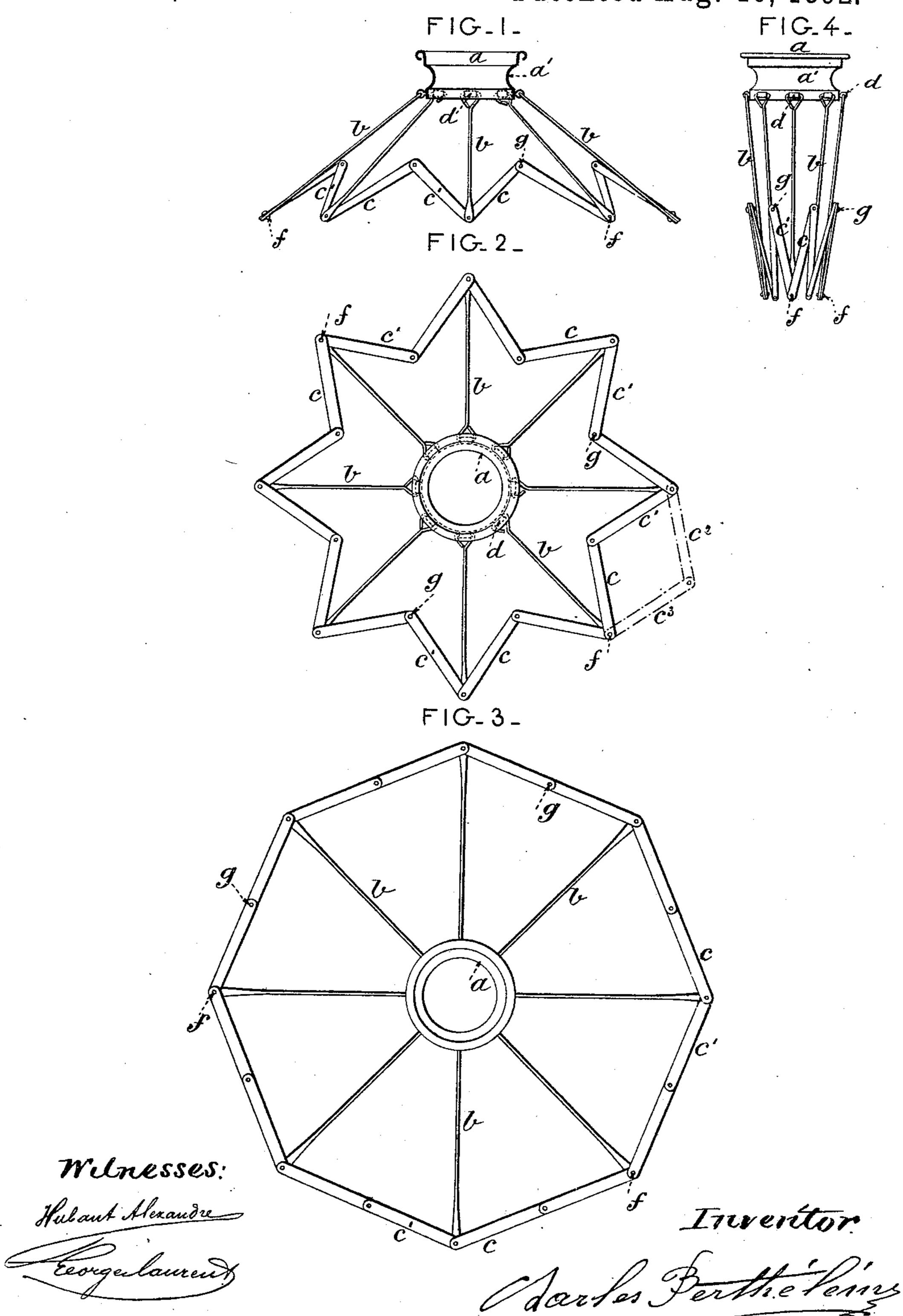
#### C. BERTHELEMY. LAMP SHADE SUPPORT.

No. 480,989.

