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Burridge et al.

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[54] **LAMPSHADE AND METHOD OF ASSEMBLY**

[75] Inventors: **Robert E. Burridge**, Hillsdale, N.J.; **Peter O. Everson**, Darien, Conn.

[73] Assignee: **Craftings, Inc.**, Englewood, N.J.

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[52] **U.S. Cl.** ..... **240/108 D**, 240/108 R

[51] **Int. Cl.**..... **F21v 1/06**, F21v 1/14

[58] **Field of Search** ..... 240/108 R, 108 D

[56] **References Cited**

FOREIGN PATENTS OR APPLICATIONS

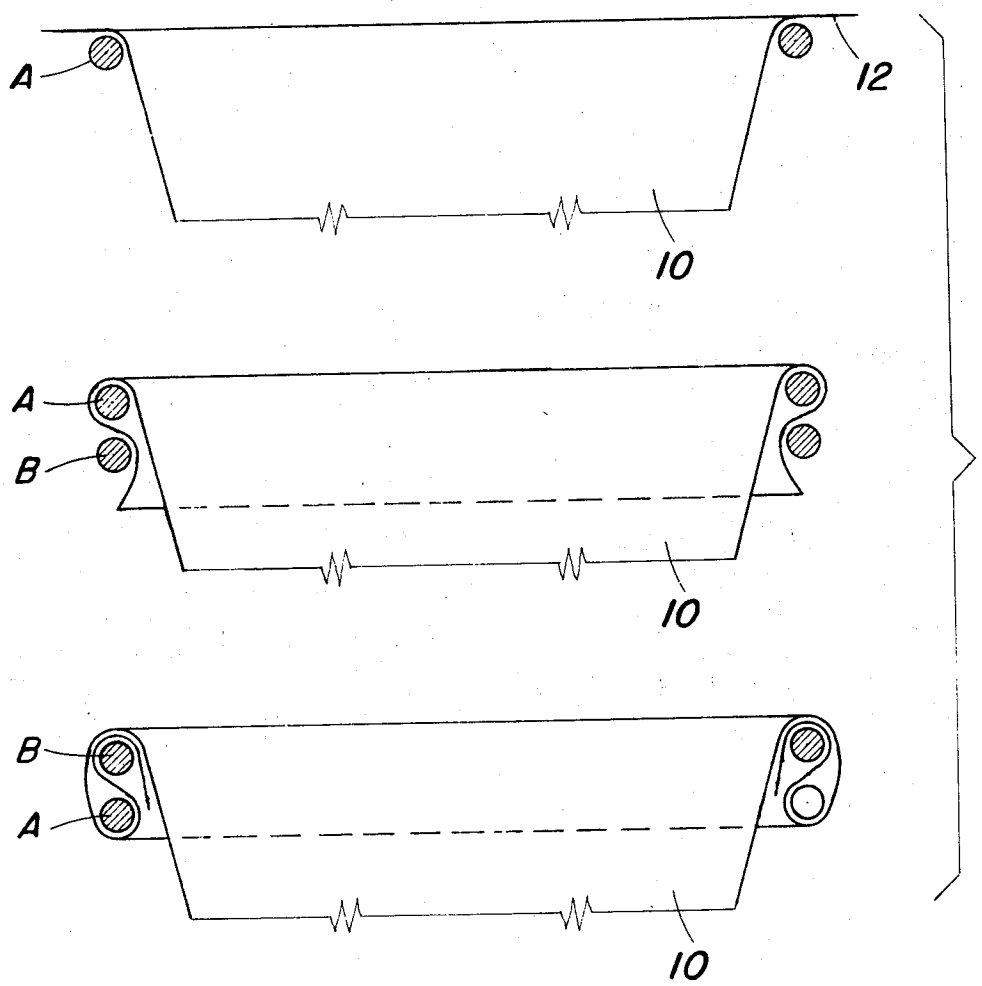
932,973 7/1963 Great Britain ..... 240/108 R

Primary Examiner—Samuel S. Matthews
Assistant Examiner—Russell E. Adams, Jr.
Attorney—Marn & Jangarathis

[57] **ABSTRACT**

Decorative lampshades in a variety of pleasing designs are quickly and simply constructed with a tube of stretch fabric, a plurality of resilient wire rings, and a technique herein referred to as a roll-finish lock. Simple mounting and electrical accessories adapt the shade so produced for use as a hanging ceiling fixture, a table lamp or a floor lamp.

