



University of Idaho
 College of Agriculture
 Cooperative Extension Service
 Agricultural Experiment Station

Current Information Series No. 250

LIBRARY

November 1974

JAN 20 1975

UNIVERSITY OF IDAHO

Refinishing Wood Furniture

WILLMA SHRYACK*

WHY REFINISH?

Refinishing used furniture can be an interesting and economical way of furnishing our homes with attractive and useful furniture. The fine quality of some of our old furniture makes it too valuable to discard and it often becomes a "conversation piece" once it has been refinished.

WHAT REFINISH?

To be worth the time and effort of refinishing, a piece of furniture should serve a purpose in your home. To do so it must have good shape and design, be sturdy in construction, and have pleasing proportions. Look for beauty in its wood, for this is important in refinishing furniture.

WHICH REFINISH?

Color and grain of some woods have natural beauty and interest. Clear finishes will enhance and emphasize the

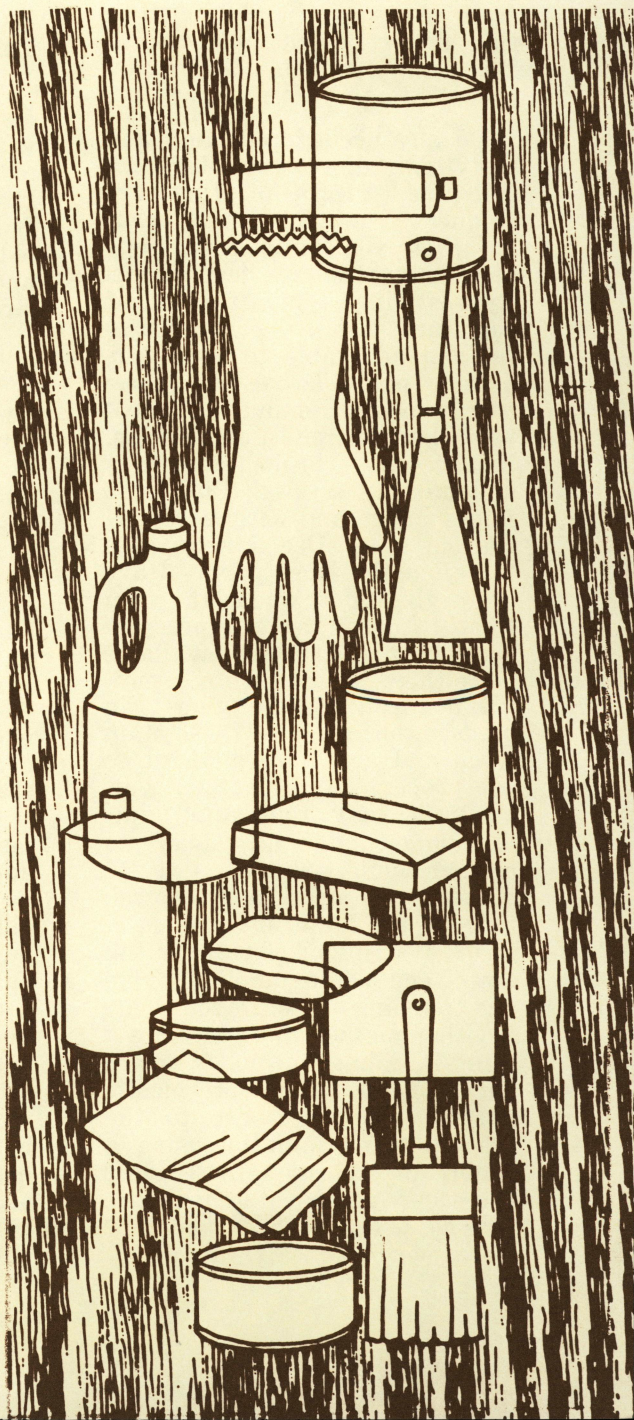
beauty of walnut, mahogany, teak, cherry, maple and oak. Paint or enamel are effective finishes for woods lacking surface interest of grain or color.

