

W. H. JOHNSON.

Lamp Shade.

No. 100,533.

Patented March 8, 1870.

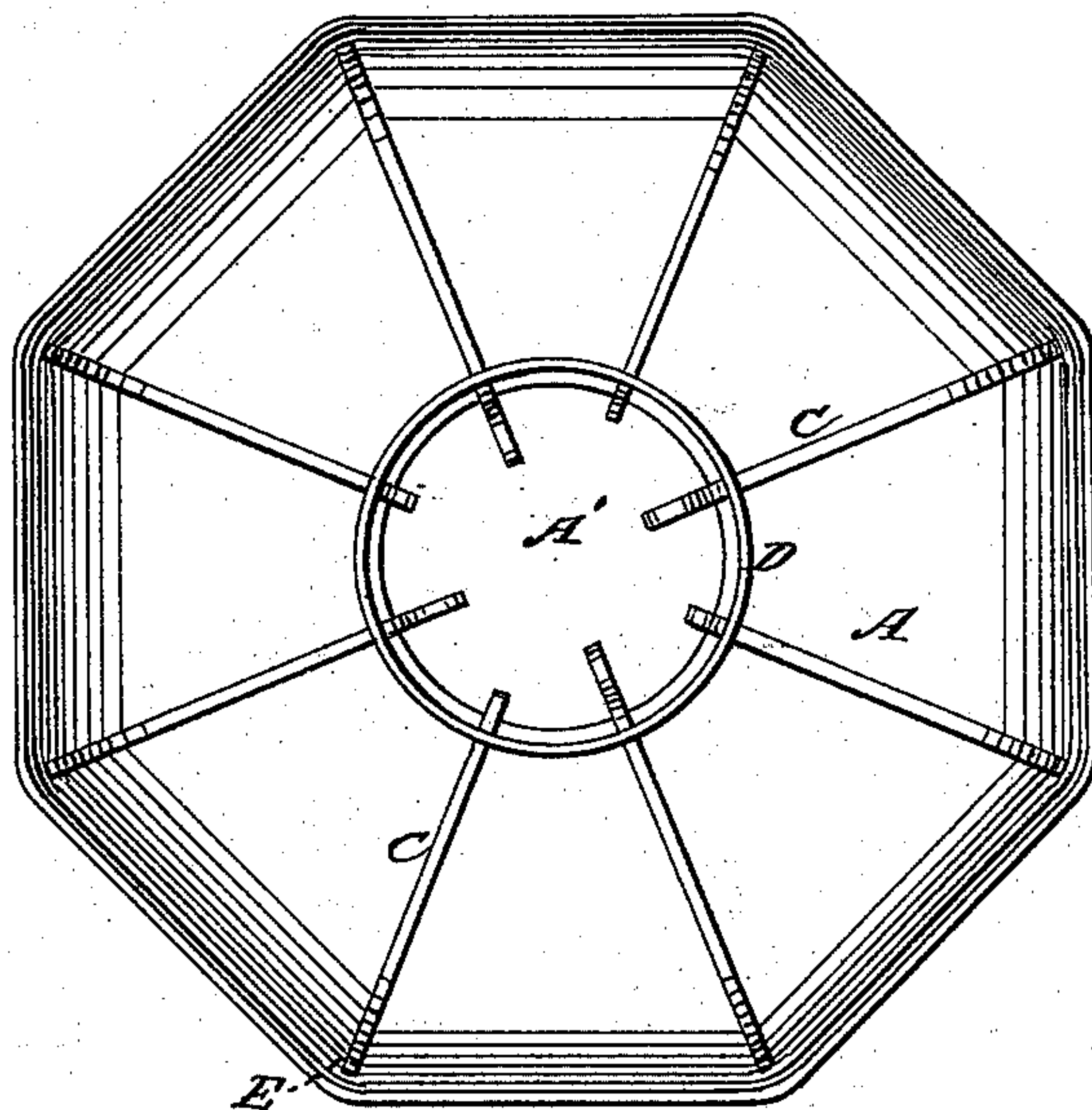