7 Claims, 8 Drawing Figures



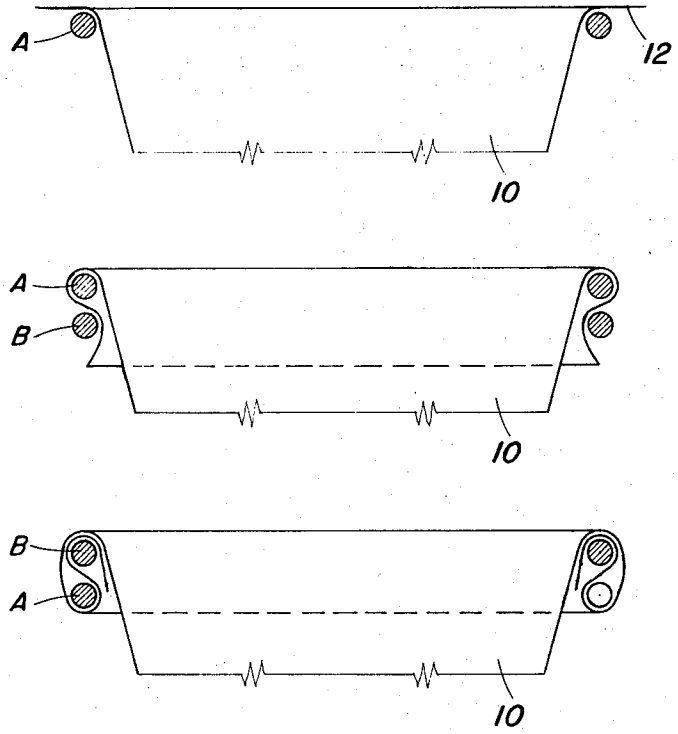


Fig. 1.

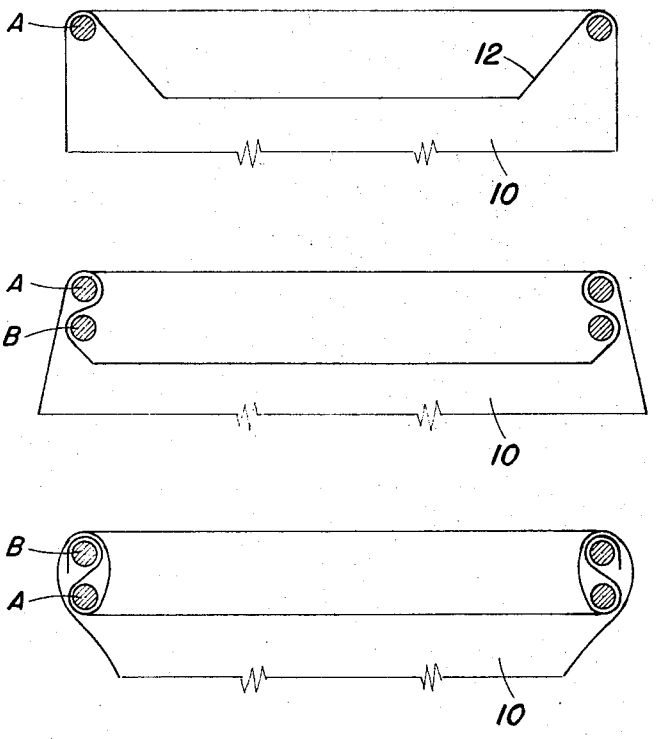


Fig. 2.