There are two types of clear finish — penetrating and surface. Each has its own use. Surface finishes which give a built-up finish on the wood are: lacquer, varnish, or shellac. These surface finishes are difficult for the amateur to use. They tend to show scratches and mar readily, and—when repair is necessary—the entire surface must be redone.

Penetrating finishes are easier to use. They give a satin finish resembling the hand-rubbed oil finish so desirable in fine-wood pieces. Such finishes penetrate into and become a part of the wood, making a seal that protects the surface from scratches, water spots and other marring. Patch-repairing then is easy. A penetrating seal with a tung-oil base is a fine one and is available. Each manufacturer has his own trade name for products with this base. The label should tell you if tung oil is included.

* Extension Home Furnishing Specialist, University of Idaho Cooperative Extension Service.

CAUTION—REMEMBER that many of the materials you use in wood refinishing are dangerous when used improperly. Some are inflammable; some give off toxic fumes. Work in a well-ventilated room away from any type of flame. Wear rubber gloves. Burn or keep in covered metal containers all used cloths and steel wool. Burn all used papers. Replace all lids on containers. Clean brushes and wrap in foil or plastic.



3
322

Steps to Refinishing

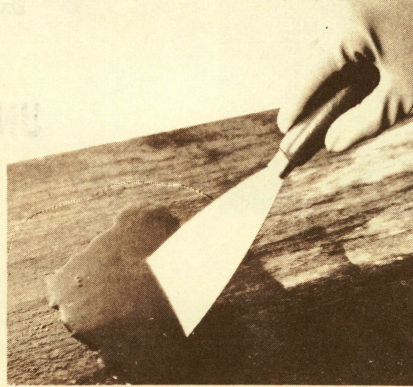


Wear rubber gloves

STEP ONE — REPAIRING

There are no "short cuts" to good refinishing. Each step from removing the old finish to the final rubdown must be followed and completed before you proceed to the next step.

Do any needed repairing and restyling before you start refinishing. Pieces of furniture frequently gain in simple beauty when you remove carvings and unnecessary decorations. By restyling a misfit piece of furniture, it may be made useful and adaptable to your furnishing plan. To restyle or repair a piece, remove all hardware, handles, pulls, and hinges. Replace any broken bracings and missing screws. Pull loose joints apart and scrape off all the old glue. Use a resin glue to rejoin the loose parts. Have both glue and wood at room temperature. Resin glues are easy to use and are available in either powdered or semi-liquid form. Casein glues can be used, but some of these stain wood and are more difficult to use properly. With hot vinegar, wash off any remaining glue. Remember, glue is easier to remove while it is still soft. If a hole is too large for its dowel, tighten the joint by placing a strip or strips of cloth over the dowel end before applying glue and pushing it into the hole. Another method of tightening a joint is filling the extra space with plastic wood or plastic putty. Apply pressure to the freshly glued joint by using a clamp or tourniquet. Protect the wood against the pressure tool by using pads of paper or cloth.



Allow the remover to stand until the old finish shows wrinkles or blisters and softens.

STEP TWO — REMOVE OLD FINISH

You can remove old finish easiest and most satisfactorily with commercial paint and varnish remover. Select a remover that is non-flammable, and wax free. Removers containing wax leave a residue on the surface, and inflammable removers are fire hazards.

Follow the label's directions exactly. The usual procedure is simple. With a paint brush, apply the remover to an area not larger than 2 square feet. Wear rubber gloves and avoid inhaling remover fumes. Flow the remover on in one direction. Do not move the brush back and forth. Allow the remover to stand until the old finish shows wrinkles or blisters and softens—about 15 minutes. Then—working with the grain of the wood—hold the blade of a broad putty knife flat against the wood and push it under the old finish. Clean the knife on newspaper or old cloth. Several applications of the remover may be necessary to remove all the old finish. Use steel wool, burlap, toothbrush, pointed stick, or coarse string to remove the softened finish from hard-to-get-at places. After the last application, remove every trace of finish remover by wiping with coarse burlap. Clean and neutralize the surface with denatured alcohol, mineral spirits, or turpentine. Allow at least 24 hours before starting the next step.

