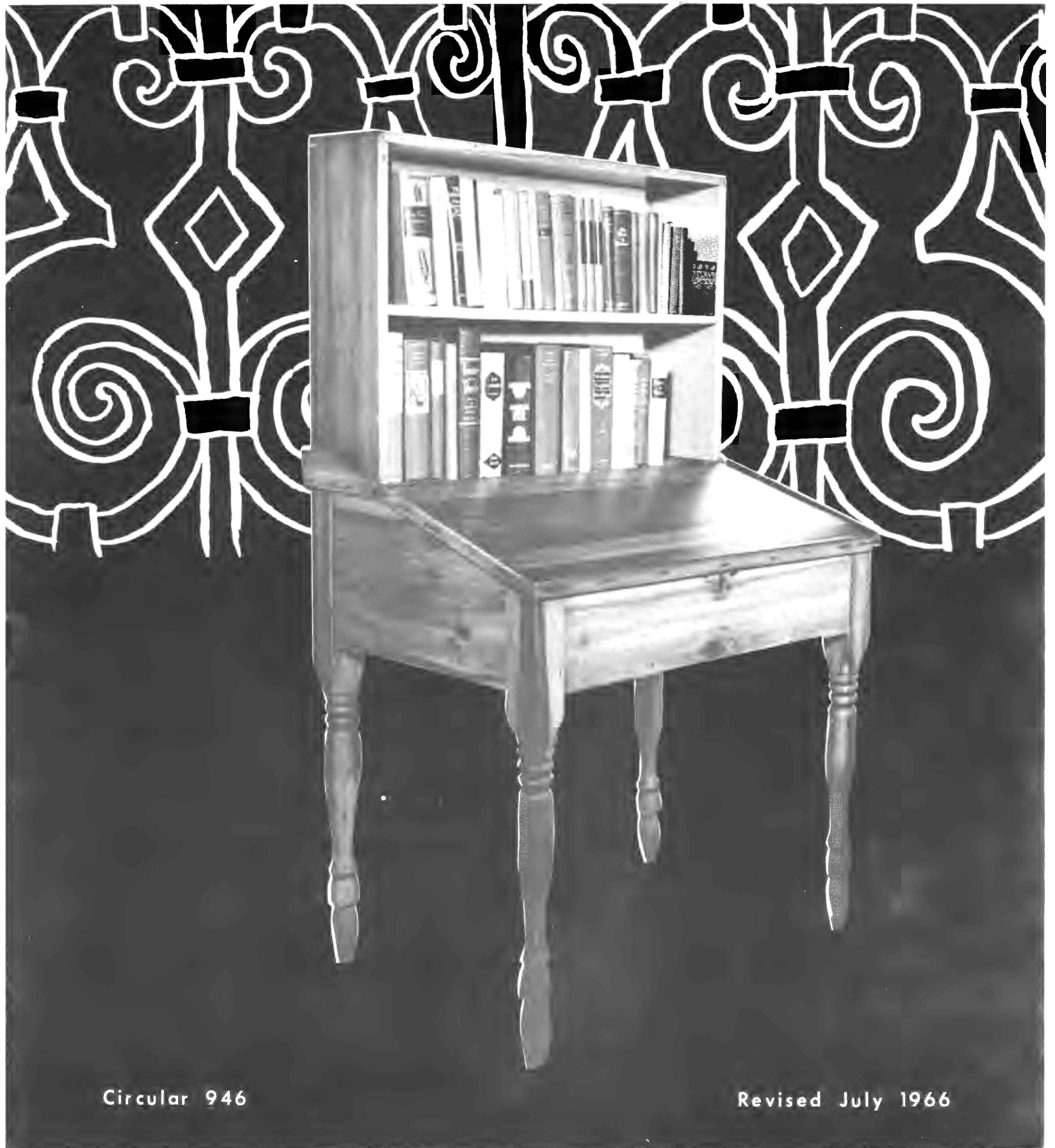


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# FINISHING WOOD FURNITURE



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# Finishing Wood Furniture

Prepared by  
Katherine L. Habel, Extension Home Furnishings Specialist

There are many ways to refinish furniture. Some techniques are best suited to professional use only. The methods included here are suitable for beginners.

Many pieces of furniture can be satisfactorily refinished at home. Before you start a home project, consider these things:

**Is the piece worth refinishing?** Study its design and construction. Good design means (1) good proportion, which is a pleasing relationship between height, width, and depth; (2) good shape, or a pleasing use and combination of straight and curved lines; and (3) good scale, which means it is not too big nor too small in relation to space and other furnishings in the room.

