EXTENSION SERVICE
BULLETIN 185

Ruth Jamison

New Life
For Your
Furniture

October, 1956
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VPI AGRICULTURAL EXTENSION SERVICE


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New Life For Your Furniture

By RUTH JAMISON, House Furnishings Specialist

Before buying new furniture, the wise homemaker and her family visualize new uses for discarded, broken down or out-of-date furniture on hand. They are willing to perform services for themselves which they can not afford to have done. With remodeled and restored furniture and accessories many families can create attractive, restful homes at a small cost. Aside from restoring the furniture on hand, bargains can be picked up at auction sales and second-hand shops to round out one’s furnishings, if the purchaser is aware of the possibilities of remodeling, repairing, and refinishing.

Before starting work on any piece of furniture it is well to consider: Is it worth refinishing? Is it of good wood, well constructed? Does it have good lines? Is it well proportioned? Can the poorly constructed features be remodeled to advantage? Can home repairs and a good gluing job make it useful?

Satisfactory results in refinishing furniture require a great deal of patience, energy, “elbow grease” and time; therefore, no piece should be undertaken unless it justifies the effort. Furniture constructed of cheap wood, or having poor design, or both, had better be taken on the shorter route and painted or slip-covered rather than given a “natural finish.”

Tools and Equipment You’ll Need

Refinishing is hard on clothes; therefore, it is well to wear old clothing. Also wear low heel shoes. Rubber gloves will protect the hands.

<table>
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<td>Putty knife, sharp knife, and piece of glass</td>
<td>Paint and varnish remover</td>
</tr>
<tr>
<td>Screw driver</td>
<td>Prepared strength glue</td>
</tr>
<tr>
<td>Fiber scrub brush</td>
<td>Sandpaper, Nos. 1, ½, 000</td>
</tr>
<tr>
<td>3 small glass jars</td>
<td>Steel wool 000</td>
</tr>
<tr>
<td>3 small paint brushes</td>
<td>A package of fine steel wool</td>
</tr>
<tr>
<td>Rags and newspapers</td>
<td>(such as used in cleaning pans)</td>
</tr>
<tr>
<td>Several yards of clothesline or other small rope</td>
<td>1 pound oxalic acid</td>
</tr>
<tr>
<td>3 feet furniture clamps</td>
<td>Burnt umber (small tube)</td>
</tr>
<tr>
<td>Several sticks for tourniquet</td>
<td>½ pt. linseed oil, 1 qt. turpentine</td>
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<tr>
<td></td>
<td>1 pt. lacquer thinner, 1 pt. lacquer</td>
</tr>
<tr>
<td></td>
<td>Pumice (¼ pound)</td>
</tr>
<tr>
<td></td>
<td>Clear floor seal</td>
</tr>
<tr>
<td></td>
<td>Transparent wood filler</td>
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</table>

Your Out-Of-Date Furniture

You can, perhaps, use it longer and bring your furniture up to date by remodeling it. Remodeling might do wonders for any of the following pieces of furniture: your dining room suite, your bedroom suite, the high headboard bed, the schoolmaster’s desk (fig. 1), the dresser with the mirror hung in a heavy ornamental frame (fig. 3), your chest of drawers (fig. 7), the mission rocker, the old parlor suite, the couch with raised headboard and back, and your top-heavy sideboard with shelves and mirror at the top.
Measure the high headboard bed with mattress on. Mark the legs so that when you saw them off, the top of the mattress will be only 20 inches from the floor. You can then plan where you will need to saw to have the headboard just the right height. A good height for the headboard is 34 inches from the floor after the legs have been adjusted. Twenty-two inches is a good height for the footboard. Some adjustments in these measurements may be necessary in order to have a strong board at the top. Using any board with a straight edge, draw a line across the headboard where you plan to saw. Then saw off the surplus top. If the footboard is 34 or more inches tall you may prefer using it for a headboard, then sawing the headboard off even with the rails. Much work can be saved if you slip cover the headboard. Then use an extra large bedspread that completely covers the sides and footboard, practically reaching the floor, rather than refinishing the wood.

The mirror of your old dresser can be removed easily by unscrewing the frame supporting it. Discard the frame. Hang mirror flat on the wall as you would a picture. Put a screw eye one-third the way down from the top on each side of the frame after it is refinished. Run picture wire through the screw eyes until you have at least 3 or 4 wires securely fastened. It is ready to hang on two 20 lb. picture hooks placed about two inches apart at the desired height over the chest. Remove the cheap brass pulls (fig. 3) from the oak dresser. Fill the holes from each pull with putty from untinted transparent filler or with maple dowels. Screw in plain wooden knobs to match the wood as shown in Fig 4.