STEP THREE — BLEACH (if desired)

If we bleach, we do so for one of three reasons—to get a light blond finish on a naturally dark wood, to lighten wood previously stained dark, or to remove such surface defects as spots, streaks, or dark areas.

Commercial bleaches are better for our use than homemade ones. They do a better job. Remember that all bleaches are made of strong chemicals dangerous to skin and eyes. They are poisonous. Take great care when you use a bleach of any kind. Wear rubber gloves; protect your eyes, and dispose of all remaining bleach when the bleaching job is done.

Carefully follow directions for the bleach you are using. Working with the grain of the wood use a rag, cellulose sponge, or brush to apply the bleach. Repeat applications until you have the tone you want, then wash the surface thoroughly with water and wipe it dry. Allow a 24-hour drying period.

STEP FOUR — PREPARE WOOD SURFACE

Preparing the wood surface for its new finish is a vital part of refinishing. The surface must be as smooth as satin without blemishes or roughness if you are to have a satisfactory final finish. There is no substitute for such preparation.

1. Raise indentations with steam. Place a damp, heavy cloth over the dent. Touch heated iron to the cloth on the spot



Raise indentations with steam

over the dent. The steam will swell the wood fibers. Repeat until the former indentation is level with the surrounding surface.

2. Fill the holes and cracks with sawdust-and-glue, wood dough, or wood putty. Using a flexible putty knife, press filler into the hole or crack. To allow for shrinkage in the filler, build up the fill higher than the surrounding surface. After a 24-hour drying period, add more if the filler has shrunk.

3. Remove stains with a solvent or by sanding. For animal fat stains, use benzene or naphtha. Use acetone (fingernail polish remover) for stains from vegetable oils. Sand off spots made by glue.



Sand the wood surface with the grain of the wood.

4. Sand the wood surface until it is satin smooth. Sanding determines the final beauty of the finish. Never use coarse sandpaper as it makes deep scratches that must be removed in the final sandings. Start with No. 3/0 or 4/0 garnet paper and finish with No. 6/0 or



Hold sandpaper with grit side out to sand carved lines.

7/0 garnet paper. Always sand with the grain of the wood and keep surface wiped free of sawdust. You may use an electric sander of the vibrating type for the first sanding on flat surfaces. Always use a sanding block in your hand for final sanding. Hold the paper in your fingers when sanding shaped areas. For rounded places cut the paper into strips and use a shoe-shine action. Fold the paper with grit side out to sand carved lines. Crushed paper becomes pliable and is fine for sanding carvings or scrollwork.

Be satisfied only when the wood surface feels perfectly smooth and when a nylon stocking will not snag when rubbed over it.

STEP FIVE — STAIN WOOD (if desired)

Most wood is more attractive and beautiful when left unstained. Sometimes the right staining emphasizes interesting wood grain or blends wood tones where there are irregularities.

Pigment oil stains give most satisfactory results and are available in a wide range of color tones. They are easy to use as they penetrate slowly and do not raise the wood grain.

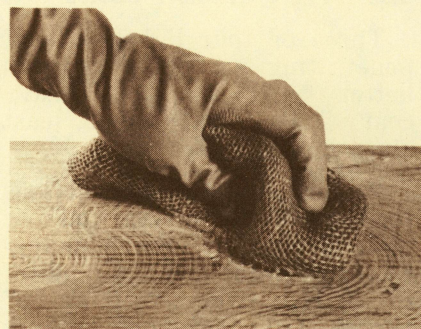
Have wood surface absolutely clean. Use tack rag* for final wiping. Closely follow directions given for use of the pigment oil stain you are using. Working with the wood grain, brush the stain evenly on a small area at a time and wipe off immediately. Repeat until you have the color tone you want. Soft woods absorb oil stain quickly. Hard woods stain less readily. Allow the final stain to dry over night.

If you need to use a wood filler, apply a thin washcoat of half penetrating seal and half turpentine when the stain has dried. The washcoat prevents the stain from bleeding when you work the filler into the wood. Let the washcoat dry at least 24 hours.

