

July 2, 1940.

P. LABUDA

2,206,508

WIRE FRAME FOR LAMP SHADES

Filed June 25, 1938

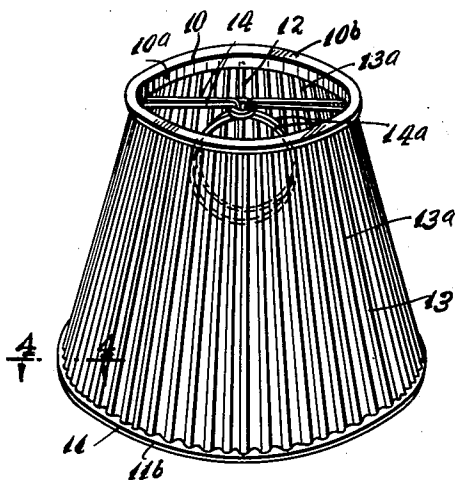


Fig. 1.

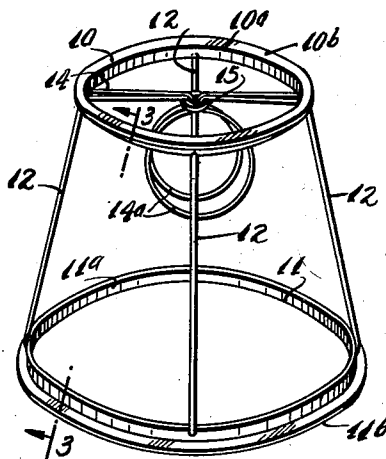


Fig. 2.

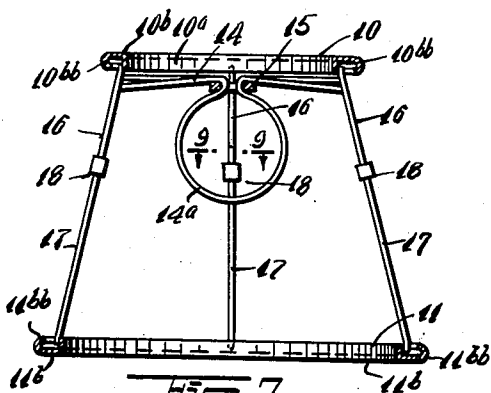


Fig. 3.

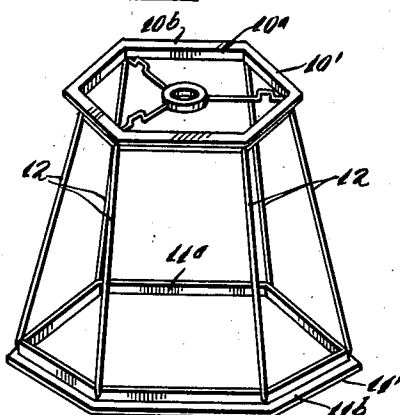


Fig. 4.

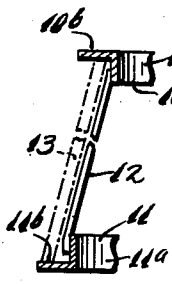


Fig. 5.

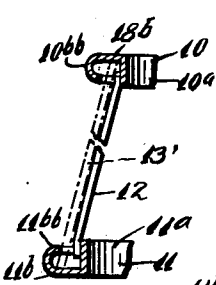


Fig. 6.

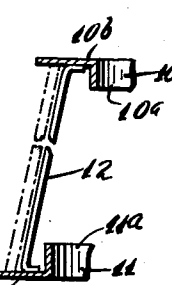


Fig. 7.

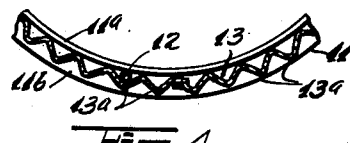


Fig. 8.



Fig. 9.

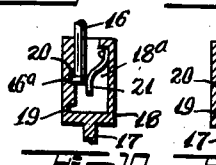


Fig. 10.

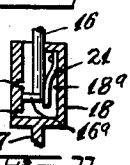


Fig. 11.

INVENTOR
Paul Labuda
BY *Gottlieb Polach*
ATTORNEY

UNITED STATES PATENT OFFICE

2,206,508

WIRE FRAME FOR LAMP SHADES

Paul Labuda, New York, N. Y.

Application June 25, 1938, Serial No. 215,762

5 Claims. (Cl. 240—108)

This invention relates to new and useful improvements in a wire frame for lamp shades.

