

(No Model.)

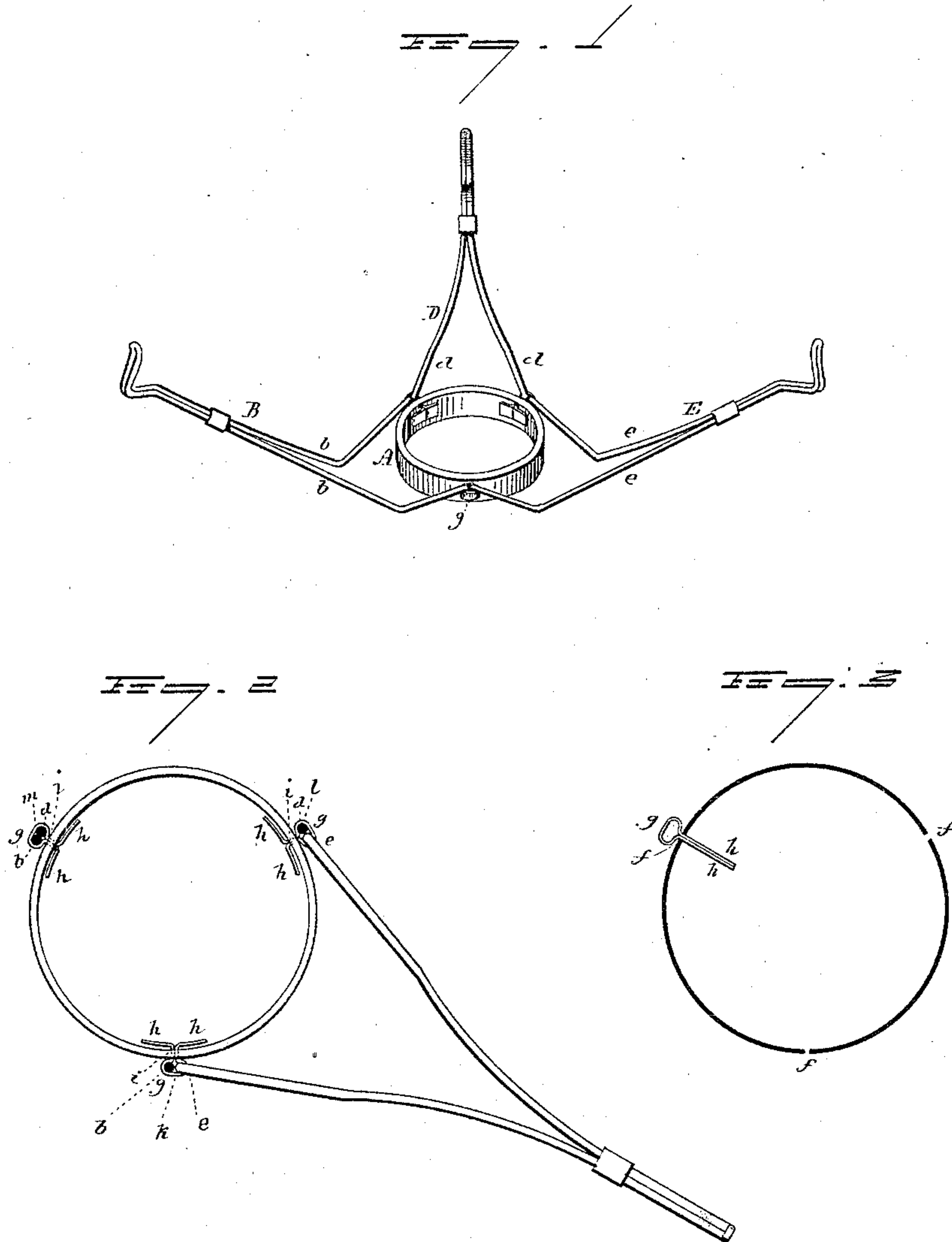
2 Sheets—Sheet 1.

O. N. PERKINS.

SHADE HOLDER.

No. 286,063.

Patented Oct. 2, 1883.



Witnesses
J. H. Murray
J. C. Earle

Orson N. Perkins
Inventor
By Atty. J. H. Earle

(No Model.)