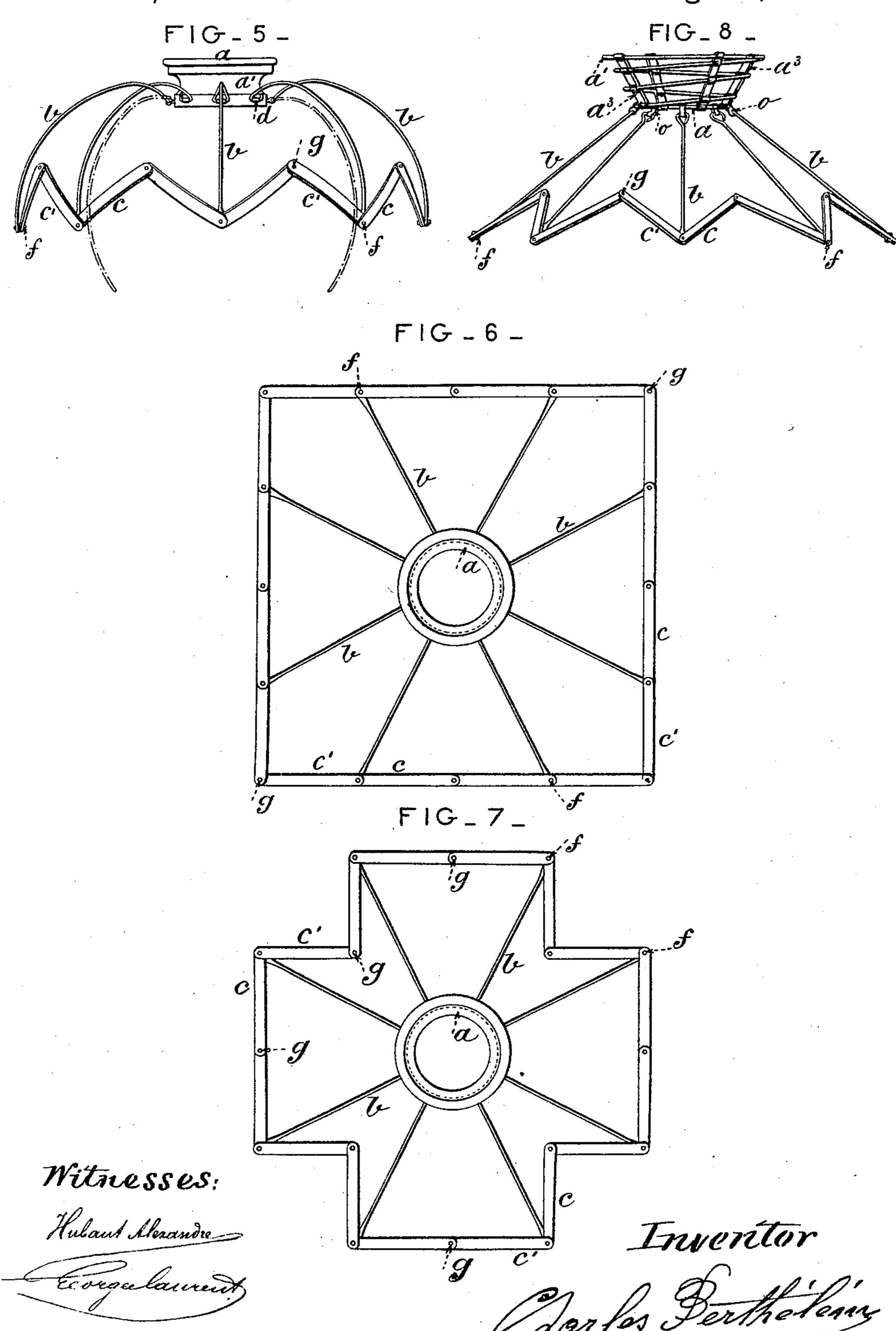
Patented Aug. 16, 1892.