**Do you have a suitable, well-ventilated place in which to work?** Refinishing takes a long time, is messy, and the piece needs to dry in a dust-free area.

**Do you have the time and energy?** Labor is the main cost in refinishing.

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Over-restoration can ruin a fine piece of old furniture. In refinishing old furniture do not try to make it look new. If the piece is not disfigured, leave some indications of age, such as traces of paint, the marks of the cabinetmaker, or signs of wear that come naturally through the years with use. Many old pieces of furniture need only to be cleaned. This should be your first step if there is a finish still on the wood.

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## Cleaning Instead of Refinishing

Cleaning the finish of an old piece of furniture may be necessary in order to examine its condition before you decide what to do to it. To remove dirt and old wax use a cloth dampened with turpentine or a commercial wax remover. You can wash badly soiled furniture if you do it carefully. Use a mixture of 1 quart hot water, 3 tablespoons boiled linseed oil, and 1 tablespoon turpentine. Keep the mixture hot. Wipe the surface with a soft cloth wrung out of this solution. Polish with a soft dry cloth. Wash and dry small areas at a time.

If the finish is in good condition a fresh coat of the same finish may be applied. Test to find whether a clear finish is varnish, shellac, or lacquer. In an area free from wax, rub a small spot with denatured alcohol which will soften shellac. Do the same with lacquer thinner to determine if the finish is lacquer. Turpentine will soften varnish.

If the old finish is sticky, rough, cracked, chipped, or badly stained, it should be removed.

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## Removing Old Finish

Removing old paint and varnish is not difficult but it requires patience, time, and perserverance to get the surface clean.

**Remove Hardware.** Before starting to remove the finish, take off hinges, and re-

move handles, knobs, or other hardware from doors and drawers to make finishing easier. Old cane, padding, and upholstery should be removed from chairs.

**Use Remover.** Paint and varnish removers should be used in a well-ventilated room, away from open flames. ALWAYS FOLLOW THE DIRECTIONS ON THE CONTAINER. It's wise to remove the finish from the lower part of a piece of furniture first because some removers will cause streaks in a finish if they run down over it. These streaks are difficult to remove.

Use an old paint brush to apply the remover. Allow it to stand on the surface until the finish, or at least the first layer, appears to be loosening. Do not allow the remover to dry. The paraffin or wax in the remover acts as a seal to slow down evaporation. With a dull putty knife, remove the loosened layer of finish. Always work with the grain of the wood. Wipe off the

surface and apply another coat if any old finish remains. Shiny spots show that the old finish is not all off. The surfaces from which all finish is removed appear dull.

Burlap, stiff bristle brush, steel wool, or coarse cord will help to remove old finish from turned or carved areas.

Directions on some containers suggest what to use as a wash following the remover. If no suggestion is made, it is advisable to wipe the surface with a cloth dipped in either denatured alcohol or turpentine. New finishes will not dry satisfactorily over some old finishes or remover left on the surface. Always allow the surface to dry thoroughly for at least 24 hours.

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## Smooth Surface With Abrasives

**Abrasives.** Abrasive paper, steel wool, and powders are used to smooth, finish and polish surfaces of furniture.

### PAPERS

Flint, garnet, silicon carbide (carborundum) or aluminum oxide

Uses	Grade
Smoothing	Medium—1/0 to 3/0
Finishing and polishing.	Fine or very fine 7/0 to 10/0 (waterproof for polishing)

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### STEEL WOOL

Uses	Grade
Smoothing	0 to 000
Finishing and polishing	0000

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### POWDERS

Uses	Grade
Pumice stone polishing	FFF or FFFF
Rottenstone polishing	One grade

## Smoothing and Finishing

Sanding or smoothing with an abrasive is a most important step in finishing or re-

finishing furniture. Its purpose is to smooth a surface, not remove it, and to bring out the sheen of the wood. If the surface is not smooth enough, the finish may not be satisfactory.

Wrap abrasive paper around a block of wood, the under side of which is covered with 3 or 4 thicknesses of felt or other soft cloth. A black-board eraser makes a satisfactory block.

Always use abrasives with the grain of the wood.

After each application of an abrasive, wipe the surface first with a dry cloth and then with a tack rag. This is a treated cloth that picks up fine particles of dust that a dry cloth will not collect. You can purchase a tack rag, or you can make one.

