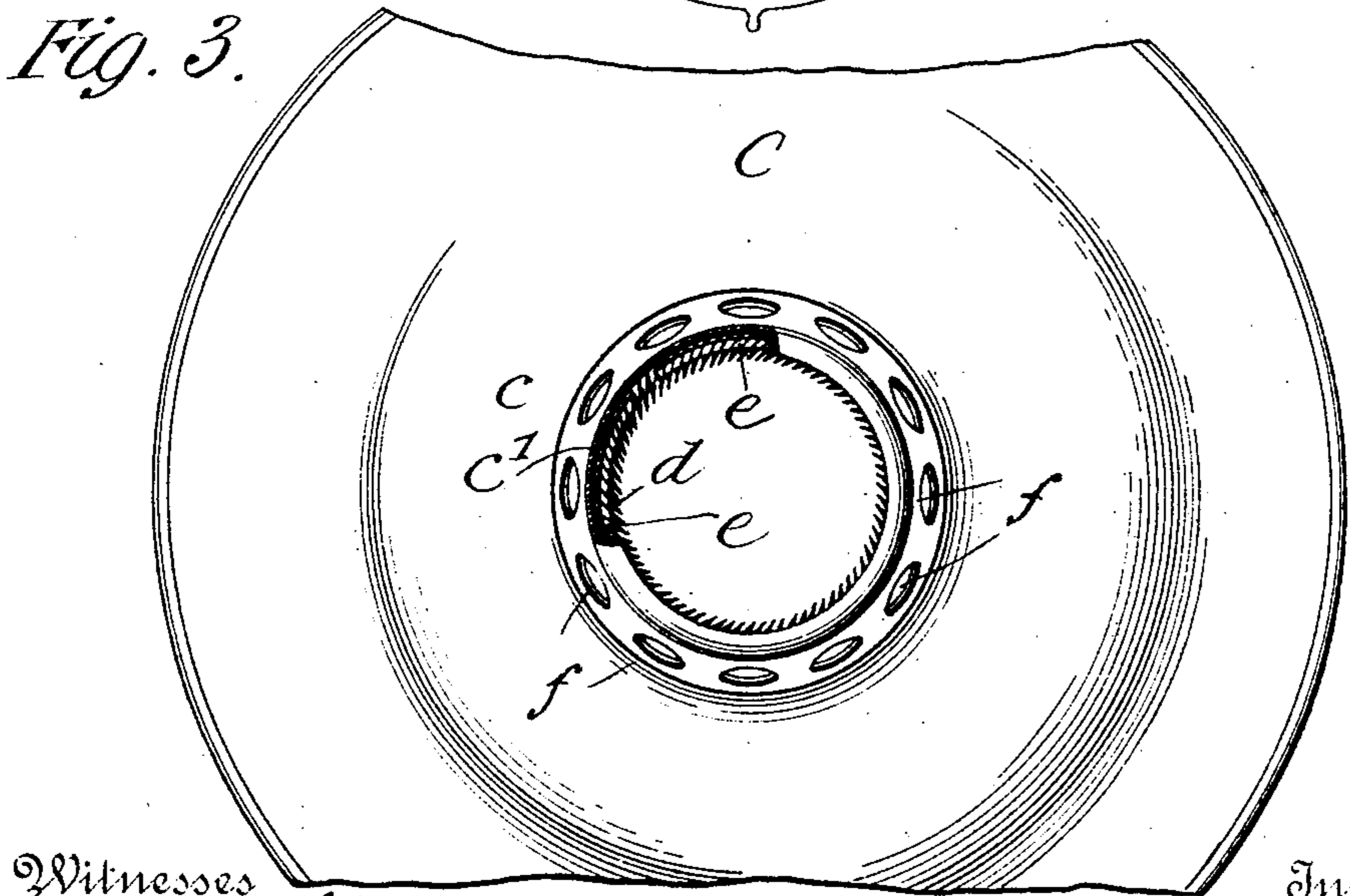