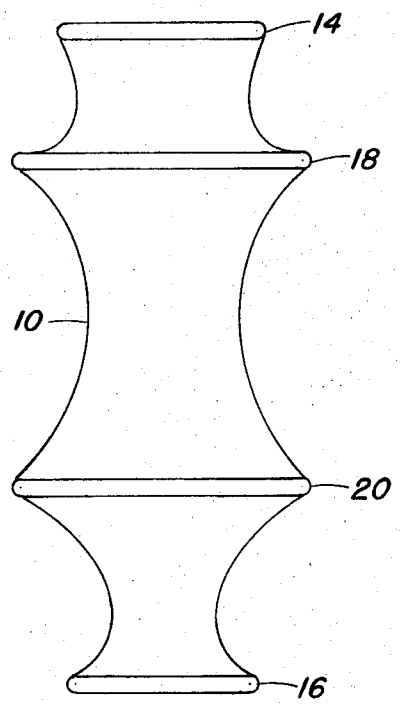


Fig. 3.

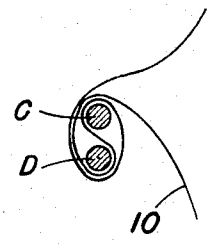


Fig. 4.

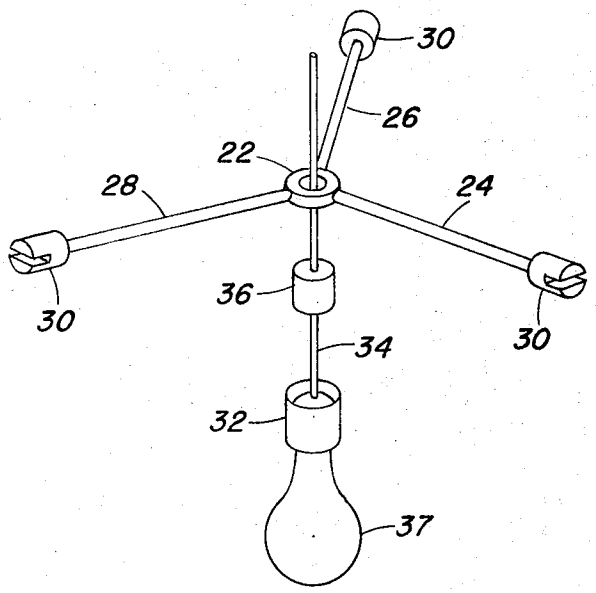


Fig. 5.

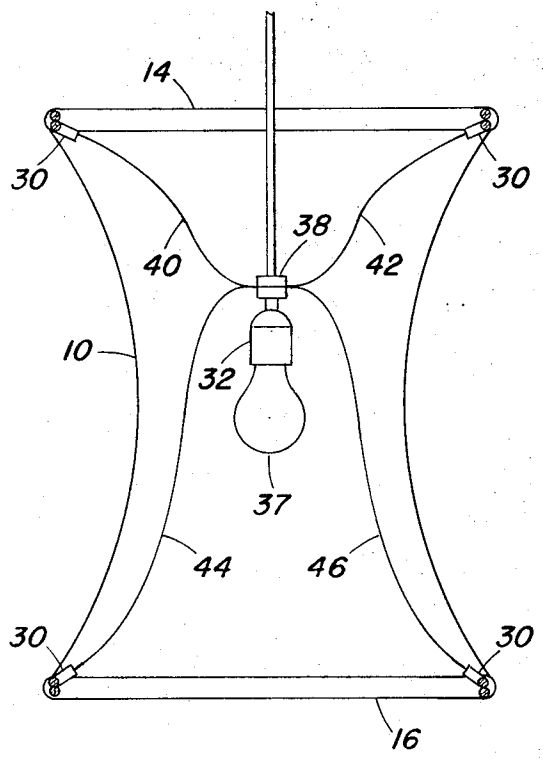


Fig. 6.

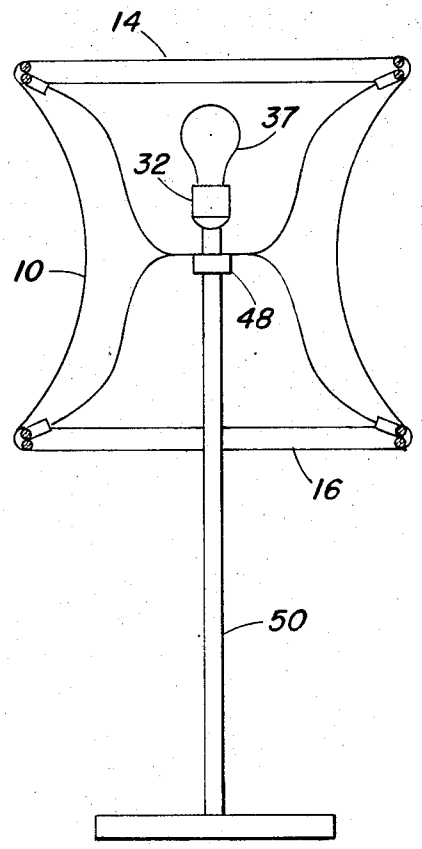


Fig. 7.