To make a tack rag, wash a 2' square of cheese cloth in water. Wring it out just enough to prevent drip. Either dip it in turpentine or pour turpentine on it. Sprinkle varnish over the cloth. Fold the edges to the center and twist the cloth to force out the water. The cloth should be sticky enough to pick up dust and other foreign particles but not to leave moisture on the surface of the furniture. If the tack rag dries out sprinkle it with a few drops of water and

turpentine. You can use it indefinitely. Always store in a small, tightly covered container.

Steel wool is fine, wool-like strands of shredded steel. It is a good all-around

abrasive for final smoothing. Veneers should be smoothed with steel wool only. You will find that pad-form steel wool is easier to use. It is available in 1 lb. packages of 16 pads.

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## Minor Repairs

### Regluing

If a piece of furniture needs regluing in some or all of its joints, 3 things are essential for successful results: (1) clean, dry surfaces, (2) the right kind of glue, and (3) clamps.

All old finish, old glue, paint, dust, wax, oil, or grease must be removed from the surfaces to be reglued. Hot vinegar will remove some old glues. Wood must be thoroughly dry before new glue is applied. Allow 24 hours between washing or soaking and regluing.

If the surfaces are slightly roughened, the holding power of the glue will be increased. Glue should be applied and dried at temperatures of 70 degrees to 75 degrees F.

If a furniture joint is loose, but does not need to come completely apart, remove the old glue and work new glue down around the joint with a swab or small pointed stick. You can sometimes use a small, wedge-shaped piece of wood to spread it on the surfaces.

When one section of the joining is too small to fit tightly into the other, a thin strip of fabric placed over the small section will help to tighten it. Saturate the fabric with glue. Trim the edges so they do not extend beyond the edge of the joint.

Freshly glued furniture must be held firmly in alignment while the glue is hardening. After you check the joints to see that they are in proper position, apply a wood clamp, a C clamp, or a tourniquet. Put blocks of soft wood or felt between the clamps and the furniture.

To apply a tourniquet successfully, use a heavy cotton clothesline. Wind the rope twice around the reglued section. Be sure to put a pad of felt or other such material between the rope and the furniture. Tie the ends of the rope, and twist with a stick to tighten it.

Wipe off any glue that oozes out when the joinings are tight. Keep clamps or tourniquets in place at least 24 hours.

Corner blocks attached with glue and wood screws can strengthen some slightly loosened or worn joinings, particularly those where the seat is attached to the frame of a chair or sofa. These blocks must fit evenly and tightly into the corner. They should be about 1-1/2" thick and at least 3" long on each side. It is necessary to drill holes through the block at an angle so the screws will go into the furniture frame. Countersink the screw heads.

Thin metal plates and braces in various sizes, shapes, and weights are available at many hardware or department stores. These can be used on the under side of surfaces to reinforce weak or loose joints.

### Types of Glue

Plastic resin glue (white liquid) dries hard quickly, is easily applied, and is elastic and transparent. It can stain some woods slightly if allowed to dry on the surface.

Urea-formaldehyde resin glue has high resistance to humidity and fungus. It is recommended for furniture exposed to excessive moisture.

Casein glue is strong and hardens quickly. It penetrates the wood and is especially good for oily woods such as pine, spruce, teak, and yew. It is good to use if surfaces do not fit together too well. It is not waterproof and may stain light colored woods.

Animal or hide glues are strong but must be hot when applied. They have no particular advantage over the plastic resin or casein glues.

### **Removing Dents on Unfinished Wood**

A dent in solid wood can be raised. Place several layers of cloth (such as blanket) dampened with water over the surface. Press with a hot iron. The steam makes the wood swell and return to the level of the surrounding area. Repeat the operation if necessary.

Do not use this process on veneers. Be careful near glued joints. The steam might loosen them, particularly if they are glued with animal glue.

When the area is dry, smooth it with an abrasive.

### **Filling Small Holes and Cracks**

A surface should be stained before filling holes or cracks. Then purchase filler to match the color of the stained wood. Be sure the crack or hole to be filled is free of all dirt, grease, or old finish.

Wood dough or putty is a strong permanent filler. It comes in wood colors but has no grain. It can be sanded or drilled and will hold nails or screws. It is most satisfactory when used in an inconspicuous place or under an opaque finish. If used to fill a large area, apply it in layers, since it shrinks slightly as it dries.