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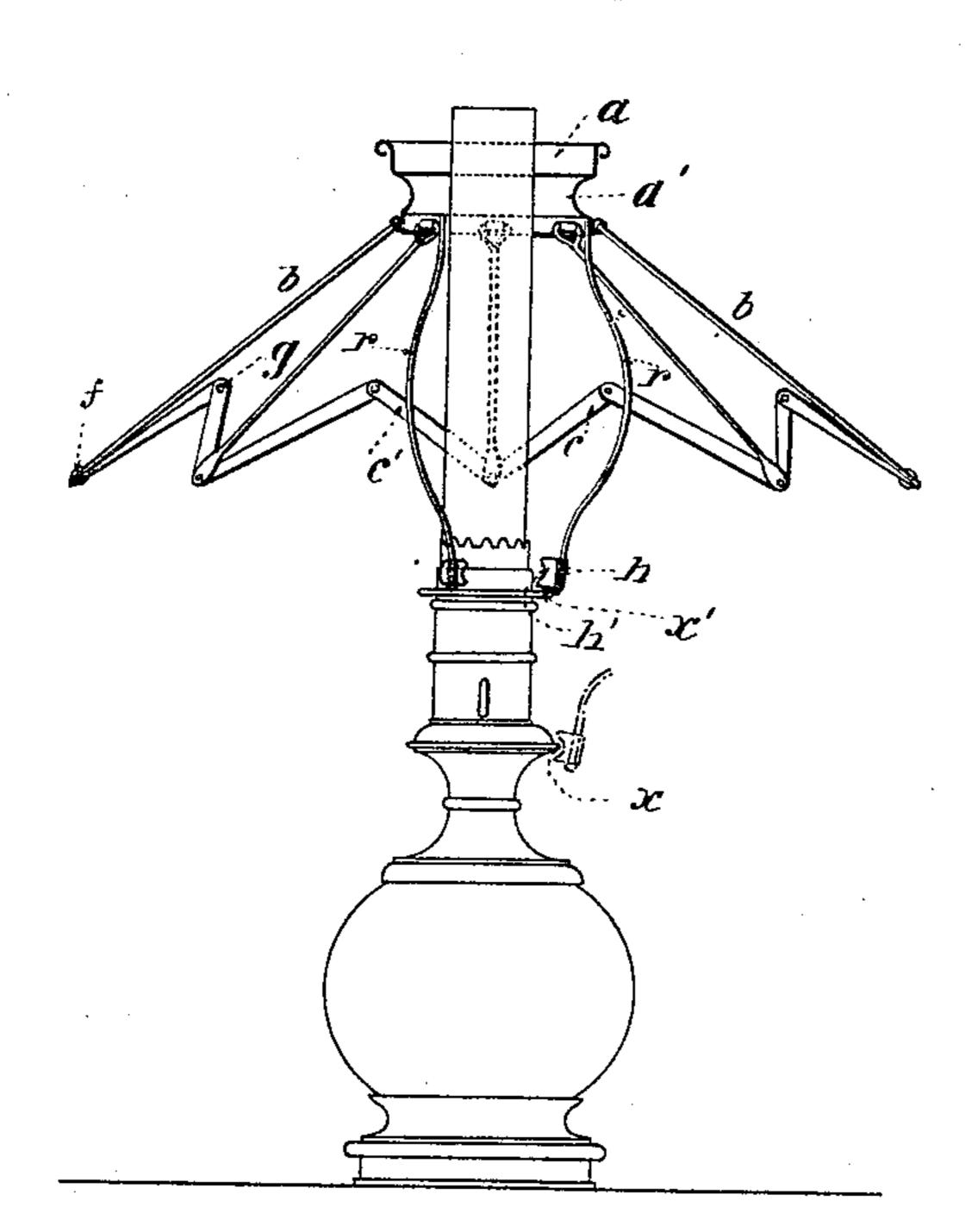