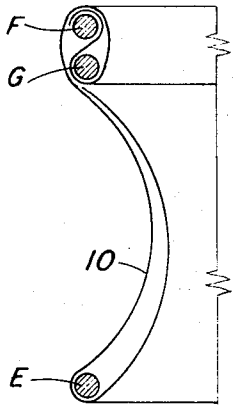


Fig. 8.

LAMPSHADE AND METHOD OF ASSEMBLY

The present invention relates generally to lampshades and, more particularly, it relates to lamp or lampshade kits adapted to be constructed by the purchaser in an essentially endless variety of pleasing shapes and designs. The fabric tube forming the exterior of the shade may be further decorated either before or after assembly, as by tie-dying, painting, printing, applying buttons, sequins or the like, so that with a minimum of effort a completely unique lampshade or lamp may be constructed.

The provision of lamps and lampshades as above described forms the general object of the present invention. Various other objects and advantages of the invention will become clear from the following description of several embodiments thereof, and the novel features will be particularly pointed out in connection with the appended claims.

Reference will hereinafter be made to the accompanying drawings, wherein:

FIG. 1 and FIG. 2 are schematic representations of two forms of roll-finish lock;

FIG. 3 is an elevation of a hanging lamp in accordance with the invention;

FIG. 4 is a schematic representation of a roll-finish lock for the intermediate rings of the FIG. 3 lamp;

FIG. 5 is a perspective view of the electrical accessories needed to make a complete hanging lamp with the FIG. 3 shade;

FIG. 6 and FIG. 7 are elevations in section of a hanging lamp and a table or floor lamp, respectively, showing electrical accessories required for each; and

FIG. 8 is a schematic representation of an alternative lampshade construction for use with the FIG. 6 or FIG. 7 embodiments.

In essence, the present invention is at least partly based on a novel method of securing a fabric shell or tube called the roll-finish lock. Understanding of the invention requires that the roll-finish lock be properly understood, and attention is directed to FIGS. 1 and 2. All that is required is a tube of fabric, preferably a stretch fabric and, for each roll-finish lock to be made, a pair of wire frames of the same size and shape. While essentially any closed frame shape may be employed with the invention, i.e., a circle, oval, triangle, square, etc., - shaped frame, the description following will refer to them as rings. The wire rings should be heavy enough to hold their shape but also have some resiliency.

Referring now to FIG. 1, a tube of stretch fabric 10 is passed up through a first ring A with a free end 12 being passed thereover, with an inch or so left hanging on the outside. Next, a second ring B is slowly and carefully pressed down around the outside of ring A, starting at one point and working around the edge, until it is completely below ring A and the fabric passes, as shown, therebetween. Next, again slowly and carefully, ring A is pressed down and around the outside of ring B, starting at one point and working around the periphery until ring A is below ring B as shown, and the fabric is locked therebetween. Repetition of the pressing of one ring down over the other one or more additional times improves both the quality and the appearance of the thus-completed roll-finish lock.

When following the procedure set forth above in connection with FIG. 1, it will be noted that the "seam" side is external to the ring. An equally effective and attractive roll-finish lock can be made with the seam on the inside by following the slightly different procedure shown in FIG. 2. In this case, the tube of fabric 10 is brought up over the outside of ring A and the end 12 allowed to hang an inch or so on the inside. Ring B is then pressed down around the inside of ring A, ring A is then pressed down through ring B, and so on; this places the seam on the inside.