Stick shellac or lacquer is available in a variety of wood colors. It has no grain, but when used in small spots may not be noticeable. You can scratch the surface with a razor blade or needle to imitate the wood grain.

Melt the end of the stick of shellac or lacquer with either a soldering iron or the heated blade of an old knife. If an old knife is used and is heated in a gas flame, wipe off any soot formation before touching the stick. The soot can discolor the shellac.

Never heat the shellac or lacquer directly in the flame. Hold the stick so that when shellac or lacquer melts it drops into the hole or crack. As it hardens, press it down with a wet finger or the blade of a small spatula. When it is thoroughly hard, even the surface with a sharp knife, chisel, or razor blade. Then rub with a fine abrasive.

### **Treating Spots and Stains**

Some minor surface scars are evidence of age and may not need to be removed.

Dark spots and stains (not grease or oil) may be treated as follows: Dissolve 2 ounces of oxalic acid, which may be purchased at a drug store, in 1 quart of hot water in a glass or enamel container. REMEMBER THAT THESE ACIDS ARE POISON. Apply the hot solution to the spot and surrounding area. Allow to remain 15 to 20 minutes. Wash off with ammonia water (1 part household ammonia to 10 parts water). Then wash with clear water and allow to dry 24 hours. Repeat if necessary. Smooth the surface.

If a piece of furniture, particularly pine or maple, appears gray or faded after paint or varnish remover has been used, wash the entire piece following the same procedure suggested for treating spots.

Oxalic acid should be used in a well-ventilated place, away from an open flame.

White spots or rings on varnished surfaces can sometimes be completely removed or may be made less noticeable. If the spot has gone through the finish or is not affected by the treatment, the only other alternative is to remove the finish and re-finish the surface. Some suggested treatments are:

1. Dip a soft cloth in oil and pumice stone, and rub the spot.

2. Dip a soft cloth first in oil and then in salt, and rub the spot.
3. Sprinkle cigar or cigarette ashes on spot. Dip cloth in oil or solvent cleaning wax and rub ashes over the spot.
4. Dip cloth in spirits of camphor or

- household ammonia and rub the spot.
5. Follow directions on commercial spot or scratch removers.

Always rub lightly and with the grain of the wood. Wipe the surface dry and re-wax if desired.

## **Finishing the Piece**

### **Brushes**

Clean brushes are necessary. Rub a new brush back and forth across the fingers to remove all dust and loose bristles. Wash in a cleaning fluid such as carbon tetrachloride or warm water and soap. Rinse and dry before using.

When a job has been finished the brush should be cleaned, dried, wrapped in aluminum foil, and stored flat or hung by the handle. Soak it in the solvent used to thin the finish.

Finish	Solvent
Shellac	Denatured alcohol
Varnish	Turpentine
Enamel	Turpentine
Penetrating sealers	Turpentine
Lacquer or plastic	Lacquer thinner

If work is stopped for a few hours, suspend the brush in a can of appropriate solvent. Never let the brush rest upright on the bristles. Insert a wire through a hole in the brush handle and rest it on the edges of the can containing enough solvent to cover the bristles.

### **Wood Fillers**

Filling the pores of wood prevents them from becoming clogged with dust, which soon dulls the surface.

Varnish and shellac fill the pores of the wood to a degree. Open-grained woods such as ash, chestnut, oak, hickory, mahogany, or walnut require a paste filler if an extremely smooth surface is desired.

Paste wood fillers are available in natural grayish color and in some wood tones. If natural filler is purchased it can be colored with oil colors as it is thinned. When hardened, these fillers will not absorb stain. The filler should be darker

than the pores of the wood or the stain because it lightens as it dries and could show through a transparent finish.

Thin fillers with turpentine to a brushing consistency. The larger the pores, the thicker the filler may be. Brush the filler onto the wood, working across the grain to force the filler into the pores. As soon as the filler loses its shiny appearance, wipe the surface to remove excess with a coarse cloth such as burlap. If it dries too hard to be wiped off, use steel wool dipped in turpentine to remove it. Allow to dry 24 hours and then smooth with an abrasive paper or steel wool.

If the surface is not as smooth as desired after one application of filler, put on as many additional coats as necessary. Make each one thinner than the previous one. Smooth with an abrasive paper or steel wool after each application has set 24 hours. Wipe the surface with a tack rag after each use of abrasive. Apply a sealer coat; see directions under "Stains."

