

(No Model.)

E. L. BRYANT.

SHADE HOLDER.

No. 318,693.

Patented May 26, 1885.

Fig 1

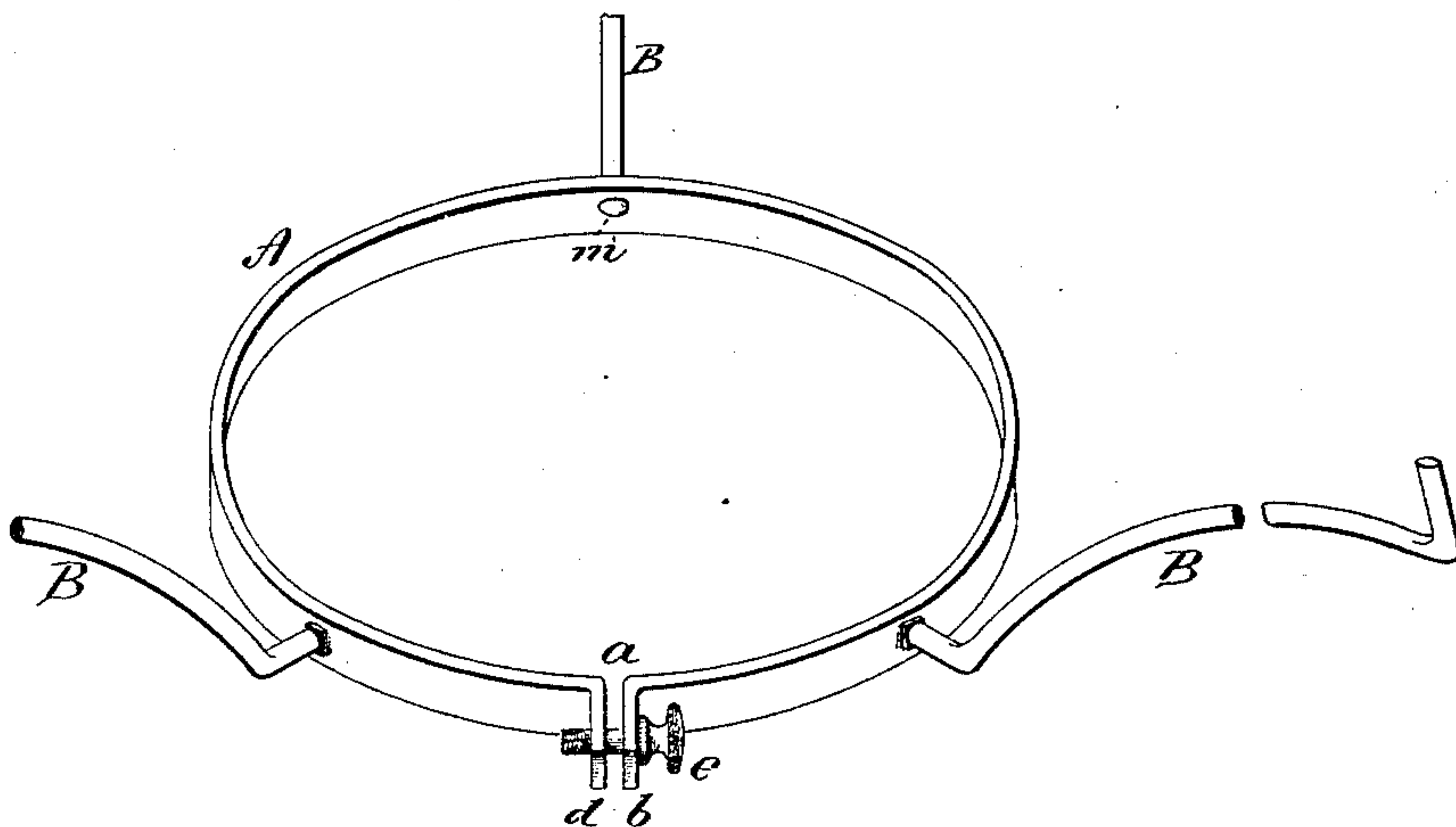


Fig. 2.

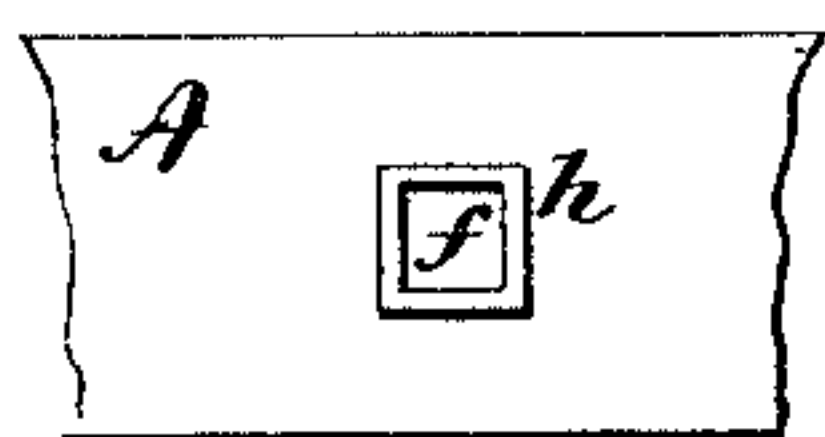


Fig. 3.



Fig. 4.