More specifically, the invention proposes the construction of a wire frame for lamp shades characterized by super-imposed frame members connected together by means of several tie rods in a manner so that a lamp shade cover may be rested against the tie rods and upon a portion of the bottom frame member with its top edge engaging against a portion of the top frame member.

Still further it is proposed to characterize the frame members by vertically extended wall portions upon which the ends of the tie rods are connected and horizontally outwardly directed wall portions against which the edges of the lamp shade are adapted to engage.

Still further it is proposed to construct the lamp shade from parchment or similar material and to provide the same with a plurality of corrugations extending along its height and into several of which the tie rods are adapted to engage.

Still further it is proposed to characterize the outwardly extending horizontal wall portions of the frame members with holding elements for engaging over the edge portions of the lamp shade for holding the same in position thereon.

Still further it is proposed to construct the tie rods in such a manner that they may be held in a normal position with the edge portions of the lamp shade engaging against the adjacent face of the outwardly extended horizontal walls of the frame members and to permit the frame members to be moved apart relative to each other for disengaging the same from the edges of the lamp shade to permit the lamp shade to be removed therefrom when desired.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a perspective view of a lamp shade having a wire frame constructed according to this invention.

Fig. 2 is a perspective view of the wire frame per se.

Fig. 3 is a sectional view on the line 3—3 of Fig. 2.

Fig. 4 is a sectional view on the line 4—4 of Fig. 1.

Fig. 5 is a view similar to Fig. 2 but illustrating the wire frame constructed according to a modification of the invention.

Fig. 6 is a view similar to Fig. 3 but illustrating a still further modification.

Fig. 7 is a vertical sectional view of a wire frame for lamp shades constructed according to a still further modification of the invention.

Fig. 8 is an enlarged detailed view of a portion of Fig. 7.

Fig. 9 is an enlarged sectional view on the line 9—9 of Fig. 7.

Fig. 10 is a sectional view on the line 10—10 of Fig. 9.

Fig. 11 is a view similar to Fig. 10 but illustrating a shifted position of the parts.

The wire frame for lamp shades includes a top frame member 10 having a vertical wall portion 10^a and an outwardly directed horizontal wall portion 10^b continuing from the top of its vertical wall portion 10^a. The top frame member is constructed from sheet metal or other similar material and is substantially L-shape in cross section as clearly shown in Fig. 3.

A bottom frame member 11 has a vertical wall portion 11^a and an outwardly directed horizontal wall portion 11^b continuing from the bottom of its vertical wall portion 11^a. This bottom frame member is constructed in a manner similar to the top frame member 10 and is also L-shape in cross section as shown in Fig. 3.

Several tie rods 12 are attached to and extend between the vertical wall portions 10^a. The top ends of the tie rods 12 are securely attached to the vertical walls 10^a of the top frame member 10. This attachment is accomplished by welding, brazing, or in any other similar manner. The bottom ends of the tie rods 12 are securely attached to the vertical wall portion 11^a of the bottom frame member 11 in a manner similar to that described relative to the attachment of the top ends to the vertical wall members 10^a.

A lamp shade cover 13 is adapted to be rested against the tie rods 12 and upon the top face of the bottom horizontal wall portion 11 and has its top edge engaged against the bottom face of the top horizontal wall 10^b. The edge portions of the lamp shade 13 are adapted to engage the horizontal wall portions of the frames 10 and 11 for preventing relative movement between the lamp shade 13 and the wire frame. As clearly shown in Figs. 1 and 4 the lamp shade 13 is provided with a plurality of corrugations 13^a extending along its height and the tie rods 12 are adapted to extend into certain corrugations 13^a.

permitting the lamp shade to pass there-around without in any way affecting the outer appearance thereof. The manner in which the corrugations extend around the rods 12 is clearly shown in Fig. 4.

If the lamp shade cover 13 should become soiled, or if it is desired to change the appearance of the lamp, the lamp shade cover may be removed from the wire frame to permit a lamp shade cover of different design to be engaged thereon. This removal is accomplished by spreading the top edge of the lamp shade cover 13 to permit it to slip over the outer periphery of the top horizontally outwardly directed wall portion 10^b. When the lamp shade cover 13 is engaging over this outward periphery it may be manually pulled therefrom. For positioning the new lamp shade cover upon the wire frame, the large, or bottom end thereof, is slipped over the top frame 10 and manually pressed downwards thereon to cause the edges thereof to be engaged between the outwardly directed horizontal wall portions 10^b and 11^b.

