(No Model.)

N. PLYMPTON.

COLLAPSIBLE LAMP SHADE.

No. 261,037. Patented July 11, 1882.

Fig1.

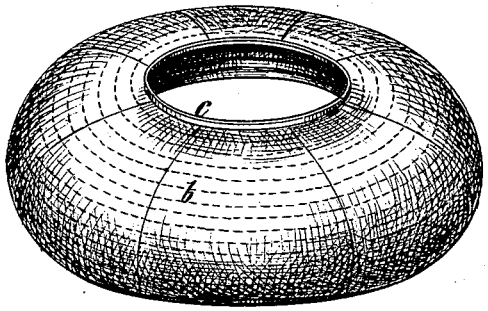


Fig2.

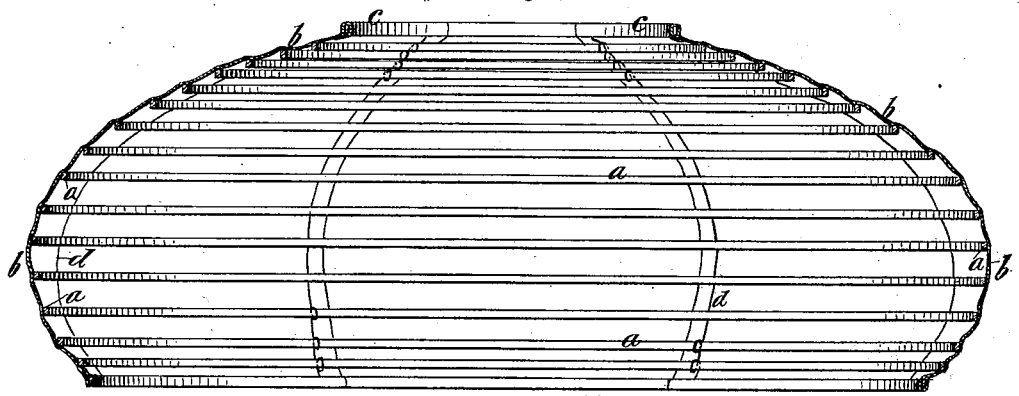


Fig3.

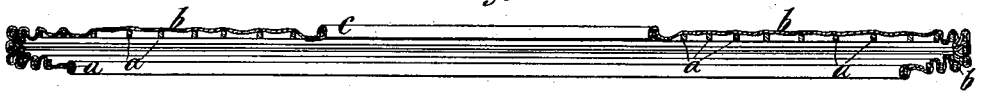
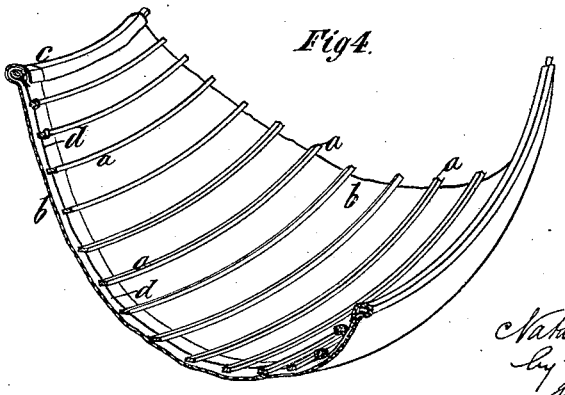


Fig4.



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UNITED STATES PATENT OFFICE.

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COLLAPSIBLE LAMP-SHADE.

SPECIFICATION forming part of Letters Patent No. 261,037, dated July 11, 1882.

Application filed April 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, NATHANIEL PLYMPTON, of the city and county of New York, in the State of New York, have invented a certain new and Improved Collapsible Lamp-Shade, of which the following is a specification.

My invention relates to lamp-shades which are made principally of paper or other flexible fabrics; and it consists essentially in a new article of manufacture—namely, a collapsible lamp-shade composed of rings or hoops and a flexible covering, and having an opening at the top and bottom, the opening at the bottom being larger than that at the top, so that the shade may be passed over a lamp-globe, which will support it at its upper part.

In the accompanying drawings, Figure 1 represents a perspective view of my improved shade expanded or extended for use. Fig. 2 represents a central section of the expanded shade upon a larger scale. Fig. 3 represents a section similar to Fig. 2, showing the shade collapsed; and Fig. 4 represents a perspective interior view of a portion of the shade.

Similar letters of reference designate corresponding parts in all the figures.

In the present example of my invention I have represented the shade as composed of a series or number of hoops or rings, *a*, which may be composed of split bamboo, wire, or any other material, and a covering, *b*, of paper, cloth, or any other suitable material which is flexible, and which may be decorated or ornamented in any desired manner.

The form of this shade may be varied to suit the taste; but a very graceful shade may be made in the form represented in Fig. 2. The portion which is of largest diameter is at some distance above the lower edge, and from such portion the diameter rapidly decreases upward to a small neck, *c*, adapted to pass over a lamp-chimney.

The opening at the bottom of the shade must be larger than the neck or opening *c* at the top, so that the bottom opening will pass freely over the lamp-globe, which will support the collapsible shade at its upper part.

This form of shade is particularly advantageous, as while it gives an ample reflection downward it gives a better protection to the eyes than a conical shade of the same size.

The rings or hoops *a* are of successively-increased diameter from the lower edge upward to the portion of the largest diameter, and above this point they are of successively-decreasing diameter to the neck *c*.

The covering *b* is composed of gores, so as to conform to the desired shape, and may be secured to the rings or hoops *a* by adhesive substance or in any other suitable manner, so as to form flexible connections between the several rings or hoops.

The ring or hoop at the lower edge and the ring at the neck *c* may be heavier or stouter than those intermediate between the two, so as to increase the strength of the shade; and its strength may be still further increased by pasting or otherwise securing to the interior of the shade radial cords or strings *d*, which form stays.

This peculiar construction of the shade is very advantageous, because it enables the shades to be contracted or collapsed in the direction of the length of their axes or height, as shown clearly in Fig. 3, in which position many of the hoops or rings are received within those of increased diameter.

It will be observed that the form of the shade here shown is such that the shades could not, like ordinary conical shades, be packed one inside another for boxing and transportation, and if made non-collapsible the room occupied by them in transportation would increase their cost very materially.

By making the shades collapsible in the direction of their height or axis I enable shades of the form shown, or of analogous form, to be packed for transportation in very small space, and thereby reduce the price at which they may be sold.

Another advantage resulting from the construction of the shade herein described is that the shade, when in use on the lamp, may be drawn down to its fullest extent on one side and more or less raised on another side to adjust the light to suit readers or workers sitting on different sides of the lamp.

I am aware that Japanese lanterns have

been made of rings or hoops and flexible covering; but they have been closed at the bottom, so as to support candles centrally within them. My lamp-shade is a very different article of manufacture, inasmuch as it has an opening at the bottom as well as at the top, and the opening at the bottom is so much larger than the opening at the top that the shade may be passed over a globe and be supported thereby at its upper part.

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

As a new article of manufacture, a collapsible lamp-shade composed of rings or hoops and a flexible covering, and having an opening at the top and bottom, the opening at the bottom being larger than that at the top, so that the shade may be passed over a lamp-globe, which will support it at its upper part, substantially as herein described.

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