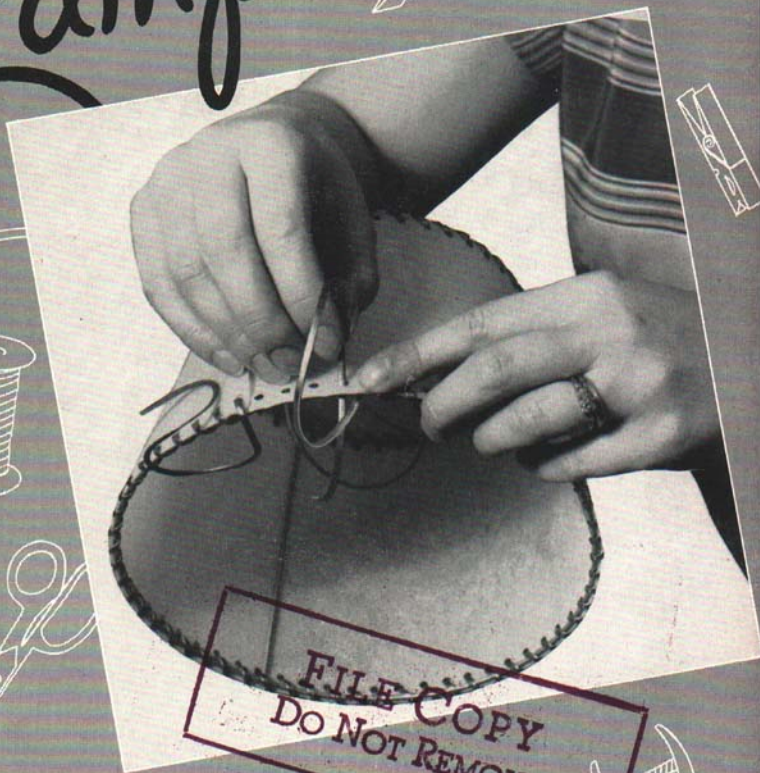


How to make

Lampshades



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How to Make Lampshades of Plastic, Parchment or Paper

By *JESSIE E. MARION and RUTH J. PECK*

Extension Specialists in Home Furnishings

The shade of a lamp is an important part of the lighting equipment. It is not enough that a lampshade be attractive, it must also be useful in directing light where it is needed. Before buying or making a shade, one should understand the principles of good lighting and know the characteristics of a good lampshade.

PRINCIPLES OF GOOD LIGHTING

Correct lighting in the home provides the right amount of light and the right kind of light for the general lighting of each room and for special activities such as reading and sewing.

It is not artificial light that causes eye strain, but the improper use of artificial light. The problem of supplying enough light is not a difficult one. However, insufficient light is the greatest single cause of eye strain.

For good lighting and easy seeing there should be at least one-tenth as much light throughout the room as there is at the actual reading or work center.

To meet the requirements for good lighting:

1. Provide enough light at the places where it is needed.
2. Place lamps so that the light shines directly on the work.
3. Prevent glare by using the proper shade on every bulb.
4. Prevent reflected glare from shiny surfaces.

SELECTION OF LAMPSHADES

A lampshade can add to or detract from the efficiency as well as the appearance of a lamp. It is well to remember that function comes before frills and that simple lampshades are always to be preferred.

The purpose of a lampshade is to direct and to distribute light and to prevent glare from the bulb. In order to direct light and to distribute light properly a lamp shade should be:

1. Broad enough at the base to spread the light over a wide area.
2. Open at the top to direct some of the light upward for general illumination of the room.
3. Deep enough to cover the source of the light.
4. Dense enough to prevent glare from the bulb.

The color of the lining for any lampshade should be white or very light in color in order to reflect as much of the light as possible. Dark-colored and soiled linings reflect less than 50 percent of the light. The amount of light reflected varies with the color of the lining of the shade —

white	85%	yellow	65%	light green	56%
ivory	75%	tan	61%	olive green	12%

SUITABLE MATERIALS FOR MAKING LAMPSHADES

When making lampshades select fabrics, papers or plastic materials, which do not interfere with the lighting efficiency of the lamp.

The color, pattern, and texture of the materials for a lampshade should harmonize with the materials in the base of the lamp and with the furnishings of the room in which the lamp is used. Materials in plain colors and of interesting textures are desirable. Patterned materials may be used with a plain lamp base and in a room having little pattern elsewhere.

The color of a lampshade should be pleasing whether the light is turned on or off. The most desirable colors for shades made of materials through which considerable light can be seen are white, ivory, peach, yellow and gold. White or light-colored linings are necessary for dark-colored shades and for shades made of material through which little or no light is visible.

Suitable materials for lampshades include the following:

Plastic—polyplastex in white and colors.

Parchment—natural, white and colors.

Paper—water-color paper or mechanical drawing paper oiled to make translucent.

To oil paper: Mix equal parts of boiled linseed oil and turpentine. Try effect of oil on paper before applying to shade. Apply with cloth pad to both sides of the shade using a *light* rotary movement.

