March 14, 1961 E. E. ESCHENROEDER 2,974,435

LAMP SHADE

Filed March 21, 1958 2 Sheets-Sheet 1

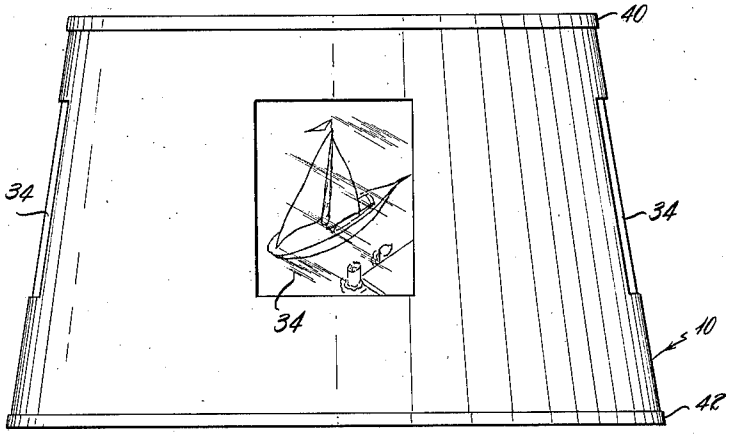


Fig. 1

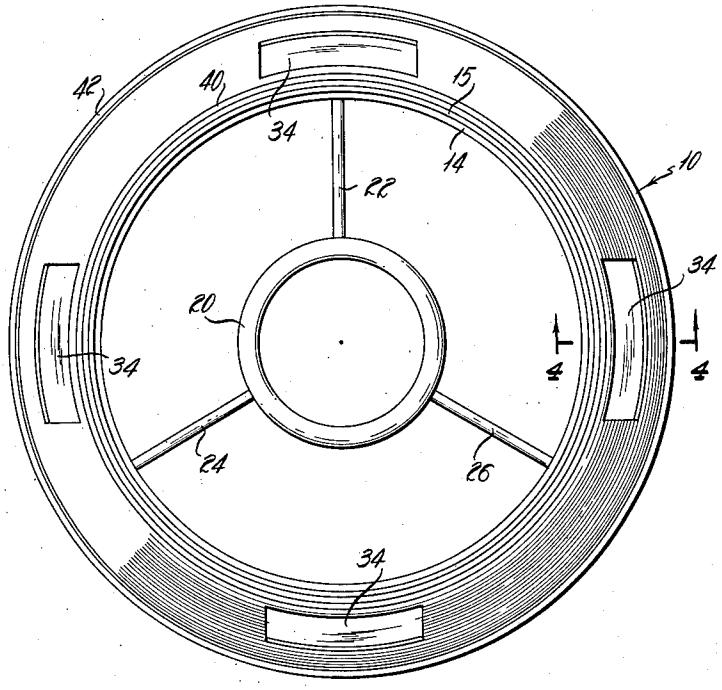


Fig. 2

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Filed March 21, 1958 2 Sheets-Sheet 2