Fig. 1

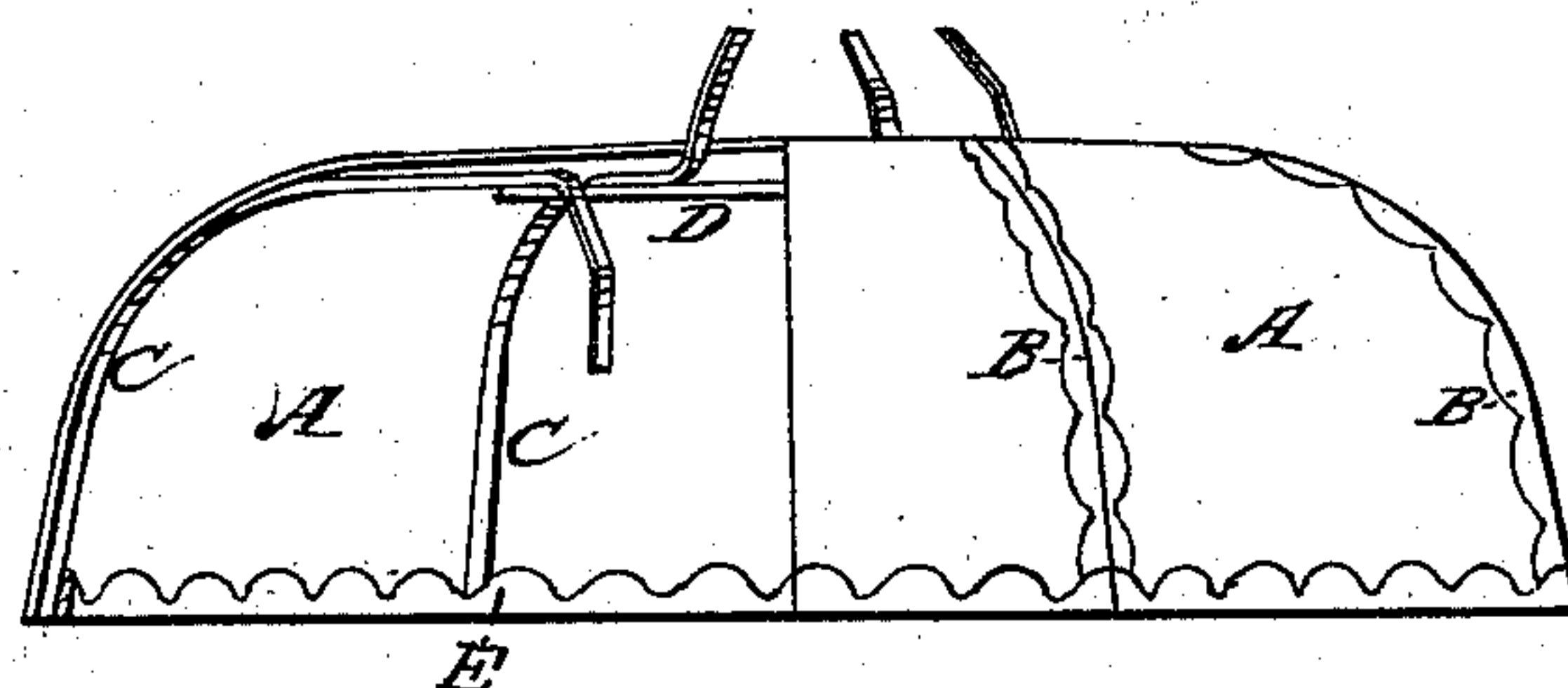


Fig. 2

Witnesses:

Wm. C. Hibbard

G. B. Whitney

Inventor:

William H. Johnson

W. H. JOHNSON.

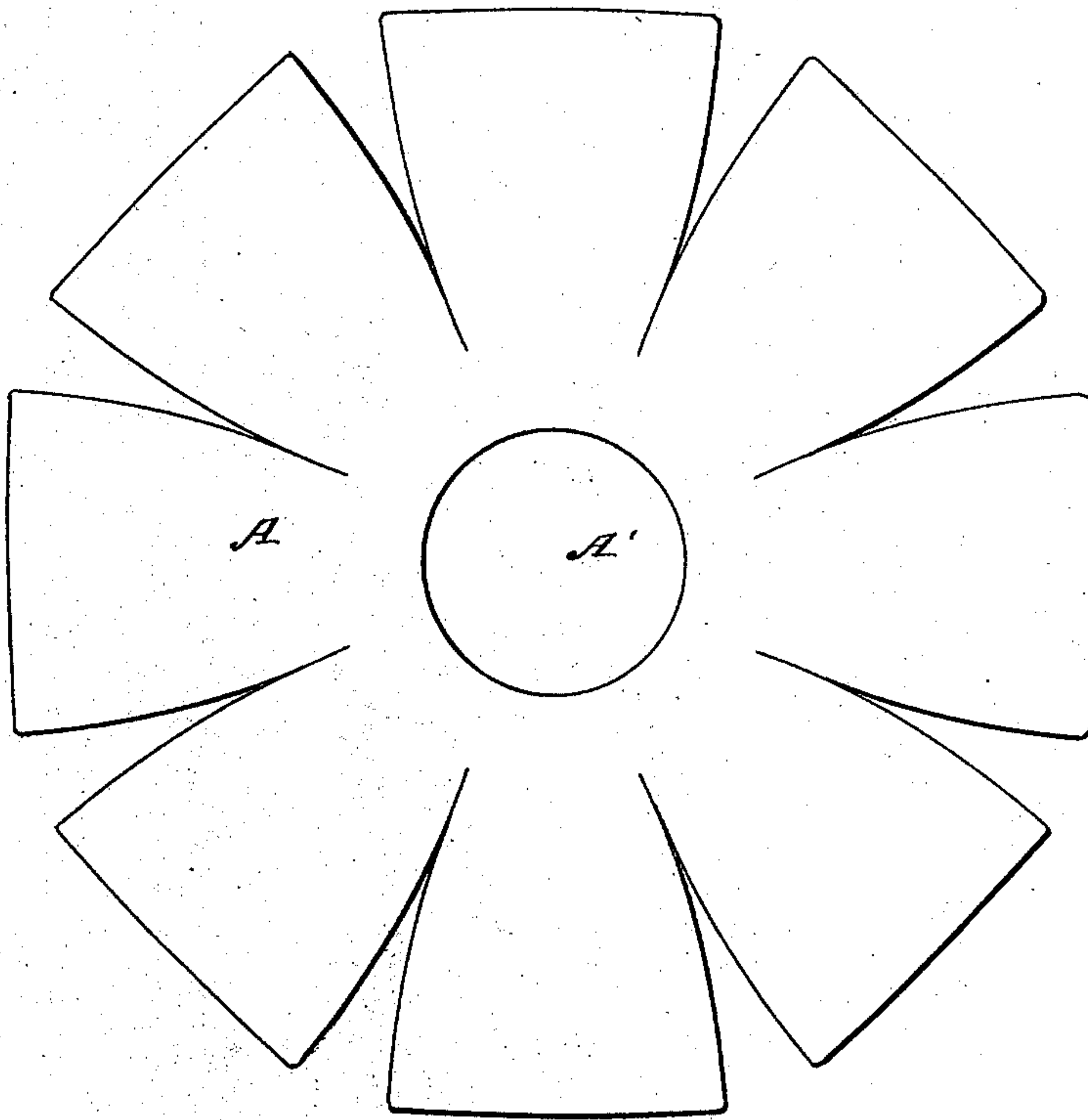
2 Sheets—Sheet 2.

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Fig. 3



Witnesses:

Wm. C. Hibbard
S. B. Whitney

Inventor:

William H. Johnson

United States Patent Office.

WILLIAM H. JOHNSON, OF SPRINGFIELD, MASSACHUSETTS.

Letters Patent No. 100,533, dated March 8, 1870.

IMPROVEMENT IN LAMP-SHADES.