## C. BERTHELEMY. LAMP SHADE SUPPORT.

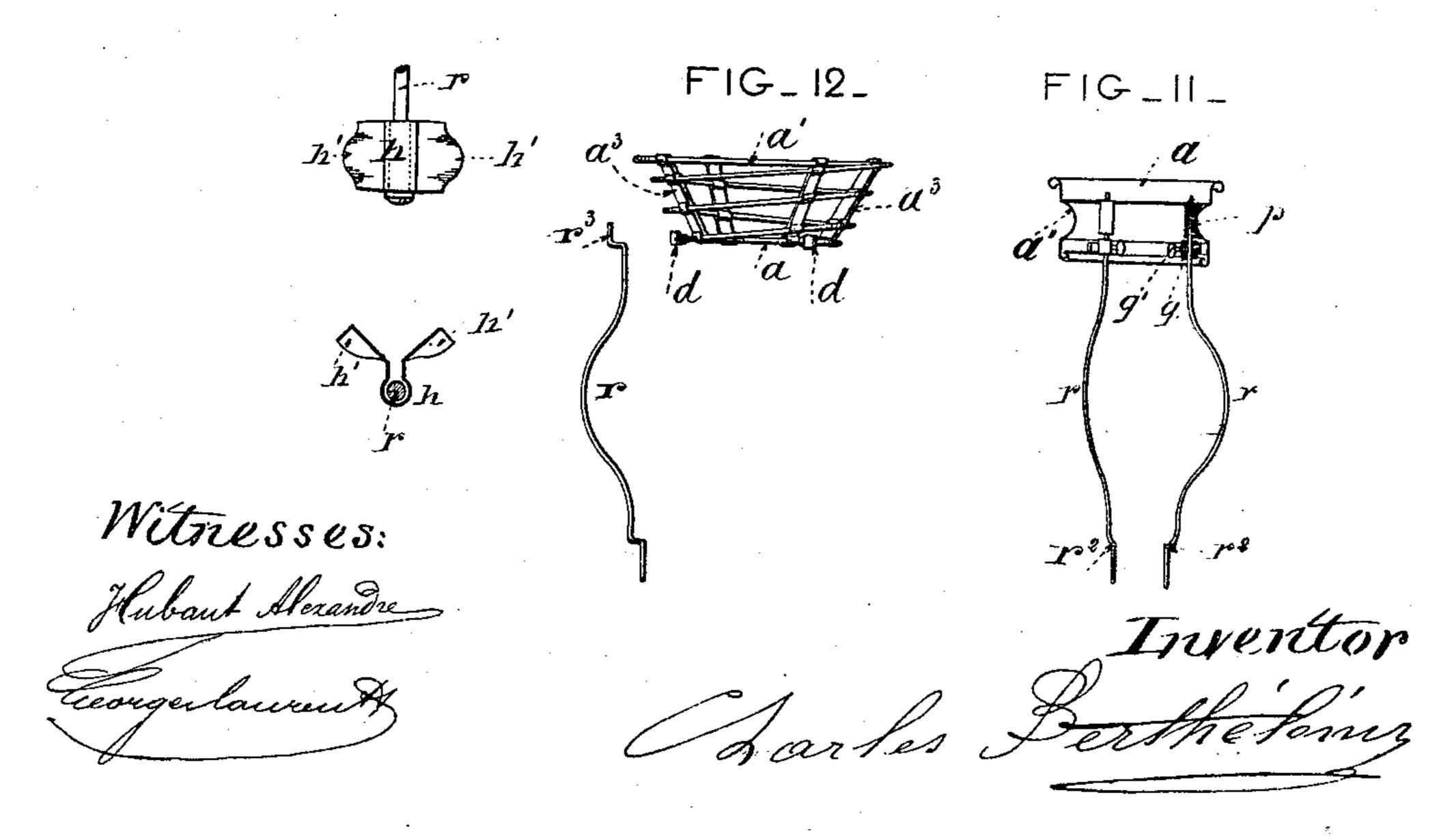
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Patented Aug. 16, 1892.

FIG-9-



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# UNITED STATES PATENT OFFICE.

CHARLES BERTHÉLÉMY, OF PARIS, FRANCE.

#### LAMP-SHADE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 480,989, dated August 16, 1892.

Application filed September 28, 1891. Serial No. 406,974. (No model.) Patented in France February 28, 1891, No. 211,775; in England March 3, 1891, No. 3,784, and in Germany April 11, 1891, No. 60,155.

To all whom it may concern:

Be it known that I, CHARLES BERTHÉLÉMY, mechanic, of Paris, in the Republic of France, have invented a new Lamp-Shade Support, 5 (for which I have obtained Letters Patent in France for fifteen years, No. 211,775, dated February 28, 1891; in Great Britain, No. 3,784, dated March 3, 1891, and in Germany, No. 60,155, dated April 11, 1891;) and I do hereby 10 declare that the following is a full and exact description thereof, reference being made to

the accompanying drawings.

My invention has for its object a new lampshade support, which comprises a special col-15 lar and any number of branches separately jointed to the collar and connected at their free ends or at any point of their lengths together by two jointed rods between each two neighboring branches, so that these couples 20 of jointed branches allow a greater or less inclination of the branches with respect to the vertical axis of the system. This inclination of the branches enables one, first, either to restrain the projection of the reflected lumi-25 nous rays, or, second, to render, on the contrary, this projection infinite, so to say, because the branches can take a position which is almost entirely vertical or entirely horizontal; or, third, to bring all the branches and 30 jointed rods against each other, so as to fold together the lamp-shade mounting, in order to make it occupy the smallest possible space, which is very convenient when the mounting has to be sent off to a customer or packed up 35 on removal.

My invention has also for its object a new support or bearing for the shade-support, which is composed of three springs fixed at one end to the collar, and the other so shaped 40 as to be supported on a molding or any projection of the lamp, so that the support suits all kinds of lamps, ordinary duplex lamps, &c., and allows of the shade being put up or down.