WIRE FRAMES FOR LAMP SHADES

Wire frames used may be old or new and include the following types:

1. Frames which have upper and lower wire rings or bands connected by straight or curved wire ribs.
2. Two wire rings or rims with no connecting ribs.

How to Prepare the Wire Frame:

Remove the old cover as directed under Method I, How to Make a Pattern.

For use with plastic or paper shades.

Straighten slightly curved ribs *before* making the pattern.

Remove deeply curved ribs *after* making the pattern.

How to Repair Wire Frames:

Solder loose wires in place.

Straighten the ribs and frame.

Check the height of the frame which should be the same on each rib.

The rims should form true circles and should lie flat on a smooth surface.

How to Clean Wire Frames:

Clean frames with steel wool to remove rust.

Polish wires with steel wool and metal cleaners.

Paint dark discolored frames with aluminum or white paint.

Allow to dry at least 48 hours.

HOW TO MAKE A PATTERN FOR A LAMPSHADE

Method I: Use the old shade for a pattern, if the original cover or lining is made of smooth unpleated paper.

1. Remove carefully the binding which held the shade on the wire rims.
2. Mark the location of the seam on a rib.
3. Open the seam at the back, and note the seam allowance.
4. Clean the cover or pattern to prevent soiling the new material.

Method II: Roll the wire frame to make a pattern, if the original cover is made of fabric or of pleated paper.

1. Use smooth heavy wrapping paper for the pattern.
2. Mark one rib of the frame with a string and use that rib as the starting point.
3. Lay the wire frame on its side placing it so that it will not roll off the paper in making one complete revolution.

Note: It is desirable to have two people work together in order to make an accurate pattern.

4. Starting with the marked rib, roll the frame slowly, each person holding the frame while the other marks lines nearest him as follows (Fig. 1):

Use a sharp pencil held in a vertical position.

Mark the path of each rim on the *outside* of the wires.

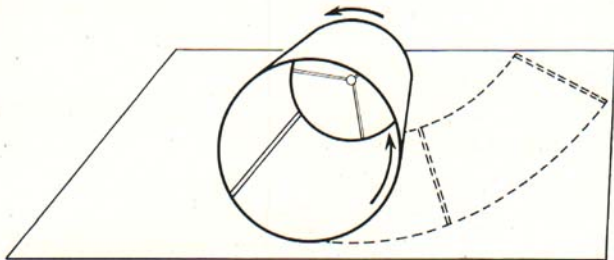


Fig. 1

Mark a line on each side of every rib as the rolling progresses to make one complete turn.

5. Add $\frac{1}{4}$ -inch seam allowance at each end of the pattern.
6. Mark the side of the pattern on which the lines are drawn as the "inside".
7. Cut out the pattern, allowing a half-inch margin on all sides.
8. Check the pattern:

Pin the seam allowance, at one end of pattern over the marked rib, turning the "inside" toward the wire frame.

Fit the pattern smoothly around the frame keeping the pencil lines on the ribs.

Lap and pin the seam at the back.

Re-mark the lines using a colored pencil, if the lines do not follow the ribs.

Check the seam allowance which should be even, $\frac{1}{4}$ to $\frac{1}{2}$ inch wide, and directly over the rib.

Remove the pattern from the frame and cut on the corrected lines.

Method III: Draft a pattern for a lampshade, if wire rims only are available.

1. Take the following measurements accurately:

Diameter of lower rim, including width of wires for AB..... inches.

Diameter of upper rim, including width of wires for CD..... inches.

Height of shade, determined by holding a ruler straight up and down, measuring from 1 inch above the light bulb down across the fixture to where the lower edge of shade should come for EF..... inches.

Circumference, around outside of the top rim for JK..... inches.

Circumference, around outside of the lower rim for LM..... inches.

2. Draft the pattern:

Use wrapping paper, sharp pencils, ruler, square, compass or a tapeline which does not stretch.

Place the paper lengthwise on the table.

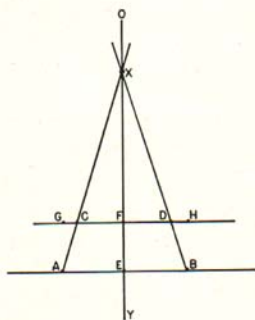


Fig. 2A

Draw a straight line lengthwise and two inches in from the lower edge.

Locate AB—the diameter of the bottom of the shade on that line.

Locate point E at the exact center of AB.

Through E draw a long indefinite line at right angles to AB for OEY.

Mark the height of the shade EF on the line EO.

Mark the same height above point A and point B for G and H.

Draw a line through points GFH.

Center CD—the diameter of the top at F on the line GFH.

Draw lines through AC and BD and extend to cross EO at point X.

Anchor the tape with a thumb tack at X.

Insert the sharp point of pencil through the tapeline at point C.

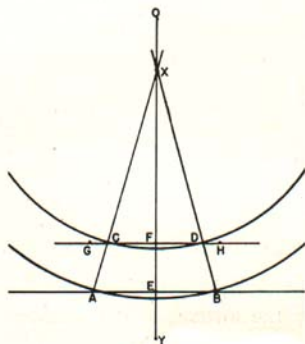


Fig. 2B

Use XC as a radius and draw a curve exactly through and well beyond C and D.

