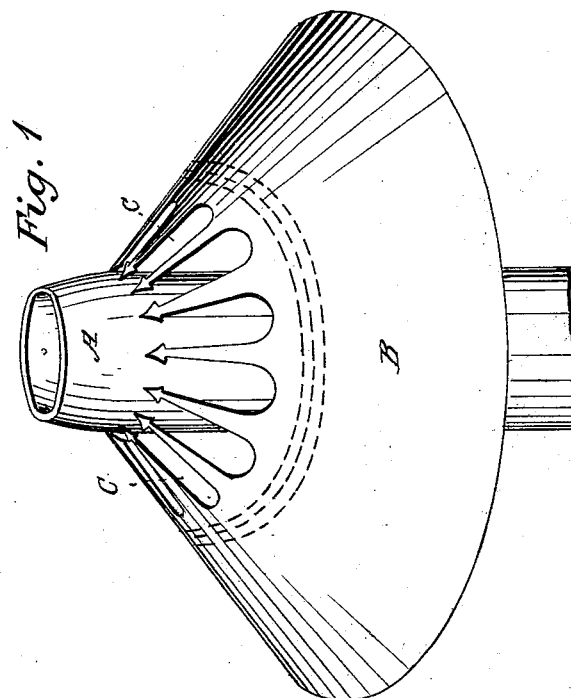


M. H. COLLINS.

Lamp Shade.

No. 108,972.

Patented Nov. 8, 1870.



Witnesses:

James H. Miller
J. M. Bowen

Inventor:

M. H. Collins
by
D. S. Wallace

United States Patent Office.

MICHAEL H. COLLINS, OF CHELSEA, MASSACHUSETTS.

Letters Patent No. 108,972, dated November 8. 1870.

IMPROVEMENT IN SHADES FOR LAMP AND GAS-BURNERS.

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

To all whom it may concern:

Be it known that I, MICHAEL H. COLLINS, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Shades for Lamps and Argand Gas-Burners; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings making part of this specification, in which my improved shade is shown in a single view, in perspective.

My invention relates to that class of shades which surrounds, and is supported upon the chimneys of lamps or Argand gas-burners, being sustained near the top of the chimney by means of springs arranged around the chimney, and made to bear against its external surface with a force sufficient to sustain the weight of the shade.

My improvement consists in constructing the shade and springs from a single piece of sheet metal, first cut to the proper form, and then having the edges united, or first pressed and then cut, so as to give to the whole the form of a frustum of a cone.

I am aware that springs acting upon the same principle have heretofore been used for supporting shades made of paper, and having the same general form when put together as that adopted in my improvement.

My invention relates only to the mode of constructing the entire shade, with its spring, of a single piece of metal, and not to its form nor the principle upon which it is sustained upon the chimney.

In the annexed drawings—

A represents the lamp-chimney, and

B is the body of the shade, from which the radial points C extend, as shown, the entire shade, with the springs, being cut from a single flat sheet, and then being properly beveled at the ends, so that, when soldered, the shade and springs shall form the frustum of a cone, as shown.

Instead of cutting a flat sheet to form the shade and springs, as described, it may be first pressed into the form of the frustum of a cone, and then have the spring points C cut so as to form the entire shade with springs from one piece without having any seam.

The body of the shade may be ornamented in any manner that may be desired.

The springs C are flexible, so that the shade may be attached to glass chimneys of various sizes.

The shade will be supported by the tension of the springs bearing against the chimney, and they will yield to the expansion of the chimney.

What I claim as my invention, and desire to secure by Letters Patent, is—

A shade for a lamp or Argand gas-burner, having its body B and radial springs C constructed in a single piece from a thin sheet of metal, and having the springs C flexible, so as to sustain the shade upon glass chimneys by the tension of the springs, substantially as set forth.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

M. H. COLLINS.

Witnesses:

R. MASON,

F. H. SPRAGUE.