### **Stains**

Staining brings out the color and natural beauty of wood. Such woods as gum, poplar, or basswood are often stained because they have little grain or natural beauty. Stains are not usually used on such woods as mahogany, walnut, cherry, maple, or birch. A clear, natural finish will darken them slightly and enhance their natural beauty and grain. Stains can be used, if necessary, to match a piece with other pieces of furniture in the same room.

In refinishing a piece of stained furniture, you may need to re-stain it to get an even color or the desired tone. If more

than one kind or color of wood has been used, except as part of the design, some staining is necessary.

Oil stains are easiest to use and are generally available. They may be purchased ready-to-use in containers of various sizes. Wood and other color pigments in an oil base are available. If the tone is too dark, add turpentine to lighten it.

You can easily mix an oil stain at home. Purchase oil colors in tubes or in cans and mix them with 3 parts linseed oil, 1 part turpentine, and 1/2 part japan drier. Vary the amount of color to obtain the exact shade you want.

Cherry—light	Cherry—dark
2 parts italian raw sienna	italian burnt sienna
3 parts italian burnt sienna	
Mahogany—brown	Mahogany—red
3 parts italian burnt sienna	3 parts italian burnt sienna
1 part rose pink or maroon lake	2 parts rose pink
Dark oak	Walnut
1 part turkey burnt umber	3 parts italian burnt sienna
4 parts italian raw sienna	2 parts rose pink
Maple—reddish honeytone	Maple—brownish
1 part raw sienna	Burnt umber
1 part burnt umber	

Test the stain on the same kind of wood as the furniture to be finished. Check the color in daylight after it is dry.

Apply a sealer coat after the stain has dried. This coat should be thin, applied with a brush, allowed to dry 24 hours, then smoothed lightly with an abrasive. It prevents the stain from bleeding into finishing coats and also prevents the stained wood from absorbing liquids which make it fade or gray.

If the final finish is to be shellac, use shellac for the sealer coat. Mix 1 part white shellac (4-pound cut) with 8 parts denatured alcohol. If the final finish is to be varnish, use a mixture of 1 part varnish and 1 part turpentine.

Stains are most satisfactory on soft, close grained woods. They are not readily absorbed by hardwoods, and the surface may remain sticky. Stains may clog the pores of an open-grained wood and make undesirable lines and streaks. When a color is used on such open-grained woods as oak, ash, chestnut, or Philippine mahogany, a limed, pickled, or heather effect results.

Apply the stain to the wood with a brush or soft cloth. Experiment on the inside or underneath until you obtain the desired tone. If the color is too dark, wipe it off with a cloth dipped in turpentine. Wipe the surface with a soft cloth and allow to dry 24 hours.

Varnish stain is a varnish to which coloring has been added. It stains and varnishes in one operation, and hides the grain of the wood. A satisfactory result is not always easy to obtain.

Water, spirit, and non grain-raising stains are available in some markets. These require special skill in blending and using.

## Antiquing and Painting

Advantages of an opaque finish are (1) to cover woods with no natural beauty of color or grain; (2) to cover a displeasing variety of woods or several poor quality woods used in one piece of furniture; (3) to make a piece of furniture harmonize in color with other furnishings in the room; (4) to replace a finish used on a particular style of furniture and, (5) to serve as a base for certain kinds of trim or decoration.

High or low gloss enamel can be applied to either old or new wood. For best results, remove any old finish. However, if an old finish, transparent or opaque, is perfectly smooth, not chipped or cracked, and not too thick, a new coat of enamel may be put over it. Be sure all wax, furni-



ture polish, dirt, and dust have been removed. Cut all gloss or slickness by rubbing lightly with 1/0 abrasive paper. The surface must be thoroughly dry. A primer and/or undercoat are recommended. FOLLOW THE DIRECTIONS ON THE ENAMEL CONTAINER.

With the wide variety of tints and tinting machines provided by manufacturers, there is little reason to mix paints at home. However, if it is done, don't mix different brands or types. Use tinting color and paint of the same brand.

Two thin coats will look better and wear longer than one heavy coat. It is advisable to allow even "quick drying" enamels to dry at least over night. Since enamel is varnish with added pigment, follow the directions for applying and polishing varnish to get a soft, satin finish.