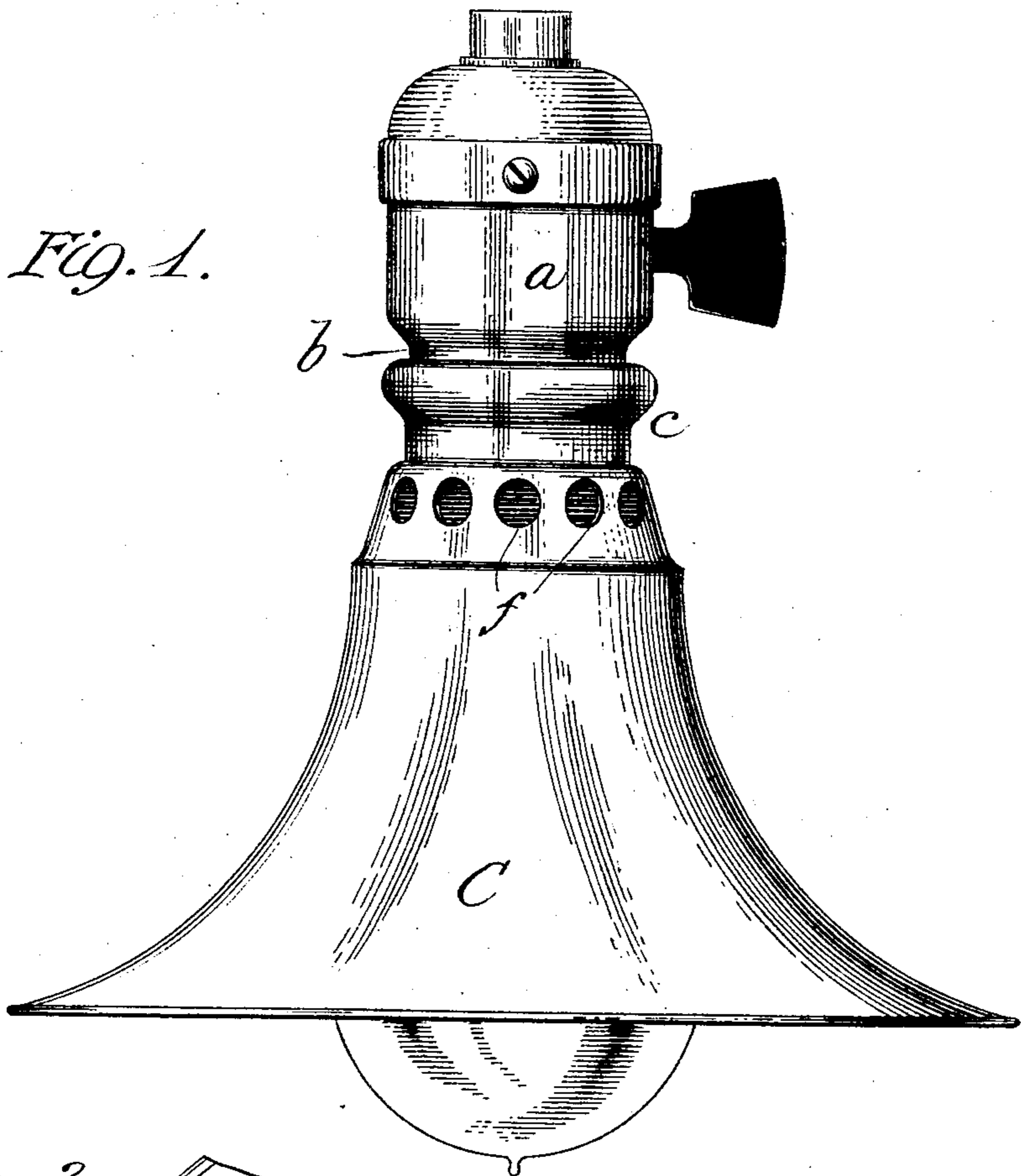