In order that my invention may be fully understood in its essential characters, reference is made to the accompanying drawings, in which—

Figure 1 is a vertical section of the shade-50 support. Fig. 2 is a plan view of Fig. 1. Fig. 3 is a plan view showing the shade-support

when fully opened and its branches horizontal. Fig. 4 is an outside view showing the shadesupport shut up and occupying the smallest possible space. Fig. 5 shows in elevation a 55 shade-support with carved branches according to my invention. Figs. 6 and 7 are plan views showing that the shade-support can be opened out in the form of either a square, Fig. 6, or a cross, Fig. 7. Fig. 8 is a detail view 60 of the spring-collar. Fig. 9 shows in elevation the spring-support applied to a lamp. Fig. 10 is a detail view of the supporting end of one of the branches of the support. Fig. 11 shows a modified form of the support. Fig. 65 12 is a detail view of the spring-collar and its support.

The shade-support is composed, essentially, of the collar a in stamped metal, of a certain number of branches b, jointed to the collar, 70 and of jointed pieces cc, connecting together all the lower ends of the branches b. The collar a is remarkable on account of the neck a', the shape of which is made to suit the head of the shade, which is thus enabled to open 75 out or shut up without ceasing to be in contact with the collar. The branches b, either round or otherwise and either straight or curved, are jointed at d in any suitable manner, and at their opposite ends they are ham- 80 mered out flat and contain a hole for the rivet f, which serves as a joint for connecting them with the pieces cc, which are themselves jointed at g, and made of flat or other metal blades. The rivets at the joints referred to are fitted 85 sufficiently close or tight to cause friction, so that the branches b and pieces c remain in any position in which they are adjusted. When the shade-support is fully opened out, the branches b are horizontal, and the pieces 90 ccare either partially or fully opened out, and being more or less in a straight line with each other between the branches, so that the shade-support is either in the form of a regular polygon, as in Fig. 3, or of a square, as in 95 Fig. 6, or of a square with the corners cut off or cross, as in Fig. 7. If, on the contrary, the shade-support is shut up, as in Fig. 4, the pieces c c shut up between the branches, so as to reduce the space occupied to a minimum 100 for carriage or removal. Between these two extreme positions the shade-support can be

480,989

made to open or close at will, as in Figs. 1 and 2, so as to give more or less light under the lamp or around it. If the branches are curved, as in Fig. 5, the shade-support harmonizes with the globe of the lamp. The pieces c c can be adapted to the branches at any point of their lengths, and their number between the branches may be two or more. Lastly, they may be made double at each of the joints, as shown by the dotted lines at c² c³, Fig. 2. However, in case the pieces are simple they can be shut up either toward the collar, as shown by the full lines in the same figure, or in the opposite direction, as shown by the said dotted lines.

In Fig. 8 I show that the collar may be made of wire, forming first a ring a and then a spiral a'. The head or upper opening of the shade bears against the spiral a', and the 20 branches of the shade support are jointed to the ring a. These joints may be made in any suitable way, but preferably as shown—that is to say, in the form of a sort of link shaped like an 8, of which one of the parts takes the 25 ring and the other the hooked end of the branch b of the shade-support. The rounds of the spiral are held together by supple bands  $a^3$  in leather, tissue, or netting. To the ring a are fixed the cushions d, which have holes 30 through them for the passage of the supports r, which have an elbow at  $r^3$  to form a stop for the collar a.

The support, which remains to be described, is made of three springs r, one end of which is fixed to the collar a and the other free. This latter is provided with a pivotal claw h,

which has two stamped wings, and a cavity h', intended to find a seat on any one of the moldings of the lamp, as at x, or on the glass-holder, as at x'. The claws h are held to the 40 lamp by the spring action of the springs r.

Instead of the pivoted claw h an elbow  $r^2$  may be employed at the end of each spring, Fig. 11. The end of each of the springs r may be fixed to the collar a by means of a sheath 45 p, riveted or soldered to the collar. The end  $r^3$  of the spring passes through this sheath and can be fixed in any point in it by a setscrew g' in a socket g, which glides on the spring, whereby the collar a can be moved up 50 or down, as desired.

I claim—

1. A lamp-shade support consisting of a collar, a number of branches jointed to said collar, and a set of jointed connecting-pieces aranged between and jointed to each two adjacent branches, substantially as described.

2. A lamp-shade support consisting of a collar, a number of springs arranged to press inwardly and attached at their upper ends to 60 said collar, their lower ends being free, provided each with seating means, and extended downward sufficiently to find a seat on the lamp below the chimney, the force exerted by the springs keeping said free ends in contact with the lamp, substantially as described.

In witness whereof I have hereunto set my

hand in presence of two witnesses.

CHARLES BERTHÉLÉMY.

Witnesses:

HUBAUT ALEXANDRE, GEORGE DAHRENT.