You can also remodel pieces for use in upholstering furniture. The wide arms of the mission and morris chairs can be saved to make narrow-armed upholstered chairs. The raised headboard couch can be made into a studio couch by simply removing the back and head rest. It is then ready for an upholstering job. The old 1890 parlor suite may need some streamlining too. Ornamental or glued-on decorations are no longer attractive. They can be removed, and the lines of the chairs and sofa can be completely changed.

The old radio cabinet is just in the way. The radio is no longer working. Have you thought of sawing the legs off at the top to make a table 30 inches high. You can put a lamp on it, place the table next to the wall, and pull an easy chair up by it.

Your mother's top-heavy old sideboard is too large for your smaller room. Before refinishing it, take off the mirror and shelves leaving a simple chest that is smaller than the original. This could be used in your dining or living room.

You have the old schoolmaster's desk but it looks lost in your living room. Try building two shelves to place on the top of the desk to give height and style to the piece.

The space between each shelf must be at least nine inches to hold books (fig. 1). The wood should be stained to match the old wood before refinishing it.

Don't forget that your nice little pine, poplar, maple, walnut, and mahogany washstands can be remodelled to make good serving tables for the dining room, little chests to use on each side of the fireplace,
This pine desk can become an important piece of furniture when you build bookshelves to fit on its top. The space between the shelves must take care of the largest books you plan to store there.
The bed has been brought up-to-date by cutting down the head-and foot-boards. The lines are now simple and more pleasing.

or a bedside table. The storage space makes it more useful than a table.

There is an endless variety of small articles around the home that can be put into new uses. They include the wooden churns, round and dasher, the old sugar and the wooden fish buckets, the dough trough on legs, the wooden dough tray, the spinning and carding wheels, the cradle and the cobbler's bench. All of these articles can be remodeled or restored to use in your home.

Round up your old chairs, tables and other pieces of furniture that you no longer care for. Make a list of all needed repairs — those that can be done at home and those that must be taken to a local cabinetmaker. Have all repairs made before work is started on the refinishing job.

How To Remove The Old Finish

Scraping.—Scrapers of glass having a smooth edge or 3- x 5-inch flat pieces of steel are often used successfully on flat surfaces. Scrape with the grain of the wood, never across the grain. Scrape removes the varnish and paint and clears the surface to reveal the color of the wood. Care must be taken not to let the scraper slip, thus making cuts and gouges which are difficult to remove. The steel scraper
is sharpened frequently with a file held at such an angle that a turned edge is made on one side only. Place the sharpened edge next to the wood and, holding scraper upright with fingers near lower edge, pull it toward you with a light downward pressure. It will be necessary to remove varnish from grooves in this way: brush varnish remover into the grooves. Let stand until varnish has softened. Scrub out with a fiber brush. Sometimes it is necessary to use a screw driver wrapped in a cloth to remove varnish from the deeper grooves.

Commercial paint and varnish remover.—A good commercial paint and varnish remover, the “stay wet” kind, is most successful when used on good old pieces. There is less danger of scarring the wood, though it will remove the previous stain from the wood. For a large piece of furniture, buy a quart can.

(Caution.—Commercial removers are explosive and are not to be used where there is an open flame.)

Using a paint brush, apply the remover very generously. Let it stand until the finish begins to bubble or wrinkle (from 5 to 20 minutes), then loosen the varnish with a scraper or putty knife (work with the grain of the wood), and wipe off. Avoid making scars in the wood as you scrape. Two or three applications may be necessary to clean the wood thoroughly. The work can be speeded up by using a stiff fiber brush (brush with the grain of the wood) or steel wool after the application of the second and third coats. When the wood is thoroughly clean (no trace of varnish, which is indicated by no signs of gray when the furniture is sandpapered), wipe the entire surface with a cloth dampened in turpentine or other solvent to prevent the remover from softening the new finish.

Veneers.—Much care must be taken in cleaning veneered furniture. The veneer is only about 1/20 of an inch thick; therefore, scraping is dangerous. Use a commercial remover, applying it lightly to only a small portion at a time. Too liberal an application is likely to cause the veneer to buckle up.

Alkaline removers are hard on the hands and the wood but are often less expensive and sometimes more effective than the commercial varnish remover, for removing paint and enamels. Among these are sal soda, trisodium phosphate (sold under the trade names of Oakite, Melo, etc.), and lye. The formulas are:

- 1 pound sal soda, 1 qt. household ammonia, 1 gal. hot water.
- Trisodium phosphate—% cup to 1 quart hot water.
- Lye—3 tablespoonfuls to 1 quart hot starch paste.