An antiqued finish is the result of putting a glaze over enamel and wiping it off in such a way as to produce highlights. You can purchase liquid glaze, or make it by mixing 3 parts turpentine and 1 part varnish. Add raw umber oil for a brown tone, raw sienna for a reddish tone, and lamp black to darken the glaze if desired. For a frosty effect on pastel enamels, add white primer or enamel to the glaze. When the enamel is thoroughly dried, use an old paint brush to apply a thin glaze coating. Work on one surface at a time. With a soft cloth, use a circular motion to wipe off this glaze. Leave the center of a flat surface and top of raised areas light. Keep turning the cloth to a clean section and blending this coating so the outer and lower areas are darkest. Only an extremely small amount of the glaze should remain on the surface. If too little comes off, dampen the cloth with turpentine. The glaze should dry at least over night and then be protected with a coat of wax or a thin coat of clear varnish or white shellac.

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### **Transparent Finishes**

The big advantage of transparent finishes is that they bring out the natural color and grain of wood. They are best used on well-

made furniture of good quality wood such as walnut, cherry, mahogany, maple, birch, oak, pecan, pine, or redwood.

There are 2 kinds of transparent finishes, those that penetrate the wood, such as linseed oil and penetrating sealers, and those that remain on the surface such as shellac, varnish, lacquer, or plastic. Wax may be used as a finish or as a protective coating over other finishes.

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### **Penetrating Finishes**

Penetrating finishes (1) cannot be used over any other finish; (2) require less skill in application; (3) sink into the wood, thus increasing the resistance to scratches, heat moisture, acids, alkalis, and alcohol; and, (4) can be patched in areas receiving much use and wear.

Penetrating finishes darken and give depth to walnut, bring out the yellow in birch and maple, the red in cherry, and the dark red in mahogany. (Oil on Philippine mahogany produces a dead or dull appearance.) They tend to complement oak whether it is stained or filled with either a natural or a tinted filler.

#### **Special Oil Finish**

Equipment--Oil mixture, double boiler to heat mixture, lintless cloths.

Oil Mixture No. 1	Oil Mixture No. 2
1 part linseed oil	2 parts linseed oil
2 parts turpentine	1 part turpentine

Use on woods of good color and grain such as mahogany, cherry, maple, and walnut. Use either raw or boiled linseed oil. Raw linseed oil takes longer to dry. Apply the warm oil with a lintless cloth. Warm oil is absorbed more readily and produces a richer color. Linseed oil is flammable so heat it in a double boiler.

After 20 minutes, rub off excess oil with a dry cloth. When it dries, it becomes sticky and hard. Rub well with a wool cloth. This produces heat and keeps the surface warm which causes absorption of more oil.

If boiled linseed oil is used, let the first coat dry at least 2 days before applying another. Use Mixture No. 1 for the first

coat and Mixture No. 2 for the remaining coats. If raw linseed oil is used, wait a week before applying second coat. Allow 2 weeks to elapse before applying third coat.

At least 4 coats of oil must be applied; 10 to 12 are recommended. After each coat, rub vigorously with a wool cloth.

The piece of furniture can be used between coats of oil and turpentine. An application of this mixture will clean and freshen its appearance when needed. Wax the surface if desired. Remove wax completely with turpentine or commercial wax remover before another application of oil.

### **Penetrating Sealer**

There are on the market many commercial penetrating sealers which contain oil and some resin or wax, available in various weights. Use the thin or lightweight for furniture. Those with a high percentage of tung oil penetrate furniture woods best and build up less on the surface. These sealers are clear or in some wood tones. They may be mixed to lighten or darken them. If you want to darken the wood, stain it first and then apply a clear sealer.

Follow specific directions on the container since products differ. Some general suggestions are: (1) pour a small amount from the container into a clean, flat dish or pan; (2) replace the container lid; (3) if the can has been opened and a scum has formed, strain the sealer through a piece of nylon hose; and, (4) do not pour any unused sealer back into the can.

Nylon hose is good for applying the sealer to the wood. Rub to force it into the wood. Use a clean, dry cloth and wipe off any excess not immediately absorbed. Let dry at least 24 hours. Rub surface with 000 steel wool. Dust, wipe with tack rag, and apply second coat of sealer. Allow plenty of time to dry between coats and continue to apply as many coats of the sealer as needed. Dull spots or streaks indicate more sealer is necessary. The final finish should be even, with some gloss but not a hard, shiny appearance. If the finish becomes hard and shiny, too much sealer has built up on the surface rather than penetrating it. Do not rub the final coat with steel wool,

but polish with pumice and oil (See section on "Abrasives.") This finish may be waxed if desired.

