

Furniture Refinishing

"SMOOTHING BARE WOODS: STAINING AND FILLING WOODS"

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SMOOTHING BARE WOODS

Before a new finish is applied to bare wood, the surface needs smoothing with abrasives. The correct grade of abrasive must be selected for best results. On smooth wood, start with fine grain sandpaper; on rough wood, start with medium grain. Continue with successively finer abrasives.

The beauty of the finished piece will depend upon the quality of sanding. Scratches and dents cannot be covered up by the new finish; it will magnify blemishes. If the climate is humid, sand again just before you apply the stain or finish.

Equipment

- sanding block (This may be (1) a wood block, approximately 3x4x2 inches padded with carpet or sponge, (2) a blackboard eraser or (3) a commercial sandpaper holder.)
- sandpaper (Silicone carbide abrasive paper is recommended for quick and efficient cutting of the surface; medium to fine grain silicone carbide for first smoothing; fine grain for next smoothing.)
- three-cornered file
- 3/0 steel wool for final smoothing
- clean dry cloths
- tack rag
- wire suede brush
- masking tape to protect inlays and grain running in different directions

Procedure

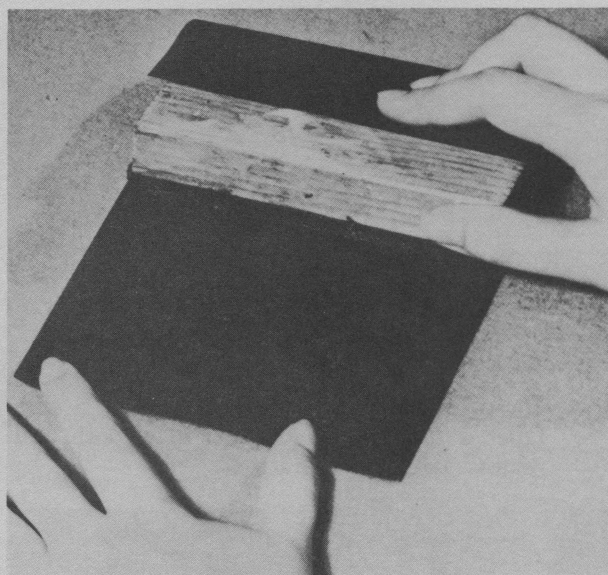
For flat surfaces:

- Select a medium or fine grain sandpaper de-

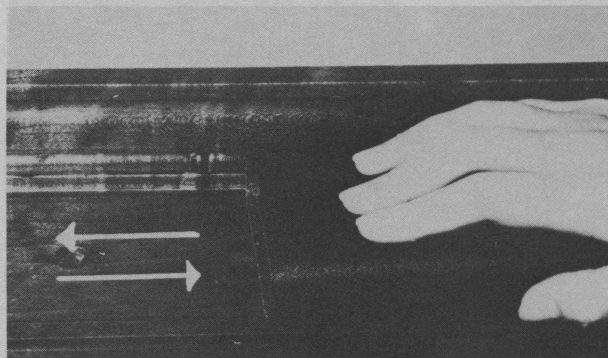
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pending upon the roughness or smoothness of the wood.

- Wrap sandpaper around sandblock.



- Sand entire piece of furniture in the direction of the wood grain.

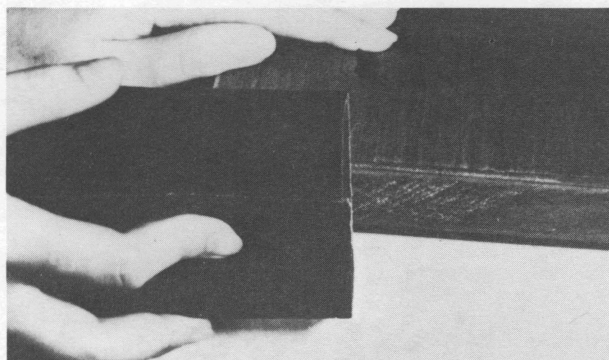


- Brush the sandpaper regularly with the wire suede brush to prevent sanding dust from clogging the sandpaper.

- Wipe sandings from the surface with a clean dry cloth.
- Begin second smoothing, using fine grain sandpaper. Use same procedure as first smoothing.
- Finish by rubbing entire surface with 3/0 steel wool. Rub with the grain of wood.
- Remove all traces of dust by wiping surface with clean dry cloth.
- Dust with tack rag. (This treated cloth will remove fine dust which an untreated one will not pick up.)

For reedings, flutings and end grains:

- On end grain, use sanding block and medium sandpaper, rubbing across end section.