(Caution.—Rubber gloves should be worn when using these solutions.)

Apply the hot solution very generously with a cloth or brush, protecting the floor with a thick layer of newspapers (when possible, work out of doors). Let stand until the old finish begins to soften and use a putty knife for scraping the loosened paint. Then use a fiber scrub brush, scrubbing vigorously into the pores of wood and into grooves. These solutions when used boiling hot will remove the worst of the old enamel finish but will also roughen the wood badly. Lye is very hard on wood. It will burn when left on too long. Now
Figure 3.—An unattractive dresser.
Figure 4.—The same dresser as that shown in figure 3, remodeled.

The heavy frame that supported the mirror has been removed and the cheap brass handles have been replaced by plain wooden knobs. The mirror is hung by wire on a strong picture hook. The dresser is now pleasing to the eye.
wash the whole surface with a vinegar solution (one cup to a gallon of water) to prevent the alkaline solution from eating into the wood. It may be necessary, when the wood is dry, to remove the small portions of the old finish which are left with a commercial remover and a stiff fiber brush, working carefully around grooves.

**Repairing Furniture**

Small holes can be filled with stick shellac to match the wood; apply the shellac with a hot screw driver or electric soldering iron. Wood dough or plastic wood colored to match the wood may be used on cheap grades of furniture. Sawdust mixed with glue to a paste can also be used.

![Fig. 5.—From chest to Welsh dresser.](image)

The chest of drawers will make a very fine Welsh dresser for the dining room, if equipped with open shelves set on top of the chest. The width must correspond to that of the chest. The top shelf is 4½ inches wide, the middle one 6½ inches and the bottom 8½ inches. The overall height is 34¼ inches. The shelves are 9 inches apart.
When plastic wood is thoroughly dry, replace missing handles and drawer pulls. Use wooden knobs and simple metal drawer pulls to replace the elaborate ones found on some furniture (see figs. 3 and 4). Remove elaborate scrolls and machine carvings. Repair cracks and broken parts.

Warped table tops and leaves can be remedied by a cabinetmaker. One can easily replace missing rounds in chairs with dowels (from the local lumber company). Be sure that the dowel measures the same in diameter as the old rounds.

Use a good grade of strength glue. Both the wood and the glue should be room temperature for best results. Remove all old glue with a knife. Apply the new glue to both parts of the wood. Glued portions must be allowed to dry under pressure for twenty-four hours. Chairs can often be secured with a rope or clothesline, using a stick for making the tourniquet. Furniture clamps are necessary for draw-

Figure 6.—Cobbler's Bench made into a coffee table.

This sturdy cobbler's bench when refinished serves as a useful and durable coffee table. The dough trough at the end of the couch is useful for holding magazines.
Figure 7.—A restored walnut chest.

This chest has been remodeled to use in the dining room. The supports holding the mirror were discarded. The carved handles were retained because of their beauty.
ing table tops, chair seats, and the more difficult jobs together tightly. When used, place wooden block between the clamps and the wood to be tightened to prevent injury to the wood. Veneer to match the wood may be cut to fit spaces where veneer is missing and may be glued securely in place, if held with furniture clamps until thoroughly dry. Put paper between the veneer and the block to be sure that excess glue does not glue the block to the veneer. Wipe all excess glue off with a damp cloth immediately after the piece has been tightened.

**Bleaching.**—To remove dark spots and ink stains, bleach with a solution of 3 ounces oxalic acid to one pint of hot water. Apply hot and very generously with a fiber scrub brush; rub with the grain of the wood until spots disappear. If spots still remain, let an application stay on the wood overnight. The next morning, wash the piece with clear water and allow to dry. The acid is poisonous; keep it in a covered glass container. The oxalic acid solution is fine for bleaching stains from furniture and floors when lighter colors are desired.

Prepared commercial “super bleaches” and bleaching lacquers for light furniture are sold by large wood-finishing supply houses.

**Shallow dents and bruises** in wood may be removed by moistening a blotter with hot water, placing it on the bruised part, and gently applying heat with a hot iron. Do not touch the iron to the wood. The moisture and heat will swell the wood, causing the dent to rise. When the spot is dry, sand to a smooth surface. Veneer wood, being thin, will not respond to this treatment.