The wire frame is provided with a support means for permitting the shade to be engaged upon the bulb positioned within the socket of a conventional lamp. This support means comprises parallel pieces of wire 14 having their ends securely attached to portions of the top frame member 10. Intermediate of their ends the wires 14 are formed with loop portions 14^a which are adapted to engage around the bulb for supporting the wire frame upon the lamp. A ring 15 is engaged upon the wires 14 just above the loops 14^a for holding the loops in fixed position with relation to each other at their top ends in a manner so that the bottom ends of the loops 14^a will be urged apart to permit them to be engaged over the bulb.

According to the modification of the invention shown in Fig. 5 the wire frame is constructed in a manner similar to that described relative to Figs. 1 and 4, except that the top frame member 10' is hexagonal in shape instead of circular. The bottom frame member 11' is also hexagonal in shape. The tie rods 12 are extended between the frame members 10' and 11' and are securely attached to the vertical wall portions 10^a and 11^a thereof. In other respects this form of the invention is similar to the previous form.

According to the modification shown in Fig. 6 the construction of the wire frame is similar to that described in connection with the previous forms of the invention except that the ends of the tie rods 12' are securely attached to the adjacent faces of the horizontal wall portions 10^b and 11^b instead of the vertical wall portions 10^a and 11^a. In other respects this form of the invention is similar to the previous forms.

According to the modification of the invention shown in Figs. 7-11 inclusive the wire frames 10 and 11 are provided with a means for engaging the edge portions of the lamp shade cover 13 for securing the cover in position thereon. Still further this embodiment provides a means for permitting the frame members 10 and 11 to be moved away from each other for releasing the holding action of the aforesaid means for permitting the lamp shade cover to be removed from the wire frame when so desired.

The means for holding the lamp shade comprises holding elements in the form of half circular extensions 10^{bb} formed on the outer edge of the horizontal wall 10^b of the top frame mem-

ber 10 for engaging over the top edge of the lamp shade cover 13. The bottom horizontal wall 11^b is formed with a similar half circular extension 11^{bb} for engaging over the bottom edge portion of the lamp shade cover 13. The method in which these portions 10^{bb} and 11^{bb} are adapted to engage the edge portions of the lamp shade cover 13 is clearly shown in Fig. 8 by the dot and dash lines 13'.

The means for permitting the frame elements 10 and 11 to be moved away from each other to release the holding action of the holding elements 10^{bb} and 11^{bb} comprises several tie rods 16 and 17 attached to the vertical wall portions 10^a and 11^a. The tie rods 16 have their top ends securely attached to the vertical wall portions 10^a and the tie rods 17 have their bottom ends securely attached to the vertical wall portions 11^a. The tie rods 16 and 17 are normally in end alignment.

A socket member is mounted on each of one of the adjacent ends of the tie rods. As shown on the drawing, the socket members 18 are mounted upon the ends of the tie rods 17, and the adjacent ends of the tie rod 16 are adapted to extend into the hollow 18^a of the socket members 18 through an opening formed in the top thereof. Adjacent the base wall of the hollow 18^a in the socket 18 there is formed an inwardly directed recess 19 and a similar recess 20 is formed above the recess 19 intermediate the ends of the hollow 18^a.

The bottom ends of the tie rods 16 are formed with inwardly directed lugs 16^a which are adapted to act in a manner for holding the frame members in a normal position or in a resiliently separated position from the normal. A leaf spring 21 has one of its ends securely attached to the wall of the hollow 18^a opposite the recesses 19 and 20 and is adapted to bear against the tie rods for urging these tie rods into a position in which the lug 16^a may be engaged into either of the recesses 19 or 20. When the lugs 16^a are engaged into the lower recesses 19 the frame members 10 and 11 will be in their normal position in which the edge portions of the lamp shade cover 13 will be engaged between the adjacent faces of the horizontal wall portions 10^b and 11^b and beneath the holding elements 10^{bb} and 11^{bb}.