- For turnings, reeded legs or carvings, a slim tapered three-cornered file will smooth and remove dark discolorations.



- Final smoothing, use 3/0 steel wool.
- Brush away sandings.
- Wipe entire surface with dry cloth and tack rag.

NOTE: Most important is the process of wiping the surface after smoothing the wood and BEFORE EACH APPLICATION OF FINISH. Dust accumulates and will cause a rough finish if every particle is not removed. Wipe with a dry cloth first; then wipe with tack rag.

STAINING WOODS

Stains are used to enhance or bring out the natural beauty and color characteristics of wood. Woods with natural beauty of grain and rich color do not need stain. Oil stain, available in many colors, is recommended for the amateur. This stain may be purchased ready-mixed or unmixed. Ready-mix oil stains are available in all common wood colorings.

When Needed

- if wood has no natural beauty or color in grain
- if wood appears faded or grayed
- if wood has been stained previously
- if a piece of furniture is made of several types of wood—staining will give a uniform appearance

Preparation

To mix your own stain, prepare the base mixture as follows:

- 3 parts boiled linseed oil
- 1 part gum turpentine
- 1/2 part Japan drier

Add colors in oil as follows:

Cherry

- dark: burnt sienna
- light: 3 parts burnt sienna, 2 parts raw sienna

Mahogany

- brown: 3 parts burnt sienna, 1 part rose pink, 1 part burnt umber
- red: 3 parts burnt sienna, 2 parts rose pink, 1/2 part burnt umber

Walnut

- rich dark brown: 4 parts burnt umber, 1 part vandyke brown
- rich reddish brown: 4 parts burnt umber, 1/2 burnt sienna

Oak

- light: 4 parts raw sienna, 1 part raw umber

Procedure

- Wipe surface with a dry cloth and tack rag.
- Test stain color on underside until you achieve desired tone.
- Apply stain with lint-free cloth or brush. Allow to penetrate.
- Wipe off excess stain before it sets.
- Allow to dry 24 hours.
- Buff lightly with 3/0 steel wool to remove roughness.
- Proceed to the next step — “Filling the Wood” (if desired); otherwise proceed to “Wood Finishes: Penetrating Finishes,” Fact Sheet # L-1023.

FILLING THE WOOD

If a satin smooth finish is desired, use a paste wood filler to fill the pores of open grain woods, such as oak and walnut. Generally, woods of old furniture need not be refilled.

If a wood filler is needed, apply a washcoat consisting of half penetrating seal and half turpentine when the stain has dried. This washcoat prevents the stain from bleeding when the sealer is worked into the wood. Allow washcoat to dry 24 hours.

Equipment

- paste wood filler
- stain to match or blend with wood color
- clean coarse cloths
- 4/0 steel wool

Procedure

- If wood has been stained, add stain to the filler. The color may be the same as the wood tone or darker than the wood to accent its grain.

- Thin filler with naphtha or painter's thinner to the consistency of thick cream.
- Using a pad or lint-free cloth, work the filler into the wood with a circular motion and across the grain of wood.



- Allow the filler to dry until it looks dull or rolls into balls as you rub your finger across its surface.
- Work the surplus filler into the wood pores by rubbing with clean burlap or cloth in a circular motion.
- Remove excess filler by wiping across the grain with a clean coarse cloth.
- Thoroughly clean the surface by wiping with the grain.
- Allow filler to dry 24 hours, then buff with 4/0 steel wool.
- Wipe the surface with a tack rag. Surface is now ready for finish — see “Wood Finishes: Penetrating Finishes,” Fact Sheet # L-1023.

CAUTION: DO NOT ALLOW FILLER TO DRY TOO LONG or it will become difficult to remove.

Finishing the Wood

Refer to Fact Sheet, “WOOD FINISHES: Penetrating Finishes,” # L-1023.

References

- Agricultural Extension Service, Louisiana State University; "Refinishing Furniture — Using Oil Stains and Penetrating Seals;" Publication 1409; November 1964.
- Agricultural Extension Service, University of Arkansas; Fayetteville, Arkansas; "Refinishing Furniture;" Circular 478; Revised October 1967.
- Cooperative Extension Service, New York State College of Home Economics, Cornell University; Ithaca, New York; "Furniture Restoration," Gena Thames; Bulletin 23; Reprinted October 1966.
- Cooperative Extension Service, Ohio State University; Columbus, Ohio. "Finishing Furniture — Old and New;" Bulletin 456; October 1965.
- Cooperative Extension Service, University of Missouri; Columbia, Missouri; "Cleaning May Restore Furniture;" May 1970.

Acknowledgement

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