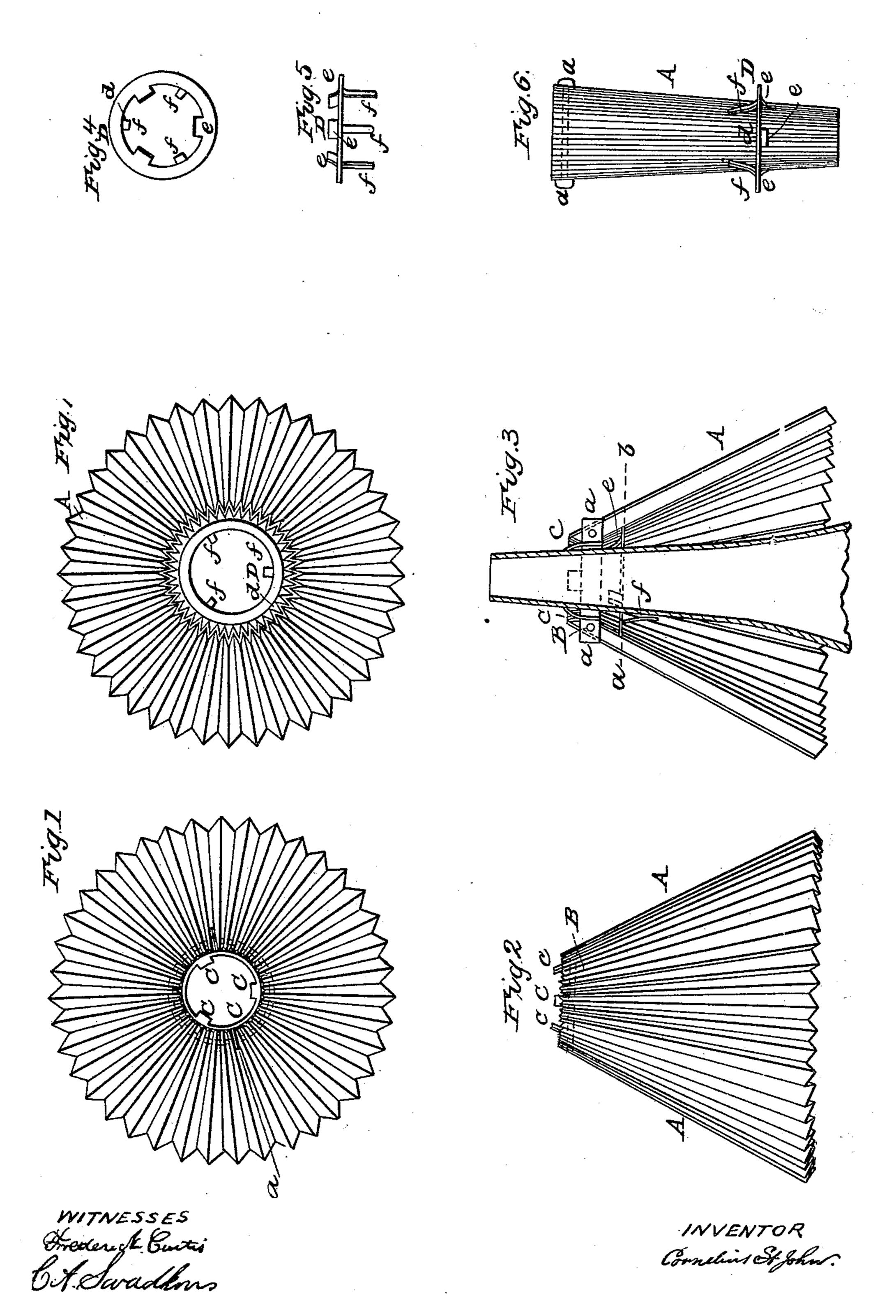
C. ST. JOHN.
Lamp Shade.

No. 50,509.

Patented Oct. 17, 1865.



## United States Patent Office.

CORNELIUS ST. JOHN, OF BOSTON, MASSACHUSETTS.

## IMPROVED LAMP-SHADE.

Specification forming part of Letters Patent No. 50,509, dated October 17, 1865.

To all whom it may concern:

Be it known that I, Cornelius St. John, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful or Improved Lamp-Shade; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a vertical section, of the said shade. Fig. 4 is a top view, and Fig. 5 a side elevation, of its expander. Fig. 6 is a side view of the shade as it appears when in a folded state, and with the expander encompassing it. Fig. 7 is a horizontal section of the shade when opened in the form of a conic frustum.

The body of the shade is a corrugated cylindrical tube, A, made of paper or other suitable material, it being laid in folds or plaits running lengthwise of the said body, the same being as exhibited in the drawings. Through these plaits, and near to the upper end of the body, a ring, B, is run, such ring also going through two arms, aa, of a short metallic tube, C, which is provided with springs or elastic projections eec, arranged as shown in the drawings. When the shade is placed on the glass chimney of a lamp these springs or projections serve to hold it thereon.

Besides the above, the shade has an expander, D, which consists of an annulus, d, having elastic projections or springs  $c\ c\ c\ f\ f$  extending from its inner circumference in manner as shown in Figs. 4 and 5. This expander is to

have a diameter larger than that of the ring B, and when used is placed on and so as to encircle the lamp-chimney. On pressing the shade downward on the chimney and the expander the latter will not only serve as an additional support to the shade, but will expand it into the form of a frustum of a cone, and to such extent as may be necessary, the expansion of the shade being increased as the expander is forced up into the shade or the latter pressed down on the expander.

After the shade may have been removed from the lamp-chimney its lower end may be compressed, so as to enable the shade to be inserted into the expander in manner as represented in Fig. 6, when the whole will be reduced to a small compass or convenient form for being laid or packed away.

I claim—

1. The improved folding lamp-shade, made substantially as described—viz., of the folding body A and the supporting-annulus B and tube Cand its projections, or the equivalents thereof, applied to one end of such body in manner and so as not only to support the body on a lamp-chimney, but to enable it to be expanded while thereon, substantially as set forth.

2. In combination, with the folding lampshade so made, the expander D, constructed substantially as and to be used as specified.

CORNELIUS ST. JOHN.

Witnesses:

R. H. Eddy, F. P. Hale, Jr.