Feb. 27, 1962 YUKIO OKAMOTO 3,023,307

COLLAPSIBLE LAMP SHADE

Filed April 6, 1959

FIG. 2

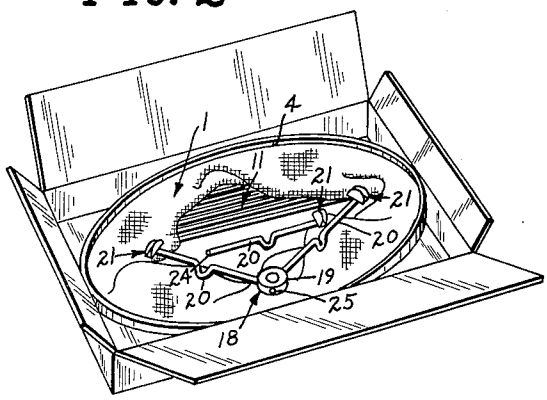
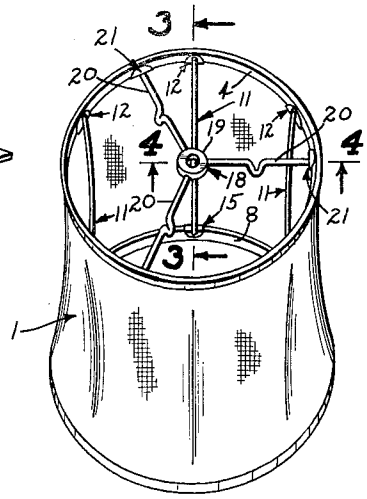


FIG. 1



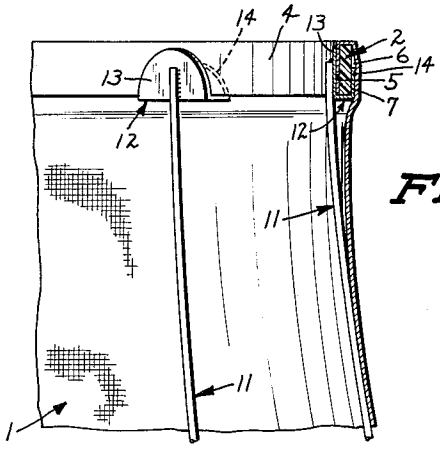


FIG. 3

FIG. 5

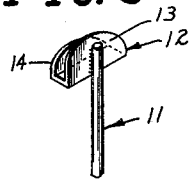


FIG. 6

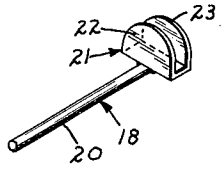
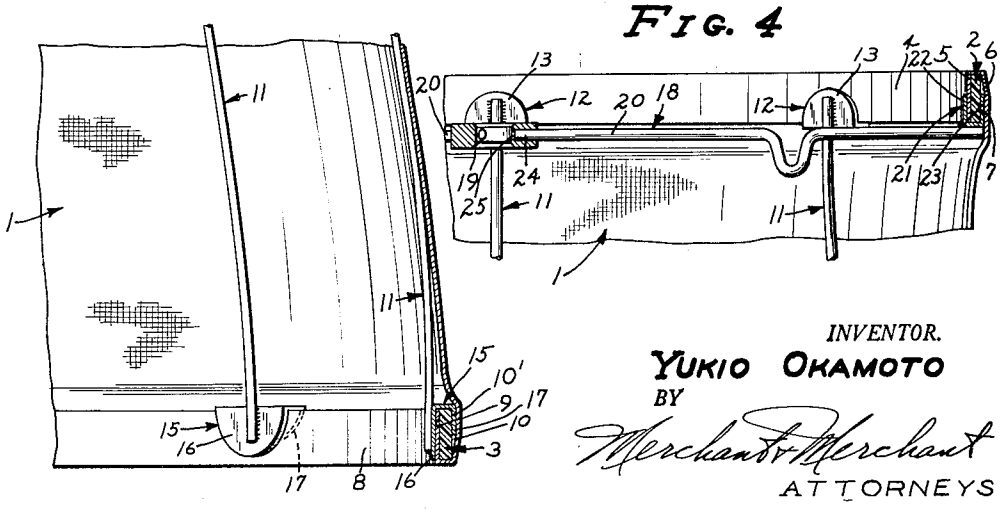


FIG. 4



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3,023,307

COLLAPSIBLE LAMP SHADE

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2 Claims. (Cl. 240—108)

My invention relates to improvement in lamp shades and more particularly to improvements in collapsible lamp shades.

The primary object of my invention is the provision of a lamp shade, conventional in appearance, including a fabric cover and supporting structure which may be readily shipped and stored in a relatively small package and which by virtue of the simplicity of its construction may be readily assembled by the purchaser with a minimum of instructions.

A further object of my invention is the provision of a device of the class immediately above described which incorporates a minimum of parts, which is inexpensive to produce, which is rugged, durable and pleasing in appearance when constructed.

The above and still further objects of my invention will become apparent from the following detailed specification, appended claims and attached drawings.

