

How to RETOUCH REPAIR REFINISH

CABINETS

*Part I—Burns,
scratches, gouges and
other imperfections
in the finish of a
cabinet can be
removed or hidden.
And the work is
profitable*



By JEFF MARKELL*

PERHAPS you have a good old TV, radio or hi-fi cabinet that you'd like to hang on to. But time has taken its toll and the finish has become rather shabby. Or perhaps you are in the servicing field and get requests from customers to touch up battered cabinets while the insides are in for repair. In either case, you can do a great deal to brighten up a dull, beatup cabinet.

If you are in the servicing business, you doubtless already know what a boon to customer relations even a coat of polish on a cabinet can be. If you haven't tried this simple approach, try it for a while to see if it isn't worth instituting as a standard procedure.

You can give it a fancy name and call it applied psychology if you please, but when a customer gets back a unit that looks better than when she sent it out for repairs, she is likely to think that it plays a great deal better too. And you then have a customer who swears by your work for reasons that have nothing to do with electronics.

If cabinet work goes beyond a routine rubdown and polish, you should charge the customer for it and the matter should be taken up with her before you start. If you see obvious defects or injuries that can be repaired, point them out to the customer when the job first comes in. Suggest that they be attended to while the unit is in for repair. In this way, you can add dollars to your repair billings and build customer satisfaction with the lady of the house at the same time.

If you are tied up with strictly elec-

tronic work and can't spare the time for cabinet repairs, make a deal with a local cabinetmaker. In return for the steady volume of business you can provide, he should be willing to give you prices that will let you make a dollar or two on the cabinet work. And you can guarantee professional quality.

Whether you collaborate with a cabinet man or do the work yourself, you still have to know what to look for and what can be done to deal with your customer intelligently. Let's investigate the kinds of defects most often encountered and what can be done about them.

It helps to break down the common types of cabinet defects into two categories. The first consists of various types of injuries resulting from use, wear and tear or transit damage. While such injuries are occasionally serious enough to warrant discarding the entire cabinet, they are usually relatively minor and rather simple to correct. The second category of defects is made up of breakdowns or failures in the cabinet resulting either from old age or construction or finishing methods that were not what they might have been from the start. These will be detailed next month.

Burns are easy

One of the commonest cabinet injuries is burns. About 99% appear on the cabinet tops, and about 98% are cigarette burns. The ones along the edges of the tops are the result of someone's parking a lighted cigarette. The ones in the middle of the top are spots where a lighted cigarette fell off an ashtray.

Burns are easy to detect. They pretty much shout at you. Their size ranges from a very small discolored spot to a large blackened area a couple of inches long and half an inch wide. The size is your tip to how difficult it will be to repair. A large-area burn is generally a deep one. Though it may appear to be superficial, wait until you start scraping away the charred material. You may have to go a lot deeper than you thought to get all the scorched wood out.

There are two ways to treat a burn, but for either one the first step is the same—scraping. All charred material, both finish and wood, must be removed. Do the rough work with a sharp knife—a paring knife with a curved blade, a jack knife or a curved Exacto knife is good.

When you have removed all the burned finish and scraped out all the blackened wood, smooth off the spot

A word of caution to those who have never before attempted to repair or retouch furniture finishes. This type of work is not arduous or heavy labor, but it does require a bit of skill or, if you will, "feel" that can be acquired only with practice. For example, it takes a few tries before you'll get the feel of how much pressure to apply when French polishing, or how long to heat the knife when burning-in. Therefore, before you try your first job for bacon, you ought to practice on an old discarded cabinet or table to get used to the materials and methods. The chances are that your first solder joint wasn't perfect either.

*Markell Associates, Cabinet Design and Construction.

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with very fine sandpaper, 2/0 to 4/0, and stain it to match the surrounding area.