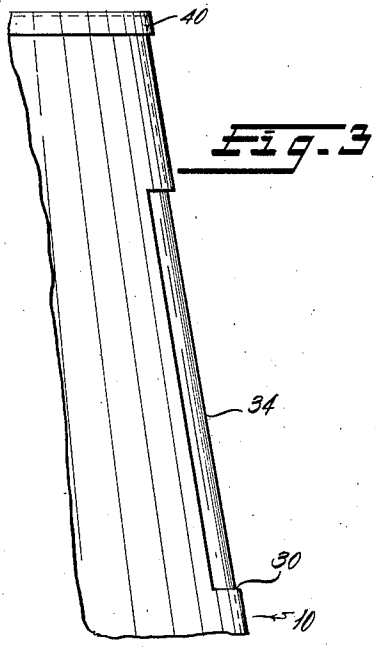


Fig. 3

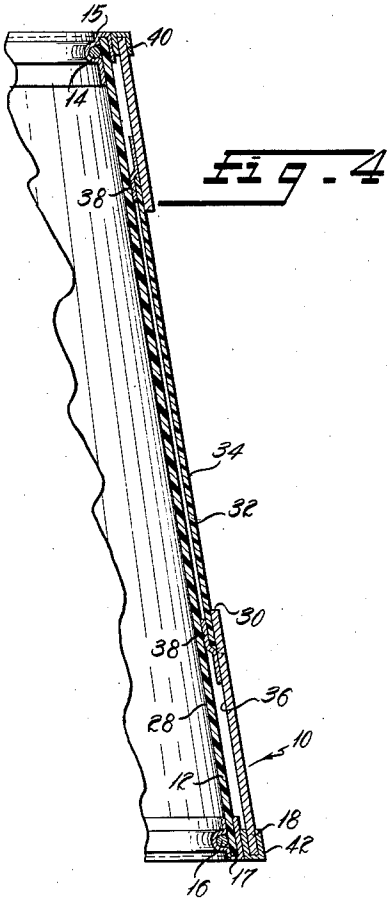


Fig. 4

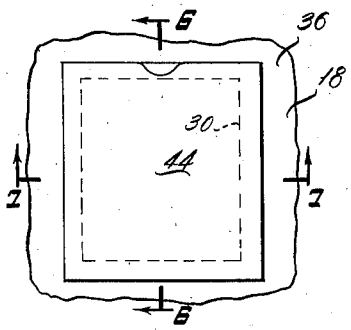


Fig. 5

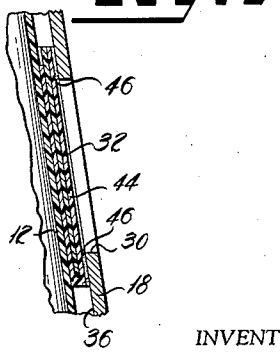


Fig. 6

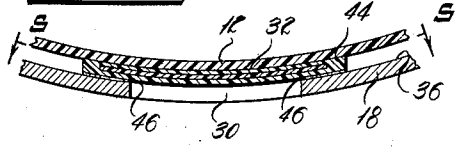


Fig. 7

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2,974,435

LAMP SHADE

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5 Claims. (Cl. 40—131)

The present invention relates to improvements in lamp shades and more particularly to improvements in decorative lamp shades which have or are adapted to have displayed on the wall thereof an image such as photographs, transparencies, drawings, paintings, prints or the like (hereinafter referred to as an "image").

Image displaying lamp shades have been developed in various forms in the past as is shown, for example, in United States Patents Number 1,463,722, issued July 31, 1923 to H. J. O'Boyle; Number 1,593,305, issued July 20, 1926 to F. H. Kulka; Number 2,177,204, issued October 24, 1939 to G. Buzick et al.; and Number 2,680,317, issued June 8, 1954 to M. R. Lewis. The prior image displaying lamp shades with which I am familiar have the basic disadvantages of being complicated in construction and expensive to manufacture, and of having the image as an integral part of the shade construction so that it is impossible for the user to display any image other than that placed on the shade at the time of its manufacture or, if the image is removable, having the image so mounted that its removal and replacement is extremely difficult. Further, these prior image displaying lamp shades are confined to but a single general type of material for the image carrier sheet.

The present invention provides an image displaying lamp shade which overcomes all of these disadvantages of the prior constructions.

It is the primary object of the present invention to provide an improved image displaying lamp shade which is simple in construction, inexpensive to manufacture and in which the image carrier sheet can be readily mounted in and removed from its display position to the end that the images displayed are readily changed by the user of the lamp shade.

A further object of this invention is to provide an improved simple and inexpensive image displaying lamp shade of separable double-walled construction comprising an inner wall, adjacent the light source in operation, of translucent material and an outer wall, preferably generally opaque, having one or more transparent image display windows therethrough whereby an image carrying sheet may be detachably mounted between said walls in alignment with said window to permit uniform illumination of the image thereon by the passage of light from a light source located interiorly of the inner wall through the light diffusing translucent inner wall and through the image carrier and the window.

More specifically, it is an object of this invention to provide an improved image displaying lamp shade of double-walled construction comprising an inner frusto-conical translucent wall and a similarly frusto-conical windowed, generally opaque outer wall, substantially co-extensive in axial length with and received over said inner wall in interfitting relation, and means on one of the adjacent surfaces of said walls for supporting an image carrier in alignment with said outer wall window.

These and other objects of this invention will become more fully apparent by reference to the appended claims

and as the following detailed description proceeds in reference to the accompanying drawings wherein:

Figure 1 is a side elevational view of a lamp shade constructed in accord with the present invention;

Figure 2 is a top plan view of the lamp shade of Figure 1;

Figure 3 is an enlarged fragmentary side elevational view of the lamp shade of Figure 1;

Figure 4 is a fragmentary sectional view taken substantially along the line 4—4 of Figure 2;

Figure 5 is a fragmentary interior view of the outer wall of a lamp shade similar in construction to that of Figures 1 to 4, but having a different image carrier mounting arrangement constituting a second embodiment of the invention; and

Figures 6 and 7 are fragmentary sectional views taken along the lines 6—6 and 7—7, respectively, of Figure 5.