### Preparing The Surface For The Finish

Smoothing down the surface for the final finish is one of the most important steps. First sand with No. 1\1/2 sandpaper, sanding with the grain of the wood. Cut the full sheet into quarters and wrap a section around a 2- x 2- x 6 inch sanding block. When the surface feels very smooth and slick, sand with No. 2/0 sandpaper until the surface is very, very smooth. You cannot sand too much. Now go over the entire surface with No. 3/0 steel wool. Wipe all dust and particles from the piece. Then it is ready for the finish.

**Stains.**—When the natural color of the wood is desired, no staining is needed. Sometimes it is necessary to match or blend woods by staining.

- **Water stains** are for hardwoods only.
- **Spirit stains** are used on both hard and soft woods.
- **Oil stains** are used on both kinds of wood but are preferably used on pieces of furniture made of a combination of both, such as the poplar and oak chair, or when soft woods are given a dark finish. With oil stains, different kinds of woods will respond and come out in blended tones that will be acceptable. Five or ten minutes after application, wipe off all excess with a soft cloth. Let dry 24 hours, shellac, varnish, or apply oil finish.

**Water and spirit stains** are applied in the same way. The surface of the wood should be sponged with water to raise the grain before applying the stain. Apply only one coat and do not recoat any part of the surface. Wipe off before dry to get even tones. When dry,
Figure 8.—Pine corner cupboard is decorative as well as useful.
What is lovelier than the old pine corner cupboard finished in its natural color. Even the nail holes when filled become decorative assets.
sand with No. 2/0 sandpaper. Restaining may be necessary after sanding, if the natural wood grain shows through. Water stains penetrate deeply and are very permanent. Test for the best color on a scrap of wood before using stain on furniture. Prepared powder for making water stains in many furniture colors can be obtained from large supply houses.

A wash coat of shellac (one part shellac and four parts denatured alcohol) should be applied between the stain and filler coats.

**Fillers.**—For porous and open grained woods, such as oak, ash, chestnut, walnut and mahogany, a transparent filler, or one containing the desired color, may be used. Fillers of the commonly used colors and properly mixed can be obtained on the market. Special fillers can be made by adding pigments ground in oil to transparent filler as follows:

- **Red filler**—add venetian red or burnt sienna.
- **Silver gray**—add zine white in various proportions up to one-half to white paste filler and thin with a mixture of 1 part boiled linseed oil and 3 parts turpentine. Use over a silver gray stain on walnut or oak.
- **Walnut stain**—Mix a little burnt umber in 1/4 cup linseed oil and turpentine.

Thin paste filler with linseed oil to a consistency that will brush on easily. Brush on with the grain of the wood. Wipe off across the grain after filler has begun to set (about 20 minutes). After 24 hours, sandpaper lightly and dust off.

**New Finishes**

**Oil Finish.**—This finish is still preferred by many people. Its disadvantage is the length of time required to get a soft satin finish. If the finish is not properly applied the surface may appear oily.

After cleaning and dusting the piece, wipe the entire surface with a cloth dampened with turpentine. Then apply with a cloth a hot mixture one part linseed oil, one part turpentine. Heat in a pan of hot water. Rub with 000 steel wool when dry. You will need from five to twelve coats and each should be rubbed well when dry. Rub last coat with a cloth dipped in oil, then in pumice. Remove the pumice with a damp cloth. When dry, wax.

**Floor seal** will give a durable and easy-to-live-with finish similar to that of oil. There are many brands on the market, each applied according to the directions. The wood to be finished must be clean, and all old finish must be removed and wiped with turpentine before you apply the first coat. Usually two coats of seal are enough to give a satin finish.

The advantage of seal is that it is water and spot resistant. The finish does not scar easily. Because the seal penetrates the wood the surface can be patched when needed without removing the finish. Such is not the case when you use lacquer or shellac.

**Lacquer Finish.**—Lacquer is especially good for refinishing woods to keep their natural color. It is best for table tops because it is water and spot resistant. Use one part lacquer thinner and one part lacquer. You can apply it best with a spray gun, but you may use a brush. From two to three coats are sufficient. Rub each coat down when dry with 000 steel wool. Rub the last coat with water.
The poplar chest can be attractive in the living room. It is worth scraping and refinishing in its natural color.
and pumice. Wipe with a damp cloth to remove grit. When dry, wax.

**Shellac finish.**—In order to keep the natural color of the wood, shellac is sometimes preferred, even though it produces an inelastic finish. Use clear shellac (one part shellac to seven parts alcohol) for the first coat. When dry, rub down with No. 2/0 sandpaper, dust and apply a second coat (one part shellac to four parts alcohol). When dry, sand and dust. It is usually necessary to use from four to eight coats of thin shellac in order to obtain a good finish. When a satisfactory surface is obtained, rub with pumice stone and linseed oil, wipe off with a damp cloth. When dry, wax.