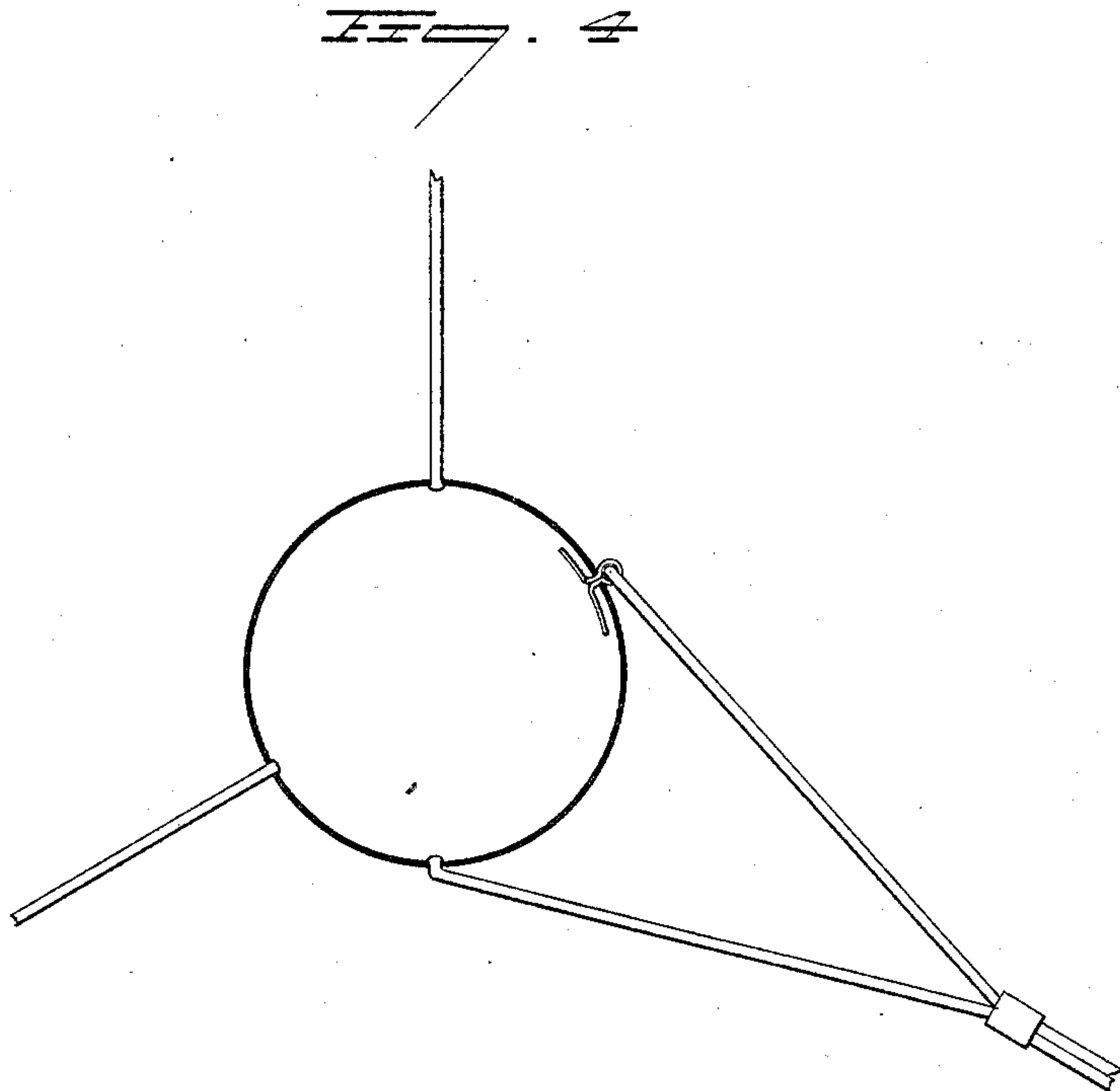
2 Sheets—Sheet 2.

O. N. PERKINS.

SHADE HOLDER.

No. 286,063.

Patented Oct. 2, 1883.



Witnesses,

J. H. Shumway
J. S. Earle

Orson N. Perkins,
Inventor.
By Atty.
J. M. Cole.

UNITED STATES PATENT OFFICE.

ORSON N. PERKINS, OF MERIDEN, CONNECTICUT, ASSIGNOR TO EDWARD MILLER & CO., OF SAME PLACE.