Use XA as a radius and draw a curve exactly through and well beyond A and B.

Center the circumference of the top rim at point J on the arc KJL.

Center the circumference of the lower rim at point M on arc NMP.

Mark $\frac{3}{8}$ -inch seam allowance beyond point N and P for points S and R.

Draw lines XR and XS.

Cut out pattern RSTU.

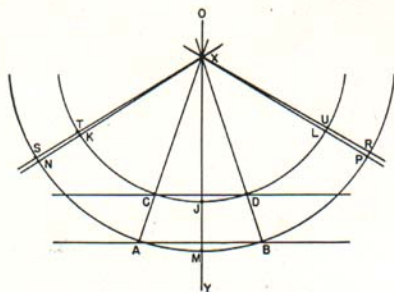


Fig. 2C

HOW TO MAKE A LAMPSHADE COVER OF PLASTIC, PARCHMENT OR PAPER

Materials used:

Cover material—polyplastex, parchment or oiled paper.

Lacings—plastic or leather.

Lampshade frame.

Equipment needed:

Sharp shears, sharp pencil, ruler, gage.

Punch which makes $\frac{1}{8}$ -inch holes.

Pincer-type clothes pins (4-6).

Household cement, transparent.

Cut the shade from the pattern (Fig. 3):

1. Place the pattern "right side" up on the right side of the material.

2. Keep pattern in place with weights.

3. Trace around the pattern with a sharp pencil held in a vertical position.

4. Mark the seam allowance on each end with dots at the upper and lower edges of the shade.

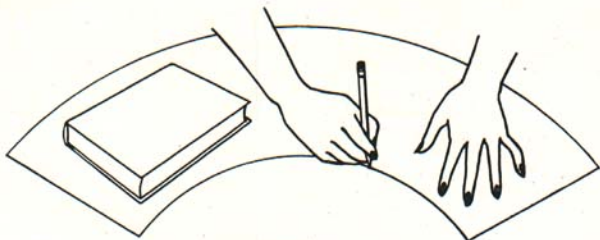


Fig. 3

5. Make a mark on the seam allowance to designate the "right side" of the cover.

6. Cut the cover *on* the pencil lines, using sharp shears.

HOW TO LACE THE COVER TO THE WIRE FRAME

1. Punch the Holes for the Lacing:

The spacing of the holes for the lacing varies with the size of the shade, the width of the rims and the effect desired.

Make trial patterns by tracing around an upper and lower corner of the shade on pieces of paper 3 inches by 6 inches, and label as "top" and "bottom" patterns.

Locate and mark with dots the exact center for the holes to be punched.

For 1st hole—measure in $\frac{1}{8}$ inch from end of shade.

For all holes—measure $\frac{1}{4}$ inch to $\frac{3}{8}$ inch from curved edges.

Between holes—measure $\frac{3}{8}$ inch to $\frac{3}{4}$ inch from center of hole to center of next hole.

Punch accurately, keeping dot in exact center of the hole.

Test the pattern by lacing to the wire rim and note the effect.

Make permanent patterns on pieces of the shade material about 3 inches x 6 inches.

Mark and punch all the holes except the last three on each edge of the shade (Fig. 4).

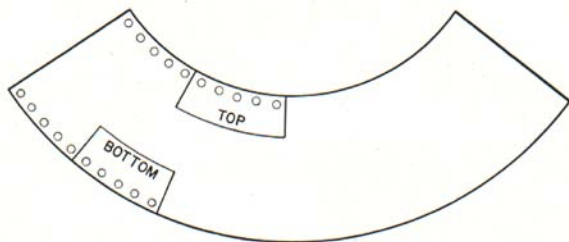


Fig. 4

2. Lace the Shade to the Frame:

The length of the lacing required is about 2 times the length of the edge to be laced.

Place the seam allowance over the marked rib.

Clip the top edge of the shade to the *top* rim with pincer-type clothes pins at each rib.

Find center of lacing and start lacing at center front of the shade.

Keep the lacing smooth, firm, at the same slant and tie temporarily at the ends.

Lace the cover to the lower rim in the same manner, slanting the lacing in the same direction as the top lacing.

Tighten lacings on each edge but avoid drawing so tightly that the edge of the cover is bent.

Trim the seam if necessary to make the lap even and $\frac{1}{2}$ inch or less in width.

Lap the seam and punch the remaining holes.

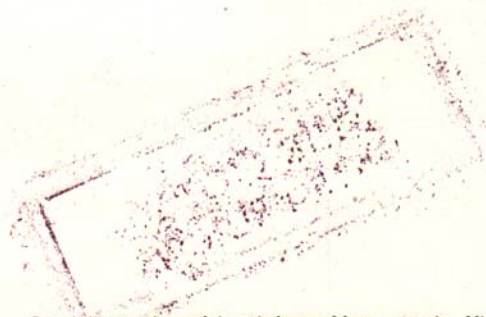
Find center of lacing and start lacing at center front of the shade.

A second lacing slanting in the opposite direction gives a heavier edge finish.

3. Cement the Seam:

Use a transparent household cement according to directions.

Keep a weight on the seam until thoroughly dry.



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