You may put on additional coats to renew a worn surface. The sealer can be applied just to an area receiving much use, such as a table top, or the entire piece can be treated. If the piece has been waxed, the wax must be completely removed before another coat of sealer can be applied.

## **Surface Finishes**

Shellac, varnish, lacquer, and plastics remain on the surface of the wood. These can be applied to any properly prepared surface. The right conditions of ventilation, humidity, temperature, and freedom of dust are especially important when these finishes are applied.

Shellac is not waterproof. Moisture and liquids turn it white so it is not the best finish for tables, cabinets, chests, or stands. It may be used to finish picture frames, chair frames, or display racks.

Always use fresh shellac and thin it with denatured alcohol or a special shellac thinner. White shellac is best for light woods and is easiest to apply smoothly. Adding small amount of orange shellac to it brings out highlights of the wood.

On raw wood, unstained or unfilled, apply first a wash coat made by mixing 1 part shellac (4-pound cut) and 8 parts thinner. For the rest of the coats, use 3 parts shellac and 2 parts thinner.

Prepare the mixture of shellac and thinner in a container that can be closed to prevent evaporation. To mix, rotate, don't shake the container.

Apply the mixture with a clean brush in a long stroke, following the grain of the wood. Using the tip of the brush, go back over the surface one time to pick up any surplus. Allow to dry thoroughly. One way to test is to press your thumb on the shellacked surface. If the print can be seen, the surface is not dry enough. When thoroughly dry, lightly rub with steel wool. Dust

thoroughly with tack cloth, and apply as many coats as desired, at least 4 or more. Allow the finish coat to dry at least over night, and then polish with pumice and oil (see section on "Abrasives"). Wax, if desired.

Varnish protects wood, is easily cleaned, will show scratches, and is one of the most difficult finishes for the amateur to apply successfully. A minimum of 3 coats is necessary for a satisfactory finish.

Varnishes on the market differ in the degree of gloss and resistance to moisture, heat, and alcohol. Read labels carefully and select the best kind for the job.

On a dry day, apply varnish to properly prepared wood in a dust-free room at a temperature of about 70 degrees F. where there is good air circulation.

A wash coat of half varnish and half turpentine makes a good base for future coats. Use dull varnish for each coat, or apply a final coat of dull varnish, if you prefer. Each application must dry thoroughly and then be rubbed with steel wool or a very fine abrasive paper. Use oil and pumice to rub the final coat.

Lacquer dries so quickly that skill is necessary to brush it on. If space and equipment are available, it is better to spray it on. Ventilation is highly important since lacquers give off strong fumes. Follow the directions on the container. Rub with steel wool after each coat as suggested for varnish.

A lacquer finish can be cleaned and treated for spots and scratches in the same way as varnish finish.

Plastic coatings provide a hard, clear, water-resistant surface finish. Follow the manufacturer's directions for application. Rub the surface between coats with 000 steel wool; use tack cloth.

Paste wax can be used as a final finish over all finishes. It serves as a good protector, especially for surface finishes such as shellac, varnish, lacquer. It forms a hard surface which may water-spot if water

is allowed to stand on it. Spots can be removed by rubbing with turpentine and re-waxing.

To apply paste wax, place a chunk between folds of cheese cloth. Rub this over the surface with a circular motion using just enough to leave a thin film. Allow to dry a few minutes and polish with a clean, soft woolen cloth. Rubbing produces heat which hardens the wax and produces a soft luster. Two or 3 thin coats of well-polished wax produce a good surface. If a thumb print shows, more polishing is needed. Occasional rubbing with a soft cloth will brighten a wax surface without using more wax.

Cream wax with a solvent base can be used to clean a waxed surface. The solvent will soften the soil enough to be wiped off. The thin film of wax left on the surface can then be polished. You can put a coat of paste wax over this if you desire. Use turpentine or a commercial wax remover when or if you decide to remove all wax.

Do not use a furniture polish containing oil on a waxed surface. It will soften, streak, and dull the wax.

### French Polish Finish

The surface should be prepared with painstaking care. Use only water stain if staining is necessary and allow to dry thoroughly.

Thin white shellac (one-pound cut) with alcohol or commercial shellac solvent to a water-like consistency. Apply to the wood with a soft, lintless cloth rolled into a ball, rubbing the shellac on the wood in rapid, straight strokes, with light pressure. Allow to dry until thumbprint does not show. Sprinkle lightly with very fine pumice stone, and rub with 000 steel wool; remove particles of steel wool with tack cloth. Apply repeated coats, rubbing after each, until a faint sheen begins to appear. At this point, add several drops of boiled linseed oil to the shellac mixture and continue the applications, but change over to a rotary motion. Add more oil to subsequent coats. Three coats is the minimum, while 5 to 7 are preferable, and 10 are necessary for table and

chest tops. The result will be a superb, deeply glowing finish that, with ordinary care, should last through several lifetimes.