French polishing

Now you have to decide which way to retouch, the decision depends on how deep a hole you have in the surface after scraping. If the depth of the scraped-out spot is $\frac{1}{8}$ inch or less, use a method known as French polishing. Make a small pad of cheesecloth or gauze about $1\frac{1}{2}$ inches square and about 20 layers thick. Wet the pad with white shellac and squeeze out the excess so the pad is soggy but not dripping. Then pull up the four corners in your fingers to make a round ended pad, and apply 3 or 4 drops of linseed oil to the rounded portion. With a brisk motion, rub the shellac into the affected area. At first, apply very little pressure. After a few seconds, the shellac will start to harden and you can apply more pressure—about what you would use to polish hard wax. Keep repeating this process, working shellac into the burned area and around the edges until you have built it up level with the rest of the top. When you are finished, the spot you have been doctoring will be glossy. If the rest of the piece is satin finished, dull the repaired spot down with extremely fine steel wool, 4/0 sandpaper or pumice.

Burning in

French polishing is fine for a shallow burn, but what do you do if you have a deep one? More than $\frac{1}{8}$ inch. Again it's easy. After the burned area has been scraped out, sanded and stained to match the surrounding color, you use a technique called burning in. For this you need an alcohol lamp, a small flexible spatula (a light, springy artist's palette knife is excellent) and a shellac stick either transparent or a color that matches the piece being repaired.

Heat the palette knife over the alcohol lamp. Touch the heated knife to the shellac stick and melt a small amount of material from it. Place it in the hole to be filled. Repeat the process, filling the hole a little at a time until it is level with the surrounding area. Do not overheat the knife or the shellac will burn, creating carbon that will smudge the repair. You need only enough heat to melt a little of the shellac stick at a time. When the hole is filled, use the heated knife to smooth the surface around the edges. Again be careful not to overheat the knife or it will blister the surrounding finish. Complete your smoothing operation by sanding lightly with the finest possible paper, about 4/0, and top off with French polish or rub with steel wool or pumice, to make the repair conform with the surrounding texture.

Water and beverage stains

Opaque or semi-opaque milky areas on cabinet tops are usually water or beverage stains. They may be in the



Cigarette burns are the most common type of cabinet damage.

Illustrations Gernsback Library

The ring left by glass standing on the top of a cabinet is easy to remove—if you know how.

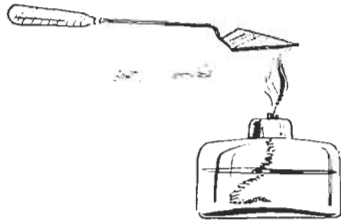


form of rings left by the bottoms of wet glasses, or irregularly shaped areas caused by spilled beverages that were allowed to stand.

There are two ways to remove these annoying white spots. One is by rubbing them out, and the other is by chemical

action. Since such spots do not generally penetrate clear through the finish, try rubbing them out first.

On a dull finish, use very fine steel wool and oil. On a semi-gloss finish, use pumice; on a high-gloss finish, rottenstone. Merely rub the spot with the



For burning-in, you will need an alcohol lamp and a spatula as well as some shellac sticks.

appropriate abrasive until it disappears.

If rubbing doesn't seem to affect the spot much, switch to a chemical treatment, since you've apparently got a spot that goes fairly deep. The trouble with chemical methods is that if the chemicals are too strong or are left on too long they'll take the finish off the area entirely, so you have to be very careful.

One method is to use ammonia. Dampen a soft rag or cheesecloth with ammonia, then wring the pad out as hard as you can. Now, very gently, quickly and lightly, brush the ammonia across the white spot. For bad white spots on lacquer finishes, do the same thing with lacquer thinner. I cannot caution you too strongly to work quickly and lightly, lest you take all the finish off along with the spot. If this happens, you've a job of French polishing on your hands.

Scratches

Little ones, big ones or both, you will find scratches on every used piece of furniture. The primary trouble with the appearance of an old cabinet is often a myraid of little scratches which give it a terribly dull, defeated-looking appearance. Most of them can be compounded out both easily and rapidly. This is where you might get a life-long customer by expending just a little effort.