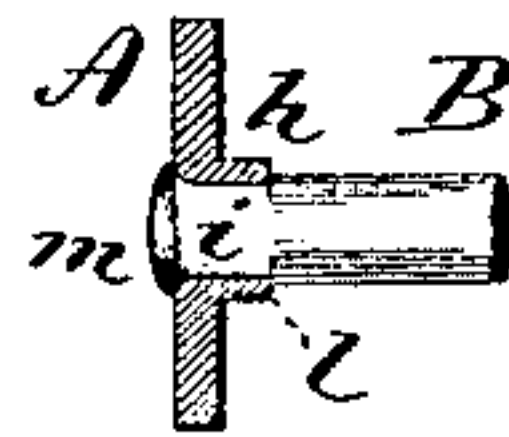
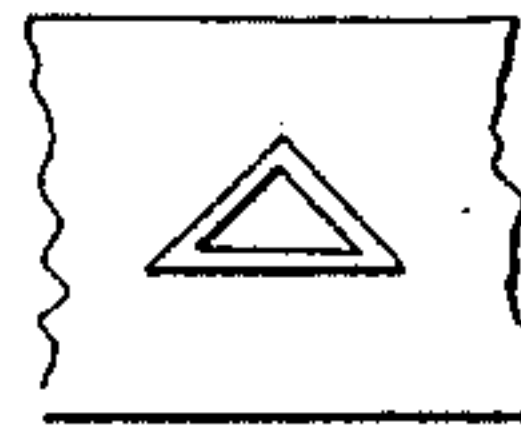


Fig. 5.



Witnesses.
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UNITED STATES PATENT OFFICE.

EDSON L. BRYANT, OF ANSONIA, CONNECTICUT, ASSIGNOR OF ONE-HALF
TO WALLACE & SONS, OF SAME PLACE.

SHADE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 318,693, dated May 26, 1885.

Application filed February 9, 1885. (No model.)

To all whom it may concern:

Be it known that I, EDSON L. BRYANT, of Ansonia, 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 of the ring and arms, showing a portion of the arms broken away; Fig. 2, a side view of a portion of the shade, showing the square hole with the flange surrounding it; Fig. 3, a transverse section of that portion of the arm which passes through the hole; Fig. 4, a vertical section through the ring at the hole, showing one arm introduced; Fig. 5, a modification in the shape of the hole and corresponding portion of the arm.

This invention relates to the construction of shade-holders for supporting the shades upon lamps and other fixtures, the object being a simple and strong construction, and which may be readily fixed to or removed from the lamp; and it consists in attaching the arms to the ring by first punching angular holes through the ring from the inside outward, and throwing the metal outward to form a flange around the holes, the ends of the arms being correspondingly square, introduced from the outside through to bring the shoulder on the arm to bear against the said flange, and riveted down upon the inside, as more fully hereinafter described.

A represents the ring, which is in diameter according to the lamp or burner to be embraced by it. From this ring the arms B, two or more, project radially for the support of the shade. The ring is divided, as at *a*, and the ends are turned outward to form an ear, *b*, on one end and *d* on the opposite end. Through these ears a screw, *e*, is introduced, working free through one ear, *b*, and tapped into the other ear, *d*, the head of the screw bearing upon the ear *b*, and whereby by turning the screw inward the ring may be contracted to clamp it upon the lamp or the burner, or the screw turned outward the clamp will be released for the removal of the ring.

To firmly secure the arms B to the ring and give them a strong support, I first punch the ring at the points where the arms are to be attached with a square hole, *f*; but, instead of cutting the metal away in the formation of the hole, I throw it outward and form a flange, *h*, around the opening, (see Figs. 2 and 4,) thus giving a square hole through the ring, but in length very much greater than the thickness of the ring. The inner ends of the arms B, which are usually made from wire, are square, as at *i*, the square corresponding to the square hole through the ring. The diameter of the arms is greater than the sides of the square, so as to form a shoulder, *l*, which, when the ends of the arms are inserted through the hole in the ring, will come to a bearing upon the outer end of the flange *h*. The end of the arm projecting through upon the inside is riveted down thereon, as at *m*, thus securing the arm to the ring. The increased length of the bearing given by the flange *h* makes a strong support between the arms and ring, very much greater than could be done without such extended flange. This method of attaching the arms to the ring may be employed with rings which are not divided.

While I prefer to make the holes in the ring and the corresponding portions of the arms square, they may be of more or less sides—say triangular, as seen in Fig. 5—it only being essential to this part of my invention that the holes shall be angular or polygonal shaped, so as to prevent the arms turning therein, and with the flange *h* formed around the hole in the ring.

I am aware that shade-rings having arms projected therefrom to support the shade have been constructed with angular-shaped recesses in which the arms are secured, and do not claim, broadly, such construction, the essential feature of my invention being punching the angular hole through the ring, forcing the metal outward to form a flange around the opening, and thereby making an extended opening, which extension is solid and connected to the ring entirely around the opening as an integral part thereof.

I claim—

The ring A, having angular holes punched therein to form a flange, *h*, surrounding said

angular hole, combined with the arms B, their inner ends of an angular shape corresponding to the said holes in the ring, and so as to form a shoulder upon the body of the arm to
5 bear against the outer end of the flange, said angular portion of the arms extended through their respective holes to the inside of the ring and riveted down thereon, substantially as described.

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