Referring now to the drawings in detail and particularly to Figures 1 to 4, the lamp shade 10 comprises, in its preferred construction, a continuous inner wall 12 having upper and lower stiffener rings 14 and 16 fixed thereto by strips of tape 15 and 17, respectively, and a continuous outer wall 18 disposed closely adjacent and supported by the inner wall 12. The inner wall 12 of shade 10 is adapted to be mounted upon a lamp in any conventional manner as, for example, by the provision of a central support ring 20 rigidly connected to upper ring 14 by radiating support arms 22, 24, and 26. Rings 14, 16, 20 and arms 22, 24 and 26 are customarily made of metal in accord with conventional lamp shade construction.

Inner wall 12 is preferably frusto-conical in form for a reason which will be explained presently, but may, in the broadest aspects of this invention, be cylindrical, of polygonal cross-section or of other suitable shapes, as desired. Inner wall 12 is preferably formed of a relatively stiff, white translucent material such as frosted acetate, vinyl, ping-pong ball-like plastics which are known by the name "Moonskin" or the like. Also, heavy translucent paper or parchment may be used if desired. Use of white translucent material provides an even reflective inside surface 28 for the shade 10 and diffuses the light passing therethrough from a light source located within the shade.

Outside wall 18 is a continuous wall of similar configuration to that of inside wall 12, is preferably opaque, relatively stiff, and is formed with one or more transparent windows 30. In the embodiment of Figures 1 to 4, each window 30 is formed by an unobstructed aperture through wall 18. Windows 30 are made slightly smaller than the size of the image to be displayed so that the margin edges of the image carrier (such as the white edge of a photograph print or the carrier for a transparency) are fully covered and concealed by wall 18 when in display position.

Walls 12 and 18 are both preferably of similar frusto-conical form, that is, of substantially the same apex angle, so that when wall 18 is received in interfitting relation over wall 12 as is most clearly shown in Figure 4, wall 18 is supported by wall 12. While the same result is achieved with interfitting upwardly tapered walls of any cross-sectional configuration, frusto-conical form is preferred for simplicity in design and appearance and ease and economy in manufacture. If the interfitting walls are not upwardly tapered, it is necessary to provide an independent support connection between walls 12 and 18.

Wall 18 is readily separable from wall 12 merely by lifting it from wall 12 whether or not wall 12 is mounted on a lamp or not. The axial length of wall 18 is preferably sufficiently longer than the axial length of wall 12 so that the top or the bottom of wall 12, as a result

of slight variations in the diameters of the inner and outer walls 12 and 18 as is inherent in the mass production of lamp shades, will be completely covered by wall 18.

The carrier sheet 32 for the image 34 to be displayed is mounted between walls 12 and 18 in alignment with window 30. For ease in establishing alignment between the image 34 on carrier sheet 32 and the window 30, I prefer to remove the wall 18 from wall 12, place the carrier 32 on the interior surface 36 of wall 18 over the window 30 with the image 34 exposed therethrough, and, with the image 34 properly aligned relative to window 30, removably adhesively bond the periphery of the carrier 32 to the interior surface 36 with strips of a suitable pressure sensitive tape 38 such as masking tape, and then replace the wall 18 upon wall 12 as shown in Figures 1 to 4. The tape 38 should contact only the edge regions of carrier 32 so that it does not obstruct light passing through the actual image 34.

When it is desired to replace the displayed image with another, the wall 18 is lifted off, the carrier 32 and tape 38 removed from surface 36 and a different image carrier placed in display position as described above.

While it is not necessary, a stiffener ring similar to ring 14 may be incorporated in the top of wall 18 to provide rigidity.

While images on a paper carrier can be displayed effectively without the light diffusion resulting from the use of white translucent material for wall 12 because of the light diffusing action of the carrier, translucent material is essential to provide light diffusion if the shade is to be used for displaying color transparencies or the like.

Tape strips 15 and 17 are used to secure rings 14 and 16 to wall 12 to assure a close nestling of walls 12 and 18, a condition which cannot be achieved quite as effectively by the use of lacing. Tape strips 40 and 42 may, if desired, be used to bind the upper and lower edges, respectively, of wall 18 to prevent nicking of the edges of wall 18 and to improve its over-all appearance.

Figures 5 to 7 illustrate a second embodiment of the invention in which a modified arrangement is made for supporting the image carrier 32 on wall 18 which greatly facilitates the interchange of images. This is an important factor for those users who like to change their decorations at frequent intervals.