SHADE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 286,063, dated October 2, 1883.

Application filed August 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, ORSON N. PERKINS, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Shade-Holders; and I do hereby declare the following, when taken in connection with 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 perspective view; Fig. 2, sectional plan view; Fig. 3, a transverse section through the ring, showing the introduction of the loop; Fig. 4, a modification.

This invention relates to an improvement in the construction of the article attached to gas and lamp burners to support a shade or globe, and commonly called a "shade-holder," the object being to construct the holder so that the collar will make strong self-adjusting frictional contact with the lamp collar or burner to which it is attached; and it consists in the construction, as hereinafter described, and more particularly recited in the claims.

A represents the collar or socket, which in internal diameter is somewhat larger than the lamp collar, burner, or whatever it may be that the holder is to be attached to. I prefer three supporting-arms, B D E, and these arms I make from wire, doubled at the extreme end and bent to receive the edge or flange of the shade in substantially the usual manner for spring-arm holders, the legs spread as they approach the collar, forming, respectively, two branches, *b b*, *d d*, *e e*. Through the collar I make as many vertical slits *f* as there are arms, and through each of these slits I introduce the two ends of a narrow strip of sheet metal, as seen in Fig. 3, the strip doubled to form a loop, *g*, upon the outside of the collar. Then upon the inside I bend the two ends *h h* of the loop backward and toward the surface, but so as to form a shank, *i*, between the loop and the turned-down portions, whereby the loop may have a certain amount of radial play with relation to the ring. Then into one of the loops, as *k*, Fig. 2, I introduce and secure the ends of the two corresponding legs, *b e*, of the arms B E. Into the second loop, *l*, I secure

the other leg *e* of the arm E, and one of the legs *d* of the arm D, and into the other loop, *m*, I introduce the end of the other leg *d* of the arm D, and also the other leg *b* of the arm B, as shown. The legs of each arm are sprung apart in its introduction, their elasticity causing them to react and force the loops toward the collar, carrying the turned-down ends of the loops *h* inward, as seen in Fig. 2, but readily yielding, so that the loops, with their respective legs, may be forced outward. The diameter or circumference within the turned-down portions of the loops is somewhat less than the diameter of the collar or the burner to which the holder is to be attached, and so that in applying the holder to such collar or burner the loops are forced outward, and then when set upon the collar or burner the reaction of the legs forces the loops inward, bringing their turned-down portions into strong frictional contact with the collar or burner, whereby the holder will be firmly secured to the lamp or burner.

I prefer to construct all the loops with radial play, as I have described, so that all the legs will act as springs; but one only of the loops may be thus free for radial movement, the others being secured to the collar, that one affording sufficient support for the holder; but in such case there will be less extent of adjustment than when the three loops are made free for radial movement. The two parts or legs of the arms are bound together between their extreme ends and the collar, as at *n*, whereby their strength or elasticity is increased. One arm only may be thus divided, the other two arms being rigid, the one division of the said divided arm attached to the loop, so as to impart to the loop the same inward radial pressure, as seen in Fig. 4. I also prefer the loop-like connection between the arms and socket; but this connection may be otherwise made. I therefore do not wish to limit myself to the combination of three arms thus constructed, or to the necessary union of either two arms in the same loop, it only being essential to my invention that the holder shall have one of its arms divided, the two parts diverging toward the collar, and so as to form connection at two distant points, one of

the connections with the collar having radial movement with the collar, and provided upon its inside with a frictional surface.

I claim—

5 1. The herein described shade-holder, consisting of the central collar, radial arms to receive the shade, two or more of said arms divided, the two divisions of the arms diverging toward the collar, the two divisions attached
10 to the collar at points distant from each other, the one division of one arm united by a loop to the corresponding division of the other arm, the said loop arranged through the collar for radial movement, and provided on the inside
15 of the ring with a frictional bearing-surface, substantially as described.

2. In a shade-holder, the combination of a collar with two or more supporting-arms, one of said arms divided, the two parts diverging toward the collar and the two parts connected 20 to the collar, one of said connections arranged in the collar for radial movement, and provided upon the inside of the collar with a frictional bearing-surface under the spring-pressure of the divided arm, substantially as described. 25

O. N. PERKINS.

Witnesses:

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