The Schedule referred to in these Letters Patent and making part of the same.

I, WILLIAM H. JOHNSON, of Springfield, in the county of Hampden, and State of Massachusetts, have invented certain Improvements in Lamp-Shades, of which the following is a specification.

Nature and Objects of the Invention.

My invention relates in the first place to the method of forming the covering of a lamp-shade, and consists in forming the covering or screen from an entire sheet of paper or other similar material suitable for such purpose, having its exterior cut to a radiate section form, so that when the contiguous edges of the several sections are brought together and secured, they will give to the shade a hollow polygonal form, suitable for such purpose as will be described.

My invention relates in the second place to the method of securing the edges of the several sections together when so cut to form, and consists in covering and overlapping the joint, when the sections are placed together in form, by a strip of paper or other suitable material attached to the sections by some adhesive matter, and made ornamental or otherwise, as may be desired.

My invention relates in the third place to the construction and adaptation to the paper or other covering before mentioned of a light metallic frame, for the purpose of keeping the shade in shape and furnishing a means for supporting the same upon the lamp, and consists in combining with the covering a metallic spider, the outer arms of which rest in the angles between the sections of the covering and keep the same in shape, and the inner ends of which arms, when required, project inward, and are bent up and down, so as to serve as a yielding and self-adapting support for the shade by embracing the exterior of the chimney.

And finally, my invention consists of a lamp-shade, constructed substantially in the manner before mentioned, as a new manufacture.

Description.

In the drawings—

Figure 1 represents a plan of the inside of the shade;

Figure 2 is an elevation, one-half in vertical section; and

Figure 3 shows the form in which the sheet of paper is cut to give the requisite form to the shade.

A is the shade or covering, made of a sheet of paper or any appropriate material, and colored or otherwise ornamented as may be desired, which is first cut to the radiate or sectional form shown in fig. 3, by means of suitable cutting dies or by a pattern, leaving a large hole, A', in the center, as is shown.

The several sections of the paper are then bent over in a curved form upon a suitable mold or former, so as to bring their contiguous edges together, as is

shown in fig. 2, in which position they are secured by the strips B, which overlap the joints on the outside, and are attached to the covering by paste or other suitable adhesive material.

Similar strips are also applied to the upper and lower edges of the shade to make an appropriate finish. These strips I prefer to make of a different color from the body of the shade, and their edges may be cut to some ornamental form if desired. The panels inclosed by these strips may be further ornamented by some appropriate device or vignette printed or embossed upon them.

After the shade has been brought to the form shown, there is placed within it the metallic frame C D, which is made with light radial arms C, made of flattened wire, which are joined at their intersection to the light wire ring D by soldering.

The arms C rest in the angles formed by the sections of the shade, and the lower end of each is secured to the shade by a small piece, E, of paper or other material, which is attached to the inside of the shade by paste or cement, and passing inside of the arm, incloses its lower end and connects it with the covering.

The inner ends of the arms project inward beyond the central opening of the shade, and are alternately bent upward and downward, as shown, so as to yield and embrace the exterior of the lamp-chimney with sufficient pressure to support the shade upon it, while it leaves a sufficiently large free space between the shade and the chimney to prevent the shade from being scorched by the heat. There is also some free space left between the frame and the covering at the top, as shown, to permit the free expansion of the frame by the heat without distorting the shade or communicating heat to it by the frame.

What I claim is—

1. A lamp-shade, made in a polygonal form, from an entire sheet of paper or other suitable material, by cutting the same to a sectional and radiate form, and then bringing the contiguous edges of the sections together and securing them substantially as described.

2. In combination with a lamp-shade so cut and formed, the strips B for uniting the several sections, substantially as described.

3. In combination with a lamp-shade, made of a sectional and polygonal form, the metallic frame with its arms resting in the angles of the sections, in the manner and for the purpose described.

4. The lamp-shade, constructed substantially as described, as a new manufacture.

Executed January 21, 1870.

WILLIAM H. JOHNSON.

Witnesses:

WM. C. HIBBARD,
G. E. WHITNEY.