### Limed Finishes

Use on oak, ash, chestnut, or mahogany.

Apply 2 coats of thin type sealer 24 hours apart. After last coat dries 24 hours, smooth with 000 steel wool. Dust with dry cloth, then tack rag. Fill pores with white firzite, white lead, or colored paint, applied across grain with brush or lintless cloth.

When paint reaches tacky stage, rub off surplus with coarse cloth and smoothing block. Rub with circular motion to prevent streaking, then rub crosswise. After paint dries 24 hours, smooth gently with grain, using 000 steel wool, until all paint is removed from surface. Or sprinkle a cloth with turpentine, fold, and wipe away surplus. Paint should remain only in pores and grain. Repeat if necessary. Then apply additional sealer coats.

### To Antique Hand-Me-Downs

Be sure the piece is in good repair. There's too much work involved to spend your time on a cheap, ugly piece. Glue any loose joints, fill any gouges with plastic wood, or with paste of sawdust and glue. Replace any missing parts.

Sand rough spots. Smooth any rough edges where paint has flaked away.

Paint the entire piece with a flat, oil base paint. Sand the entire piece after the paint is dry. Apply a second and third coat.

A good finish depends on good sanding between each coat of paint.

Prepare your antiquing glaze. Start with a glazing liquid which you can buy at paint stores, and add burnt umber oil paint to the degree of darkness you want. Use about a teaspoon of umber for each cup of glaze.

Spread the glazing solution onto one section of furniture at a time with a paint brush. Let dry 3 or 4 minutes, then wipe the glaze off with a rag in the direction of the grain. You can have it as light or dark as you want, depending on how much pressure you use when you wipe.

The next step is "distressing." This means putting little irregular specks all over the piece of furniture. This is an important step. Sometimes when people see just a small section of this specking, they don't like it, but when they see the finished piece, they change their minds. This is the step that makes your antiquing job look professional, mellowed with age.

To make the distressing liquid, add 3 teaspoons of burnt umber to one cup of glazing liquid much darker than the antiquing liquid. Dip a water color brush in this solution, and wipe it on newspaper to remove excess. Then tap the brush against your finger (or a piece of wood) so the paint will splatter over the antiqued finish. Move the brush over the painted surface until the specks are fairly evenly distributed. Practice first on a scrap of wood.

Finally give the entire piece of furniture a coat of clear, dull (not glossy) varnish. This finish may be rubbed with 000 steel wool, if desired.

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### Caution

Read all labels carefully before using any chemical. An increasing number of cleaners contain a variety of chemicals, many of which are dangerous if improperly used.

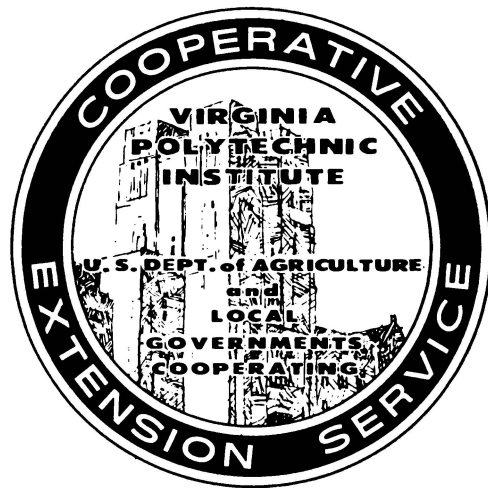
Keep all cleaners tightly covered in the original containers, out of reach of children. Never mix chemicals not specifically recommended for use together. Some cleaners are flammable.

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## **Steps in Refinishing a Piece of Furniture**

1. Evaluate piece of furniture to be refinished.
2. Consider materials, space time, and money to be used.
3. Examine old finish. If necessary clean to determine the condition.
4. Remove the old finish.
5. Complete any repairs needed.
6. Sand only to smooth surface.
7. Fill if needed.
8. Stain if desired.
9. Apply coats of finish.
10. Polish and/or wax if desired. Follow the same steps except for 3, 4, and 5 to finish a purchased piece of unfinished furniture.

## **Notes**



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