If the lamp shade cover 13 becomes soiled or it is desired to change the appearance of the lamp, the shade cover may be removed in the following manner: The frame members 10 and 11 are manually turned with relation to each other to cause the tie rods 16 and 17 to move out of end alignment to disengage the lug 16^a from the recess 19 against the holding action of the spring 21. The tie rods 16 may then be pulled outwards with relation to the socket members 18 to permit the lug 16^a to be aligned with the recesses 20. The top frame member is then released and the springs 21 will cause the lug 16^a to be seated into the recesses 20 for holding the frames in their extended position with relation to each other to permit the lamp shade cover 13 to be removed by passing it over the top frame member 10. In other respects this form of the invention is similar to the previous forms.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I

claim as new, and desire to secure by United States Letters Patent is:

1. A wire frame for lamp shades comprising a top frame member having a vertical wall portion and an outwardly directed horizontal wall portion from the top of its vertical wall portion, a bottom frame member coaxial with respect to said top frame member and having a vertical wall portion and an outwardly directed horizontal wall portion from the bottom of its vertical wall portion, holding elements on the outer edge portions of said horizontal wall portions directed towards each other, several tie rods attached to said vertical wall portions and directed towards each other, a socket member mounted on each of one of the adjacent ends of said tie rods, cooperating means on said socket members and the other of the adjacent ends of said tie rods for holding said frame members in a normal position and in a slightly separated position from said normal, whereby a lamp shade cover may be rested against said tie rods and upon said bottom horizontal wall and its top and bottom edges be engaged behind said holding elements.

2. A wire frame for lamp shades comprising a top frame member having a vertical wall portion and an outwardly directed horizontal wall portion from the top of its vertical wall portion, a bottom frame member coaxial with respect to said top frame member and having a vertical wall portion and an outwardly directed horizontal wall portion from the bottom of its vertical wall portion, holding elements on the outer edge portions of said horizontal wall portions directed towards each other, several tie rods attached to said vertical wall portions and directed towards each other, a socket member mounted on each of one of the adjacent ends of said tie rods, cooperating means on said socket members and the other of the adjacent ends of said tie rods for holding said frame members in a normal position and in a slightly separated position from said normal, whereby a lamp shade cover may be rested against said tie rods and upon said bottom horizontal wall and its top and bottom edges be engaged behind said holding elements, said holding elements comprising half circular members formed upon the outer periphery of said horizontal wall portions and being directed towards each other for engaging over the edge portions of said lamp shade cover.

3. A wire frame for lamp shades comprising a top frame member having a vertical wall portion and an outwardly directed horizontal wall portion from the top of its vertical wall portion, a bottom frame member coaxial with respect to said top frame member and having a vertical wall portion and an outwardly directed horizontal wall portion from the bottom of its vertical wall portion, holding elements on the outer edge portions of said horizontal wall portions directed towards each other, several tie rods attached to said vertical wall portions and directed towards each other, a socket member mounted on each of one of the adjacent ends of said tie rods,

cooperating means on said socket members and the other of the adjacent ends of said tie rods for holding said frame members in a normal position and in a slightly separated position from said normal, whereby a lamp shade cover may be rested against said tie rods and upon said bottom horizontal wall and its top and bottom edges be engaged behind said holding elements, said socket member being formed with a hollow and the other end of the other of said tie rods being extended into said hollow and being formed with an outwardly extended lug adapted to be selectively engaged with recesses formed in one of the walls of said hollow for selectively holding said frame members in their normal position or in their slightly separated positions.

4. A wire frame for lamp shades comprising a top frame member having a vertical wall portion and an outwardly directed horizontal wall portion from the top of its vertical wall portion, a bottom frame member coaxial with respect to said top frame member and having a vertical wall portion and an outwardly directed horizontal wall portion from the bottom of its vertical wall portion, holding elements on the outer edge portions of said horizontal wall portions directed towards each other, several tie rods attached to said vertical wall portions and directed towards each other, a socket member mounted on each of one of the adjacent ends of said tie rods, cooperating means on said socket members and the other of the adjacent ends of said tie rods for holding said frame members in a normal position and in a slightly separated position from said normal, whereby a lamp shade cover may be rested against said tie rods and upon said bottom horizontal wall and its top and bottom edges be engaged behind said holding elements, said socket member being formed with a hollow and the other end of the other of said tie rods being extended into said hollow and being formed with an outwardly extended lug adapted to be selectively engaged with recesses formed in one of the walls of said hollow for selectively holding said frame members in their normal position or in their slightly separated positions, resilient means for urging said tie rods into a position in which said lugs will engage one or the other of said recesses.

5. A lamp shade frame, comprising a pair of spaced frame members having outwardly directed flanges for engaging the top and bottom edges of a lamp shade, holding elements formed on the outer edges of said flanges and engaging the top and bottom edges of the outer face of said shade, several tie rods for each of said frame members and having one of their ends attached to their respective frame member and the other of their ends directed towards each other in end alignment, and means for attaching together the ends of said tie rods so that they may be separated when desired to slightly space said frame members to disengage said holding elements from the face of said shade to free said shade so that it may be removed from said frame.

PAUL LABUDA.