**Varnish finish.**—A clear varnish finish can be quite dull and durable if patience and care are used. With the surface very smooth, apply a thin coat of clear varnish. A clear dry day is necessary for even drying. Allow to dry thoroughly 24 hours or longer. Follow by two more coats of thin varnish, each rubbed when dry with No. 2/0 sandpaper or No. 3/0 steel wool. The final coat is rubbed with pumice stone and linseed oil for a satiny finish.

Rubbed-effect varnish contains wax and produces a dull finish that is waterproof, heat-proof, and scuff-proof. Surfaces that receive hard wear, as table tops, dressers, counters, drain boards and linoleum, will need more coats, or perhaps a special varnish, for best protection. Among the most used hard varnishes are trade names such as “spar,” and “bar” varnish, “padover,” and “linnex,” all of which are tough and noted for their resistance to water, heat, and alcohol.

**Light Effects In Wood**

Many woods are treated in light colors at the present time. If these are desired, it may be necessary to bleach the wood. Use oxalic acid according to the directions given under bleaching. When the surface is dry, sandpaper and apply the lightest paste filler possible. When filler begins to set, rub off across the grain; after 24 hours, rub the surface lightly with No. 3/0 steel wool, and dust. Coat wood thinly with shellac (one part shellac, seven parts alcohol). Let dry four hours and apply the stain. Sandpaper and apply varnish according to directions on can.

**Maple.**—A light silver gray color on maple is produced with acetate of iron dissolved in hot water. When application is dry, rub with sandpaper or steel wool, and apply a thin coat of shellac, followed by two more thin coats of shellac or varnish.

**Pine.**—New pine may be stained with antique pine or burnt umber in raw linseed oil and turpentine (½ oil, ½ turpentine). Pine that is mellowed with age may be treated with either hot linseed oil and turpentine, or finished with several thin coats of shellac, sandpapered between coats. When finishing pine to match other woods, coat it first with a thin coat of shellac, followed by oil stain in the desired color. Wax.

**Oak.**—A light antique color may be given oak furniture, after the old finish has been removed and the wood bleached, by mixing white lead paint with raw linseed oil and turpentine, in equal parts, and a
small amount of drying oil. Brush mixture into pores, working with the grain of the wood. After 30 minutes, wipe the surface clear; and, when dry (after 24 hours), coat with thin shellac, rub down with steel wool, dust and wax.

Wax finish is perhaps the simplest and easiest to apply of all finishes. Burnt umber may be added to prepared wax to give a darker color. An hour after the wax is applied, the surface may be polished with a thick woolen cloth. A second coat may be applied and rubbed with clean felt until a smooth finish is obtained.

Hand rubbing.—Use an old piece of felt that is clean, a small quantity of powdered pumice, a little raw linseed oil, a cup and a saucer.

Put some of the pumice in the saucer, some oil in the cup. Dip the felt in the oil, then in the pumice. Rub the surface with this preparation using long even strokes, with the grain of the wood. Rubbing with a piece of woolen carpet under a block will speed up the process. Re-dip the felt in oil and pumice frequently. Use enough oil to prevent fine scratches, which the pumice used alone will cause. After the surface has the desired degree of dullness, remove all oil by washing with mild soap and water. Wipe dry, and wax for a satin finish.

Care Of Brushes

Select good brushes (vulcanized in rubber) and take care of them. Never use a bristle brush in an alkaline solution. Clean brushes immediately after using, let dry, and wrap in paper before laying away so that the bristles will be kept straight and even. Clean shellac brushes in alcohol, varnish brushes in turpentine, and lacquer brushes in lacquer thinner. Liquid soap will quickly clean any brush if it has not dried. Rinse well in clear water.

Paint brushes may be kept dry; or they may be suspended in raw linseed oil—never let them stand on the bristles.

Things To Remember

1. Varnish and paint removers are inflammable and must not be used near an open flame. Keep cap on can to prevent evaporation.
2. Dispose of linseed oil and turpentine cloths. They are fire hazards.
3. Take time in refinishing. Solicit the aid of the entire family and do not omit any of the necessary steps, if you would get lasting satisfaction from the refinishing work.
4. Several thin coats of varnish, lacquer, shellac, or oil, each coat rubbed down well, will make a more durable and more beautiful finish than one thick coat.
Acknowledgment

The writer wishes to acknowledge the courtesy of the New York Extension Service for pictures used in figures 2, 3, 4, and *American Home* for that used in figure 5.