M. H. COLLINS.

Improvement in Lamp-Shades.

No. 113,982. Patented April 25, 1871.

Fig 1

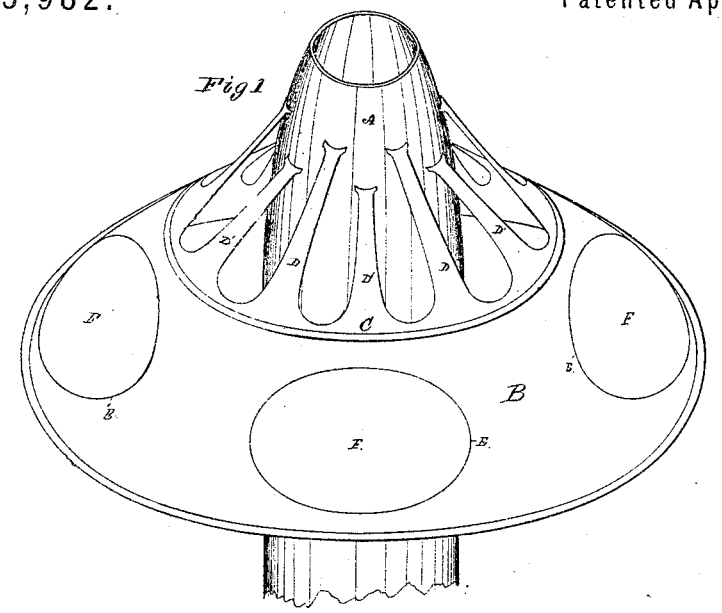


Fig 2.

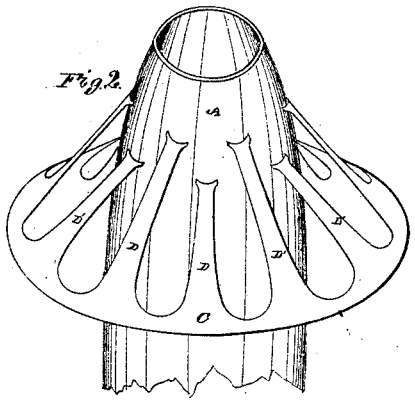
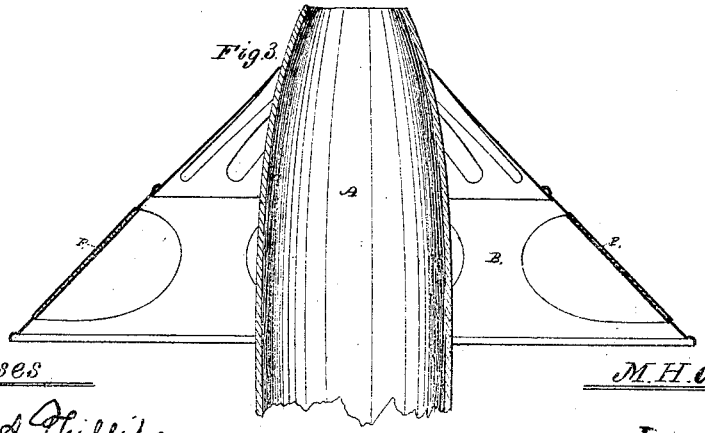


Fig 3.



Witnesses

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AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

United States Patent Office.

MICHAEL H. COLLINS, OF CHELSEA, MASSACHUSETTS.

Letters Patent No. 113,982, dated April 25, 1871.

IMPROVEMENT IN LAMP-SHADES.

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

To all to whom these presents may come:

Be it known that I, MICHAEL H. COLLINS, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Lamp-Shades; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 exhibits a perspective view of the shade as made in accordance with my invention and affixed to a chimney.

Figure 2 is a similar view of the superior or spring portion.

Figure 3 is a vertical and central section of the shade as applied to a chimney.

My invention relates to that class of metallic shades in which the springs and body of the shade are formed in two separate portions.

In the said drawing—

A denotes a chimney.

B is the body of the shade, which is of a frusto-conical shape, and may be formed of a disk of metal, (having its center perforated or punched out,) and pressed into the required shape; or it may be composed of one or more segments, properly secured together and shaped into the frustum of a cone or pyramid.

C is the superior or spring portion, which is provided with a series of radial fingers or springs, D D', &c., of different lengths, whose free ends bear against the outer surface of the chimney, and by their tension against the same maintain the shade in position thereon.

The said part C may also be formed of a disk of metal, the central part being stamped out to form the fingers; or it may be made of one or more segments so shaped and united as to give the desired form.

The two portions B C, so formed, are to be united by riveting, seaming, or soldering, as may be desirable.

Thus it will be seen that the two parts B C of the shade are formed separately, each being made from a single disk of metal and afterward united; or each part being made up of one or more segments so shaped and connected as to form the frustum of a cone, and the two parts next secured together.

By forming the two parts separately, and each of a single piece, the part B may be made from a disk of soft metal spun or pressed into shape, while the part C may be of steel or a hard metal, for giving to the springs a more permanent elastic power.

By making each of the parts B C independently and of a series of segments, the lower segments may be composed of a softer and cheaper metal than the upper portion or series, which requires a metal of a harder or higher grade, such as will withstand the action of the heat and maintain the normal elasticity of the springs.

The body of the shade may be plain or unperforated, and may be painted in any desirable color and ornamented as fancy may dictate.

I prefer to form in the body of the shade a series of perforations, E E, &c., for two reasons:

First, to render the shade lighter, so that springs of less stiffness or tension are required; and

Second, to relieve the monotony of the shade by applying to such openings a series of ornamental tablets, pictures, or transparencies, F, whereby the beauty of the shade is enhanced.

The next part of my invention is the peculiar mode of affixing the tablets or transparencies to the shade.

The openings having been stamped out of the desired form, a tablet or transparency of a corresponding shape, but of larger area, and having a coating of gluten applied to its inner face, is to be placed upon the shade over each opening, and so as to overlap its edges.

A corresponding disk of paper or other transparent material, having an adhesive matter applied to its inner face, is to be placed upon the opposite side of the shade and over each opening, and so as to overlap the edge thereof; or instead of the backing being of a whole piece it may be a circumscribing band applied in a similar manner, so as to overlap the edge of the opening and the adjacent surface of the tablet; or the tablet may be applied to the inner face of the shade, and the re-enforce or circumscribing band applied to the outer face. The whole is next to be put in a press and firmly connected together.

To make a finish to the picture a bead may be formed around each opening.

Having described my invention,

What I claim is as follows:

1. A shade for a lamp or Argand burner as made in two frusto-conical or pyramidal portions, B C, formed, constructed, and combined together in manner as set forth.

2. In a metallic shade composed of a frusto-conical or pyramidal body and a frusto-conical or pyramidal elastic spring portion B, so united as to form the frustum of a cone, making the said circumscribing elastic spring portion of a single piece of metal, or of a series of pieces so united as to form a continuous whole, as shown and described.

M. H. COLLINS.

Witnesses:

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