Most scratches can be removed by rubbing with 4/0 steel wool, pumice, rottenstone and oil, furniture rubbing compound, or even automobile rubbing compound, depending on the amount of gloss desired in the final result.

When you do a routine good-will type of polishing job, don't try to get all the scratches out. You'll get most of them out with a brief rubdown with the proper abrasive, and this way you get the effect you want—appreciably brightening the appearance of the cabinet without going to a lot of work and expense.

For a dull satin finish, use the steel wool. On a semi-gloss, use pumice and oil or pumice and water. For a high gloss finish, use furniture rubbing compound. If you can't find any, use automobile rubbing compound. It's just about the same. In the unlikely event that you cannot find either one locally, use rottenstone and oil. The high gloss is, of course, the most exacting finish

to clean up because it shows finer scratches than either of the others. When you are through rubbing out the scratches, go over the whole piece with a good furniture polish to complete the job properly.

You'll often find that by rubbing only the top and applying furniture polish to the entire cabinet you will get the desired effect, since the largest proportion of scratches will be on the top.

Where you really want to get out all the scratches, and there are some deep or stubborn ones that do not respond to rubbing alone, try French polish and then rub out.

Nicks and gouges

There are dozens of ways in which a cabinet can be hit or scraped, nicked or gouged, either in transit or around the house. The simplest nicks require more labor to repair than scratches, and they can be big and deep enough to be impossible to repair completely. If they are really big, you can reduce the unsightliness considerably, but don't give anyone the idea that you are going to make them disappear entirely.

All deep depressions require the same treatment. The first step is to clear away all loose splinters and chipped finish in and around the area. Stain where restoration of color is required, and burn in with alcohol lamp, spatula and shellac stick as described previous-

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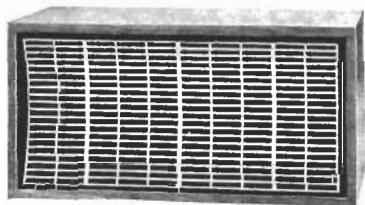
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filled in with shellac

Burn holes can be filled with shellac.

ly. I prefer using transparent shellac sticks for burning in since the transparent type allows grain and color to show through, making a better match with the surrounding area than is usually possible with opaque, colored shellac sticks. After burning in, finish off by smoothing out and polishing as with other types of injuries.

Crushed edges and corners

When a cabinet is dropped during transit, the usual result is a crushed corner or edge. Like deep nicks and gouges, this type of damage can be vastly improved, but cannot always be repaired 100%. One word of caution: before you even think of doing anything about a crushed corner, examine the joint alongside it and all other joints, particularly the one diagonally across from the damaged one. Check for joints that are sprung and have started to split open. If the joints have started to go, the structural integrity of the entire cabinet is in serious trouble. In severe cases, the cabinet may have to be discarded.

Crushed corners or edges are another form of damage you would treat with a shellac stick and burn-in. When repairing a crushed corner, use your judgment as to how far to try to rebuild it. It is usually inadvisable to try to build up a badly crushed corner to its full original shape. The new corner would be very fragile — it is made only of shellac. Build up bad crushes say ¼ inch or a bit more and stop. The damage won't be completely hidden, but it will be a great deal less obvious, and the repair will be more likely to stay in place.

Loose or broken hardware

Hinges that are wobbly because of loose screws, hinges bent out of shape, bent lid supports that won't open or won't support, door catches that won't catch, drawer slides that won't slide, all fall under the head of loose or broken hardware. A lot of the trouble caused by such problems is secondary — scratching and scarring caused by continued use of the cabinet after the hardware has gone west.

As a general rule, the best thing to do with bent or broken hardware is to take it off and replace it. A bent or broken hinge, catch or lid support will never be quite right if you try to fix it. On an antique piece with antique hardware that cannot be replaced, you have no choice but to try and repair it. Otherwise, don't waste your time.