Referring to the drawings wherein like characters indicate like parts throughout the several views:

FIG. 1 is a view in perspective of my novel shade in an assembled condition;

FIG. 2 is a perspective view of same in a disassembled condition in a shipping carton;

FIG. 3 is an enlarged fragmentary view in section as seen from the line 3—3 of FIG. 1, some parts being broken away;

FIG. 4 is an enlarged fragmentary view in section as seen from the line 4—4 of FIG. 1;

FIG. 5 is a fragmentary view in perspective of one end of the supporting stays of my invention; and

FIG. 6 is a fragmentary view in perspective of the outer end portion of one of the arms associated with the supporting spider of my invention.

Referring with greater particularity to the drawings, the numeral 1 indicates an elongated tubular fabric cover member of conventional design. Upper and lower end portions of the cover member 1 encompass respectively upper and lower annular frame bands or hoops 2 and 3, said bands 2 and 3 being preferably formed from flexible resilient material to facilitate temporary deformation into the elliptical formation shown in FIG. 2 for purposes of packaging.

As shown particularly in FIG. 3, the extreme upper end portion 4 of the cover member 1 is backturned or folded in overlapping relationship to the upper frame band 2, the same being rigidly secured, as by suitable adhesive, only along the radially inner wall 5 of said band 2, whereby to define an annular downwardly opening endless pocket 6 between the cover member 1 and the radially outer wall 7 of the upper frame band 2. Similarly, and also as shown in FIG. 3, the lower end portion 8 of the cover member 1 is backturned or folded in overlapping relationship to the lower frame band 3, the same being rigidly secured, as by suitable adhesive, only to the radially inner wall 9 of said band 3, whereby to define an upwardly opening annular or endless pocket 10 between the cover member 1 and the radially outer wall 10′ thereof.

A plurality of stays 11, preferably formed from flexible resilient material, such as steel, are adapted to be interposed between the upper and lower frame bands 2, 3 to maintain the cover member 1 in a desirable taut condition. Rigidly secured to and carried by the upper

ends of the stays 11 are upwardly opening generally U-shaped saddles 12 which, at circumferentially spaced points are adapted to receive the upper frame band 2, the radially inner walls 13 of which are adapted to engage the fabric covered radially inner wall 5 of the top frame band 2 with the radially outer walls 14 thereof being received within the downwardly opening pocket 6 defined by the fabric cover member 1 and the radially outer wall 7 of the frame band 2.

Rigidly secured to the lower end portions of the flexible stays 11 are inverted generally U-shaped saddles 15 the radially inner walls 16 of which are adapted to engage, at circumferentially spaced points, the fabric covered radially inner wall 9 of the frame band 3 and the radially outer walls 17 of which are adapted to be received within the upwardly opening pocket 10. The assemblage of the resilient stays 11 is best accomplished by first inserting either of the saddles 12, 15 over its cooperating frame band 2, 3 respectively, as shown in FIG. 3, while the given stay 11 is in substantial engagement with the adjacent wall of the cover member 1. The opposite free end of the given stay 11 is then pivotally swung in a plane generally parallel to the adjacent wall of the cover member 1 about the anchored saddle to a point where it is generally parallel to the axis of the bands 2, 3 and cover member 1, with its cooperating frame band 2, 3 received therein.

To support the upper end portion of my novel shade, assembled as immediately above described, I provide a conventional spider 18 which comprises a central annular head 19 and a plurality of circumferentially spaced radially projecting spider arms 20. Rigidly secured to each of the outer ends of the spider arms 20 is an upwardly opening U-shaped saddle 21, the radially inner walls 22 of which are adapted to engage the fabric covered radially inner wall 5 of the frame band 2, and the radially outer walls 23 are adapted to be received at circumferentially spaced points within the downwardly opening pocket 6 when circumferentially spaced portions of the upper frame band 2 are received therein as shown particularly in FIGS. 1 and 4. It will be noted that in assembling of the supporting spider 18 that care should be taken to circumferentially space the saddles 21 carried thereby with respect to the saddles 12 carried by the upper end portions of the stays 11.

Preferably and as shown particularly in FIG. 2, at least one of the spider arms 20 is removably secured to the head 19 so as to facilitate reduction in overall width thereof for purposes of packaging. Preferably this is accomplished through the snug slideable reception of the radially inner end 24 of one of the arms 20 in a radially extending opening 25 in the head 19.

My invention has been thoroughly tested and found to be completely satisfactory for the accomplishment of the above objects, and while I have shown a preferred embodiment thereof, I wish it to be understood that same may be capable of modification without departure from the scope and spirit of the appended claims.

What I claim is:

1. A collapsible lamp shade comprising two independently movable endless frame bands or hoops, an elongated shade member composed of a body of tubular flexible fabric material surrounding a hoop adjacent each end of said tubular body, the material of said each end of said tubular body being folded inwardly around its respective hoop thence outwardly between said hoop and said tubular body providing between each hoop and said tubular body inwardly opening endless pockets, a plurality of elongated fabric stretching stays extending from one of said hoops to the other and located inside said tubular body, and outwardly opening generally U-shaped saddle mem-

bers carried at opposite ends of said stays and straddling the inner edge portions of said hoops at circumferentially spaced points thereon, whereby to extend into said endless pockets and embrace the inner and outer peripheries of said hoops within said tubular body.

2. The structure as defined in claim 1, in combination with a shade supporting spider member comprising a central head, circumferential spaced arms projecting radially outwardly from said head, and generally U-shaped saddle members carried at the free ends of said arms and straddling the inner edge portion of one of said hoops at circumferentially spaced points thereon between said fabric stretching stays.

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