It is often desired to use additional rings of varying diameter within the lamp between the roll-finished ends. If the stretch fabric tube has sufficient body and "stretchiness," such additional rings may be merely inserted into the tube prior to roll finish locking of the ends with a pair of rings as described. A pair of rings can be used at intermediate positions and roll-finish locked so as to be immoveable, as well as providing an attractive design element. As shown in FIG. 4, two rings C and D are so mounted. A ring is inserted into or around the fabric tube (depending on where the seam is desired) to the desired position. The second ring is pressed over or through the first ring several times. When the roll-finish lock is completed, the remaining fabric is brought up around or through the locked rings and a very attractive design results.

A shade for a hanging lamp is illustrated in FIG. 3. A pair of rings is used to roll-finish lock each end 14, 16 of the tube 10, and intermediate rings 18, 20 are either merely inserted into the tube or roll-finish locked as shown in FIG. 4.

To complete a hanging lamp using the shade of FIG. 3, the accessories of FIG. 5 are employed. In particular, an apertured bracket 22 has three equi-spaced arms 24, 26, 28, each with a clip 30 attached to its distal end. Clips 30 are adapted to resiliently engage the inside of a ring in the top roll-finish lock 14, the fabric around the ring providing a snug fit. A light socket 32 is provided at the end of cord 34, which passes through the aperture in bracket 22. A suitable clamp or grommet 36 on cord 34 allows the light bulb 38 to be hung within the shade at any desired level, as bracket 22 and the shade will be supported thereby.

It will be noted that the lower end 16 of the FIG. 3 shade is not secured and is free to swing in a breeze. Somewhat different accessories, as shown in FIGS. 6 and 7, may be employed for shades having both the top and bottom ends secured. Both figures show a fabric tube 10 with roll-finish locks 14 and 16 at the top and bottom, respectively. FIG. 6 also shows a hanging lamp, but apertured bracket 38 has four arms: opposed arms 40, 42 resiliently engage a ring in top lock 14, and opposed arms 44, 46 resiliently engage a ring in bottom lock 16. All arms are provided with clips 30 for engaging the rings as described previously. Alternatively, arms 40, 42 may comprise one unit with a central aperture and arms 44, 46 another, bracket 38 in this instance merely being a nut or the like for securing the two units to the base of the light socket. FIG. 7 is similar to FIG. 6 but a threaded coupling is provided at 48 so that the shade and lamp may be attached to an upright table or floor stand 50.

FIG. 8 illustrates an alternative construction for shades of the general type shown in FIGS. 6 and 7. In particular, fabric tube 10 is folded over on itself to form a double-walled tube, and a single ring E is placed between the walls. Two rings F and G. are then employed to make a roll-finish lock at the other end, both layers

of fabric being used just like the single layer described hereinabove.

Various changes in the details, steps, materials and arrangements of parts, which have been herein described and illustrated in order to explain the nature of the invention, may be made by those skilled in the art within the principle and scope of the invention as defined in the appended claims.

What is claimed is:

1. A lampshade comprising:

a tube of stretch fabric;

a pair of substantially identical wire frames engaging one end of said tube in a roll-finish lock; and

means securing said roll-finish lock to a light fixture.

2. The lampshade as claimed in claim **1**, and additionally comprising a second pair of substantially identical wire frames engaging the other end of said tube in a roll-finish lock.

3. The lampshade as claimed in claim **2**, wherein said securing means includes means for maintaining said roll-finish locks in spaced relation.

4. The lampshade as defined in claim **2** and additionally comprising at least one intermediate wire frame of a size larger than said pairs of substantially identical wire frames.

5. The method of engaging two substantially identical wire frames with a tube of fabric comprising:

a. passing said fabric through and over the periphery of a first frame;

b. passing the second frame over the periphery of said first frame to secure said fabric therebetween;

c. passing said first frame over said second frame; and

d. repeating steps (b) and (c) until said fabric and frames are securely locked.

6. The method as defined in claim **5** and additionally comprising the step of securing a light fixture to the resulting roll-finish lock.

7. The method of engaging two substantially identical wire frames with a tube of fabric comprising:

a. passing said fabric around a first frame and over the periphery thereof;

b. passing the second frame through the inner periphery of said first frame to secure said fabric therebetween;

c. passing said first frame through the inner periphery of said second frame; and

d. repeating steps (b) and (c) until said fabric and frame are securely locked.

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