J. H. DALE.  
INCANDESCENT LAMP SHADE HOLDER.  
APPLICATION FILED DEC. 20, 1904.

2 SHEETS—SHEET 1.



Witnesses  
Frank S. Ober  
Waldo M. Chapin

Inventor  
John H. Dale  
By his Attorneys  
Rosenbaum & Strickbridge

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2 SHEETS—SHEET 2.

Fig. 2.

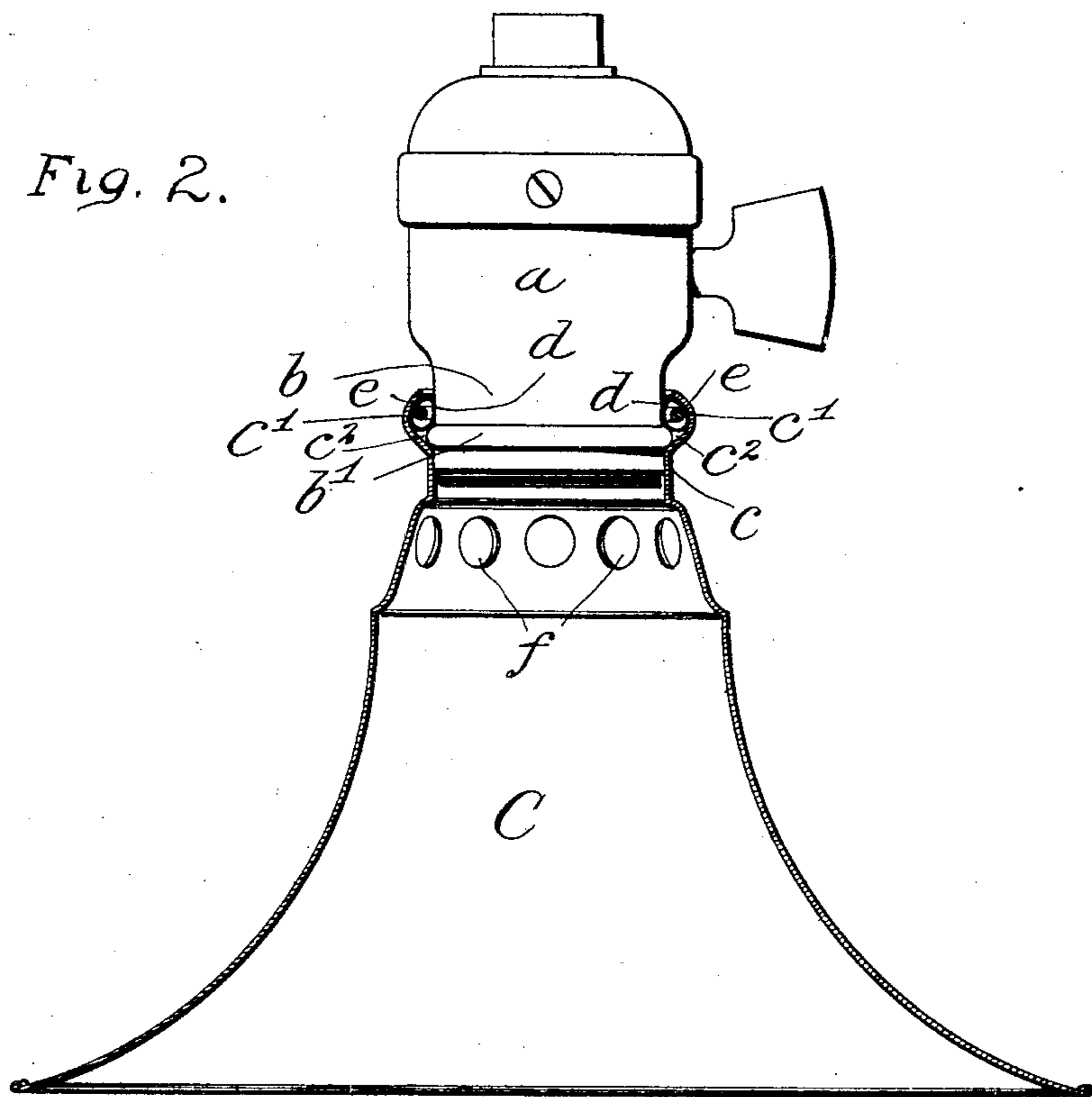
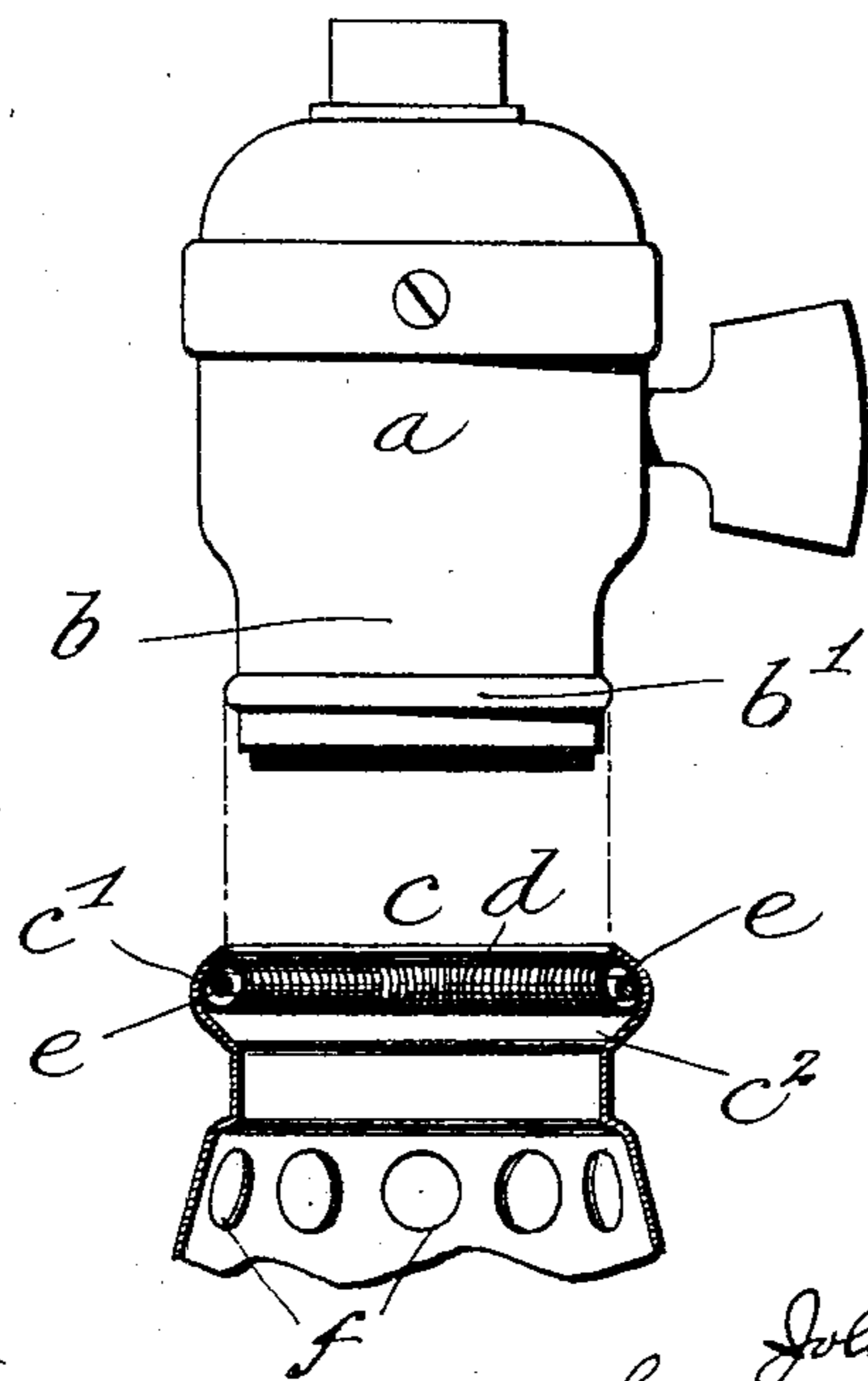