STEP SIX — FILL WOOD GRAIN (if desired)

If you want a smooth, glass-like surface finish, use a paste wood filler to fill the pores of open-grain woods. Typical open-grain woods are oak, mahogany, teak, and walnut.

Follow directions given for the paste filler you use. If the wood has been stained, add stain to the filler. The filler may be the same tone as the wood or you can get a nice effect by making the filler slightly darker than the wood to accent its grain. Filler the consistency of thick cream is best. If it needs thinning, use naphtha or mineral oil.



Rub with clean burlap in a circular motion to work filler into wood grain.

Using a pad of lint-free cloth, work the filler into the wood with a circular motion and across the grain of the wood. Allow the filler to stand until it looks dry and rolls up when you draw your fingertip across the surface. Filler will pull out of

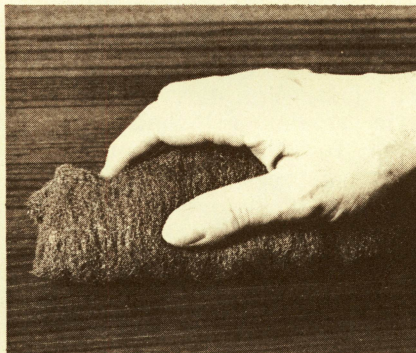
* Tack rags are sold at paint or auto-parts stores. You can make your own by washing all the filling from a 2-foot-square piece of closely woven cheesecloth. Dip the cheesecloth in warm water and wring it out slightly. Now wet the cloth with turpentine and shake it out loosely. Dribble varnish over the surface of the cloth. Fold edges toward center then twist into a tight roll to force out the water and saturate the cloth with turpentine and varnish. Twist until tack rag is sticky enough to pick up dust but dry enough not to deposit moisture when used. Store folded cloth in aluminum foil or in a small, tightly-covered, glass jar.

the wood pores if it is wiped too soon. If it is left too long, it becomes too dry and excess is hard to remove. Work the surplus filler into the wood pores by rubbing with clean burlap or coarse cloth in a circular motion. When all pores are filled, remove excess filler by wiping a coarse rag across the grain. With clean rag, thoroughly clean the wood surface by wiping with the grain. Filler needs to dry at least 24 hours. When thoroughly dry, rub the surface gently with 6/0 garnet paper or 4/0 steel wool. Use lightest possible pressure in this operation and rub only until the surface feels perfectly smooth to your fingers.

STEP SEVEN — FINISH COATS

Three or four light coats of penetrating seal give a much better finish than one heavy coat. Table tops need at least six coats.

Be sure to read instructions for the penetrating seal you use. Methods differ. Some manufacturers recommend wiping off excess seal after a "setting up" period. Others do not. Before applying the seal, wipe wood



Rub lightly with 4/0 steel wool or 6/0 garnet paper between coats of finish.

surface and paint brush with tack rag to remove all dust and dirt particles. Allow the seal to dry at least 48 hours. Test with your thumb nail. The finish will be hard, not soft or tacky when dry. Rub lightly with 6/0 garnet paper or 4/0 steel wool between coats. Remove dust particles with tack rag before each application of penetrating seal.

STEP EIGHT — RUBBING (if desired)

Rubbing the wood with pumice and either linseed oil or mineral oil gives it the soft

glow or professional, hand-rubbed look so desirable on good furniture. Dip a pad of cheese cloth in enough oil to moisten the pumice, then in the pumice powder, and rub the wood surface gently. Rub long but gently. Allow time each day for several days to do some rubbing.



Rub wood surface with pumice and oil for hand-rubbed look.

For a "grand finale", give flat surfaces a thin coat of paste wax. Use a carnauba* type of wax as it gives a hard protective finish.

* Hardest of all natural waxes, an ingredient in good paste waxes.

Issued in furtherance of cooperative extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. James L. Graves, Director of Cooperative Extension Service, University of Idaho, Moscow, Idaho 83843. We offer our programs and facilities to all people without regard to race, creed, color, sex, or national origin.