One of the most common troubles with hardware is not that the hardware itself is damaged, but merely that the screws holding it in position have stripped their threads in the wood and

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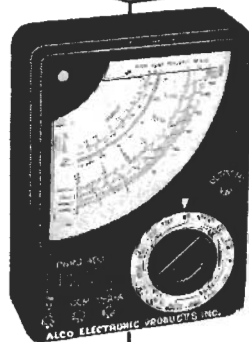
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loosened. Rather than replace them with larger screws that may not fit the hardware, remove the screws, fill the holes with plastic wood and while the plastic wood is still soft, redrive the screws. Caution! Drive only until the screw heads are flush—any more and you'll pull the plastic wood right back out. Give the plastic wood time to set, and you'll find the hardware is tight again.

This completes our discussion of the more common cabinet injuries. Deterioration due to age or construction failures in a cabinet result in other symptoms and treatments. Next month we treat some of the harder-to-handle troubles. We start off with cracked, glazed or alligatored finishes, continue on to open joints, work over some loose legs and molding and finish up with refinishing.

TO BE CONTINUED

CURE DISCOVERED FOR TV TUBES!


A Texas scientist, noted for his extensive research in the field of aniline dyes and the pre-natal dyeing of wool, which has gained him world-wide recognition as the world's foremost lamb dyer, has at long last isolated a heretofore unsuspected valve in receiving tubes which seriously limits the tube's capability and useful life. It has long been felt in engineering circles that tubes would pass both mc's and kc's. It has now been shown that acidic atmospheres in vacuum tubes cause a little door to close over the valve and prevent the free passage of mc's, which all will recognize as fatal.

Five New York doctors verified these findings and report that their sets work better when the tubes are treated with XL-9, a secret formula prepared by the Texas Institute.

XL-9, containing a slight trace of lanolin extracted from pre-natal lamb's wool together with three other as yet unspecified ingredients, when applied to the outside of receiving tubes has the property of easing internal stresses and allows the free passage of mc's and kc's.

Leading tube engineers say that the discovery of the hidden valve is a complete surprise to them and that their quality-control sections have never listed this on their reports. Both CGS and Rayvania have ordered large shipments of new formula XL-9, which they promise will coat each tube leaving their plants in the future.

Service technicians all over the country hail this discovery as the greatest boon to set owners of all time, and are making plans to award a plaque to the Texas Institute in recognition of its great contribution to mankind.—*Reprinted from TESA (of Seattle) News.*



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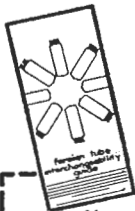
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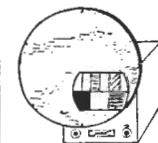
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The Formula

By Norman H. Stark

Wood is a beautiful material. It has a feeling of warmth that other materials don't have. A well-kept wood floor enhances the beauty of any home. But it must be properly cared for to be at its best. One of the major problems is discoloration. Dirt and stains can become ground-in, causing unsightly darkening. When this happens, bleaching is called for. However, advance preparation is essential.

Accumulations of wax, oil and dirt must be removed. The best and most economical way I have found to do this is to use ordinary washing soda and very hot water. About a cup of soda to a gallon of water seems about right. Scrub the floor thoroughly and rinse with clear water. You're now ready to apply the bleach. Here's the formula.

You'll need one-half pound of sodium perborate (available at a drugstore) and cold water. Mix sufficient water into the sodium perborate to make a paste of a brushable consistency. Spread paste on floor taking one section at a time, and allow to stand and "work" for about 30 minutes. Remove with clear water. Repeat this procedure as often as necessary to bring surface to degree of lightness you desire. Because both materials you will use can be irritating to the skin, rubber gloves are suggested. Store the excess in glass or plastic container.

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