In this embodiment, a transparent envelope 44, open at its top or on the side, is placed on the inner surface 36 of wall 18 in overlying relation to window 30 and bonded about its marginal edge surface to surface 36 about window 30 as indicated at 46 in Figures 6 and 7. When in display position, the image carrier 32 is located within the envelope 44 with the image 32 thereon exposed to view through one wall of envelope 44 and window 30. Interchange of images to be displayed may be effected merely by removing wall 18 from wall 12 as explained in connection with the first embodiment, removal of the image carrier 32 from envelope 44 through its open end or top, insertion of a different image carrier in envelope 44 and restoring wall 18 to its normal position on wall 12 as shown in Figures 1 to 4. The envelope 44 may, if desired, be formed by bonding a single layer transparent sheet along the side of window 30 so that envelope 44 is formed by such sheet and surface 36 of wall 18.

The invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The present embodiments are therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein.

What is claimed and desired to be secured by United States Letters Patent is:

1. A lamp shade for use in a lamp structure having a base member, and upstanding lamp shade mounting post member supported by said base member and projecting upwardly therefrom and a light source supported at the upper end of said base member, said lamp shade being adapted for interchangeable image display and comprising: a continuous downwardly and outwardly tapered endless unapertured inner translucent wall open at only axial opposite upper and lower ends and having an inner surface disposed in exposed surrounding relationship to said light source, means including rigid rod-like members mounted on said inner wall adapted to fixedly support said inner wall to said post member in spaced apart surrounding relationship to said light source and said post member, a continuous substantially opaque outer wall having a shape and size corresponding substantially to that of said inner wall and telescopically slidable over said inner wall in surrounding snug interfitting relation therewith and supported only by surface abutment with said inner wall, said inner wall being nested within said outer wall thereby providing for unobstructed separation of said outer wall from said inner wall, said outer wall having at least one visually unobstructed window therethrough exposing a portion of the outer surface of said inner wall and having an area that is substantially less than the peripheral area of said outer wall, an image carrier sheet removably mounted on one of the adjacent surfaces of said walls and covering the portion of said inner wall exposed to said window in image display aligned relation to said outer wall window, said image carrier being slightly larger than said window such that the marginal edges of said carrier are disposed and concealed between the adjacent surfaces of said walls.

2. The lamp shade defined in claim 1 wherein said image carrier is mounted on one of the adjacent wall surfaces of said inner and outer walls by means of pressure sensitive tape.

3. The lamp shade defined in claim 1 wherein a transparent envelope is adhesively bonded to one of the adjacent wall surfaces of said inner and outer walls for supporting said image carrier, said envelope having an opening along one edge thereof for insertion of said image carrier therein.

4. A lamp shade for use in a lamp fixture having a base member, an upstanding lamp shade mounting post member supported by said base member and projecting upwardly therefrom and a light source supported at the upper end of said base member, said lamp shade adapted for interchangeable image display and comprising: an upstanding frusto-conical endless inner translucent wall having substantially smooth uninterrupted inner and outer wall surfaces and open only at axially opposite upper and lower ends; means including a plurality of spaced apart rigid substantially straight rod-like members fixedly secured at their outer ends to said inner wall near the top thereof and extending radially inwardly therefrom, and means for rigidly joining the inner ends of said straight members together and adapted to be attached to said post for fixedly securing said inner wall to said post member in surrounding relationship to said light source and to said post member; a frusto-conical substantially opaque outer wall having a shape and size corresponding substantially to said inner wall and telescopically slidable over the outer surface of said inner wall in snug surrounding interfitting relationship therewith and supported only by surface abutment with the outer surface of said inner wall, said inner wall being nested within said outer wall thereby providing for unobstructed separation of said outer wall from said inner wall, said outer wall having at least one unobstructed window therethrough exposing a portion of said outer surface of said inner wall and being of substantially smaller area than

the circumferential area of said outer wall, an image carrier sheet having dimensions slightly larger than said window and being removably disposed between adjacent surfaces of said walls, said carrier covering the portion of said inner wall exposed to said window and having its marginal edges extending beyond the edges of said window by predetermined magnitudes, means for removably supporting said image carrier on one of the adjacent surfaces of said walls including adhesive means concealed between said wall surfaces and supporting said image carrier sheet in display aligned relation to the outer wall window, said inner wall being formed of a white translucent material to permit the effective display of color transparencies and the like.

5. The lamp shade defined in claim 4 wherein said image carrier supporting means comprises a transparent envelope adhesively bonded to one of the adjacent wall

surfaces of said walls and having an opening along one edge thereof for insertion of said image carrier therein.

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