Fig. 4.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN HENRY DALE, OF NEW YORK, N. Y.

## INCANDESCENT-LAMP-SHADE HOLDER.

No. 803,883.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed December 20, 1904. Serial No. 237,642.

*To all whom it may concern:*

Be it known that I, JOHN HENRY DALE, a citizen of the United States, residing at the city of New York, in the borough of Manhattan and State of New York, have invented certain new and useful Improvements in Incandescent-Lamp-Shade Holders, of which the following is a full, clear, and exact description.

This invention relates to shade-holders for incandescent electric lamps, the object being to provide a cheap and efficient form of holding device incorporated with the shade itself and adapted to be applied directly to the casing of the ordinary lamp-socket.

The construction in detail constituting the invention will be described with reference to the accompanying drawings and pointed out in the claims.

Figure 1 is a side elevation of the complete fixture mounted in operative position. Fig. 2 is a vertical section of the same, the lamp being omitted. Fig. 3 is a plan of the shade with a part of its holding device broken away, and Fig. 4 is a section of the holding device of the shade and an elevation of the lamp-socket separated from each other.

The ordinary incandescent-lamp socket comprises a casing *a*, having a contracted portion or neck *b* to receive the neck of the lamp. This contracted portion ordinarily is provided with an annular external bead *b'*, the function of which is to prevent the ordinary shade-holder, which is clamped around the neck of the socket above the bead, from slipping off. In carrying out my invention I make use of this same bead, but in a novel way.

*C* is a lamp-shade which I prefer to make of metal, such as brass or aluminium, and provide with an internal refracting-surface. The upper or contracted portion of the shade is provided with an extension or neck *c*, having an internal diameter such as to fit neatly over the neck *b* of the lamp-socket. This neck *c* terminates in an annular exterior bead forming an interior groove *c'*, which groove is somewhat longer than it is deep, and its extreme edge is of such diameter as to pass over the bead *b'* on the socket. In this groove *c'* is seated a metallic helix *d*, held in place by an open spring-ring *e*, passing through it and having a tendency to open, thus holding the helix in the groove *c'*. The diameter of the turns of the helix is less than the space across the groove *c'*, so that an open space *c''*

will be left below the helix and within said groove. The turns of the helix are also arranged obliquely, so that when a radial pressure is applied to their inner sides they will yield and tend to flatten down. Being in the form of a spiral, however, this flattening down will be resisted by the resiliency of the helix.

The shade is adjusted to the socket by passing its contracted end over the neck *b* of the socket, forcing it on until the bead *b'* passes beyond the helix *d* and becomes seated in the space *c''*, immediately beneath the helix. The natural resiliency of the spring tends to throw its turns into a radial position, and thus a pressure is exerted upon the upper edge of the bead *b'*, which serves to hold the shade in place upon the socket, preventing its removal therefrom except by exercising considerable force. The helix will when the shade is placed in position be interposed between the bead and the walls of the groove, particularly the wall at the upper portion, and acts to chock the bead in the groove. When necessary, however, the shade can be removed by simply drawing it downward or away from the socket, whereupon the helix will flatten down or yield sufficiently to allow of the escape of the shade. It will be seen that this shade-holder can be adjusted very quickly to the socket and that no screws are required, that the holder is not a separate piece distinct in itself, and that the whole device presents a neat and ornamental appearance when assembled. The openings *f* are for ventilating purposes.

It will be understood that the special fastening device comprising the bent-over helix seated in the groove of the shade may be used on an individual holder separate from both the shade and the socket—that is to say, the holder might consist of a structure similar in shape to the upper part of the shade and be attached to the shade by the ordinary screws and flanges; but I prefer to use my invention in the manner herein particularly described.

Having described my invention, I claim—

1. The combination with a lamp-socket having a neck portion and an annular external bead, of a shade having a neck portion adapted to fit on the socket-neck portion and having an internal-grooved portion at the end of the neck, whose end diameter is larger than its neck portion, to pass over the said socket-bead, and a coil-spring located in the shade-grooved portion arranged to engage

the socket-bead when the members are connected and force the bead into engagement with the groove portion adjacent the neck.

5 2. The combination with an incandescent-lamp socket, comprising a cylindrical portion having a circumferential bead, of a shade having a hollow cylindrical portion for receiving said socket to a point beyond said bead and having an internal annular groove

of larger area than the bead, and a helical spring having tangentially-disposed helices within said groove for engaging said bead.

In witness whereof I subscribe my signature in the presence of two witnesses.

JOHN HENRY DALE.

Witnesses:

HARMAN S. SALT,  
C. Row.