity, cheapness and convenience, having a wider range of concentric adjustment to lamps of different sizes.

With these ends in view, our invention consists in a shade-holder having a shade-ring, and a clamping-ring made independent thereof, and adapted to be attached thereto and removed therefrom at pleasure, without removal from the shade and lamp respectively, as each of the parts is complete in itself.

Our invention further consists in a shade-holder having certain details of construction and combinations of parts as will be hereinafter described and pointed out in the claims.

In carrying out our invention, as herein shown, we construct the body *A* of the shade-ring with a large central opening, the walls of which are formed by three corresponding cams *A'* *A'* *A'*, separated from each other by radial clearance slots *A<sup>2</sup>* *A<sup>2</sup>* *A<sup>2</sup>*, which open inward and extend outward beyond the cams. The flange *A<sup>3</sup>* of the ring is made integral with the body thereof, and provided, as shown, with three depending ears *A<sup>4</sup>* *A<sup>4</sup>* *A<sup>4</sup>*, which receive clamping-screws *B* *B* *B*. We do not, however, limit ourselves to the particular con-

struction of the flange, or its adaptation to hold a shade.

The clamping-ring *C* is made from a single piece of metal, and constructed with three radial arms *C'* *C'* *C'*, arranged at equal distances from each other, and each having a locking finger *c*, made integral with it, and set down below its plane. The ring is also provided, as shown, with two ears *C<sup>2</sup>* *C<sup>2</sup>*, located at its ends, and receiving the adjusting screw *C<sup>3</sup>*, which may or may not be used, as desired. As shown in Fig. 1, the shade-ring is constructed with three downwardly projecting stops *D* *D* *D*, arranged at the inner ends of its three cams, in position to be engaged by the locking fingers of the radial arms of the clamping rings, which is thus arrested in its rotary movement before its locking fingers reach the clearance spaces *A<sup>2</sup>* of the shade-ring.

In Fig. 3 of the drawings, the shade-ring is provided with three correspondingly arranged, but inwardly projecting stops *D'* *D'* *D'*. We do not limit ourselves to using these stops at all, nor to forming them as shown, but by preference we shall employ stops of some character in the place indicated.

It will be observed that the shade may be applied to the shade-ring and secured thereto without any reference to the clamping ring, and on the other hand that the clamping-ring may be applied to the lamp and clamped thereupon without any reference to the shade-ring.

To connect the clamping-ring and shade-ring, the former is applied to the latter with its locking fingers *c* in line with the clearance slots *A<sup>2</sup>*, through which the fingers pass down below the inner face of the body of the shade-ring. When now the clamping ring and the shade-ring are rotated in opposite directions, or when either of the rings is rotated alone, the locking fingers will be caused to engage with the cams *A'* of the shade-ring in such a manner that the said cams will operate to contract the clamping-ring and bind the two rings together. Then, to disconnect the two rings it is simply necessary to turn one or the other or both of them, until the locking fingers of the clamping ring are brought into line with the clearance slots of the shade-ring, thus per-



mitting the two rings to separate. It will thus be seen that the shade-ring and clamping-ring may be connected and disconnected at pleasure, and without disturbing the shade and lamp, with obvious convenience to the user of the lamp.

We do not limit ourselves to making the shade-ring and clamping-ring in the exact form shown. Thus, the number of the cams of the shade-ring and the number of the arms of the clamping-ring might be varied in correspondence. We would therefore have it understood that we do not limit ourselves to the exact construction shown and described, but hold ourselves at liberty to make such changes and alterations as fairly fall within the spirit and scope of our invention. We are, however, aware that a shade-holder, in which jaws for clamping the edge of the globe are drawn toward and moved away from each other by means of long cam-slots formed in the body of the holder, is old.

In another application filed by us on the 18th day of June, 1894, and serially numbered 514,936, we have shown, described and claimed a shade-holder for incandescent electric lamps, of the same general construction as the holder shown, described and claimed herein. In that other case, however, the rings are constructed for their permanent, though loose attachment, and the claims are limited to such a construction.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A shade-holder for incandescent electric lamps, having a shade-ring adapted to have a shade directly connected with it, and a clamping-ring made independent thereof, each ring being complete in itself, and the two rings being adapted to be connected and disconnected at pleasure without disturbing the connection of the shade and lamp to which they are respectively applied, substantially as described.
2. In a shade-holder for incandescent electric lamps, the combination with a shade-ring, of a clamping-ring provided with radial arms

furnished with locking fingers which are engaged with the shade-ring for connecting the two rings together, substantially as described.

3. In a shade-holder for incandescent electric lamps, the combination with a shade-ring of a clamping-ring, one of the said rings being furnished with cams, and the other ring adapted to engage therewith for coupling the two rings together, and concentrically adjusting the clamping ring substantially as described.

4. In a shade-holder for incandescent electric lamps, the combination with a shade-ring having its body constructed with a large central opening, the walls of which are formed by long cams, of a clamping ring provided with radial arms having locking fingers which engage with the said cams for connecting the two rings together, substantially as described.

5. In a shade-holder for incandescent electric lamps, the combination with a shade-ring having cams which are separated from each other by clearance slots, of a clamping-ring constructed with locking fingers arranged to pass through the said slots for engagement with the said cams whereby the two rings are connected together, substantially as described.

6. In a shade-holder for incandescent electric lamps, the combination with a shade-ring adapted to have a shade connected with it, of a clamping ring adapted to be applied to the socket of an electric lamp, the two rings being made independent of each other and adapted to be coupled together by rotating one upon the other, and one being provided with stops for limiting such rotation, substantially as described.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

EDGAR A. RUSSELL.  
NATHAN W. CRANDALL.

Witnesses:

HARRY C. SPRING,  
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