A Hand-Rubbed Oil Finish

Proper surface preparation underlies its beauty

by Tom Wisshack

Thomas Sheraton, the 18th-century English furniture designer, recommended making a paste of linseed oil and ground brick dust and rubbing it into mahogany with a piece of cork. The result, enhanced by innumerable polishings with beeswax over the years, is the beautiful patina we see on many treasured antiques.

Oil finishes still have much to offer today's craftsman. An oil finish will accentuate the grain, color and figure of the wood rather than obscure it, as many coats of a surface finish (such as varnish, shellac or lacquer) are prone to do. Additionally, an oil finish will never chip, peel, develop fisheye or orange peel. And dust contamination is not an issue with oil finishes, making them a good choice for the craftsman without a separate finishing space. If dust lands before the piece is dry, simply wiping it down with a soft, clean cloth takes care of the problem. Finally, and perhaps most importantly, because an oil finish penetrates and bonds with the wood, rather than forming a film atop the wood, renewing the finish is as simple as rubbing in some fresh oil.

As simple and beautiful as oil finishes are, however, it would be a mistake to view oil finishing as a quick, easy solution or a cover-up for bad workmanship. On the contrary, there is quite a lot of work involved in preparing a surface for an oil finish, and an oil finish will magnify any imperfections in the wood. Also, an oil finish is only moderately resistant to water and alcohol, so it may not be the best choice for a dining room or kitchen table, but for a piece of furniture subject to less spillage and daily wear, it may be ideal. For many craftsmen, the beautiful, rich patina that an oil finish develops over time far outweighs the care needed to maintain it. In this article, I'll discuss preparing for and finishing new furniture as well as rejuvenating previously oil-finished pieces.

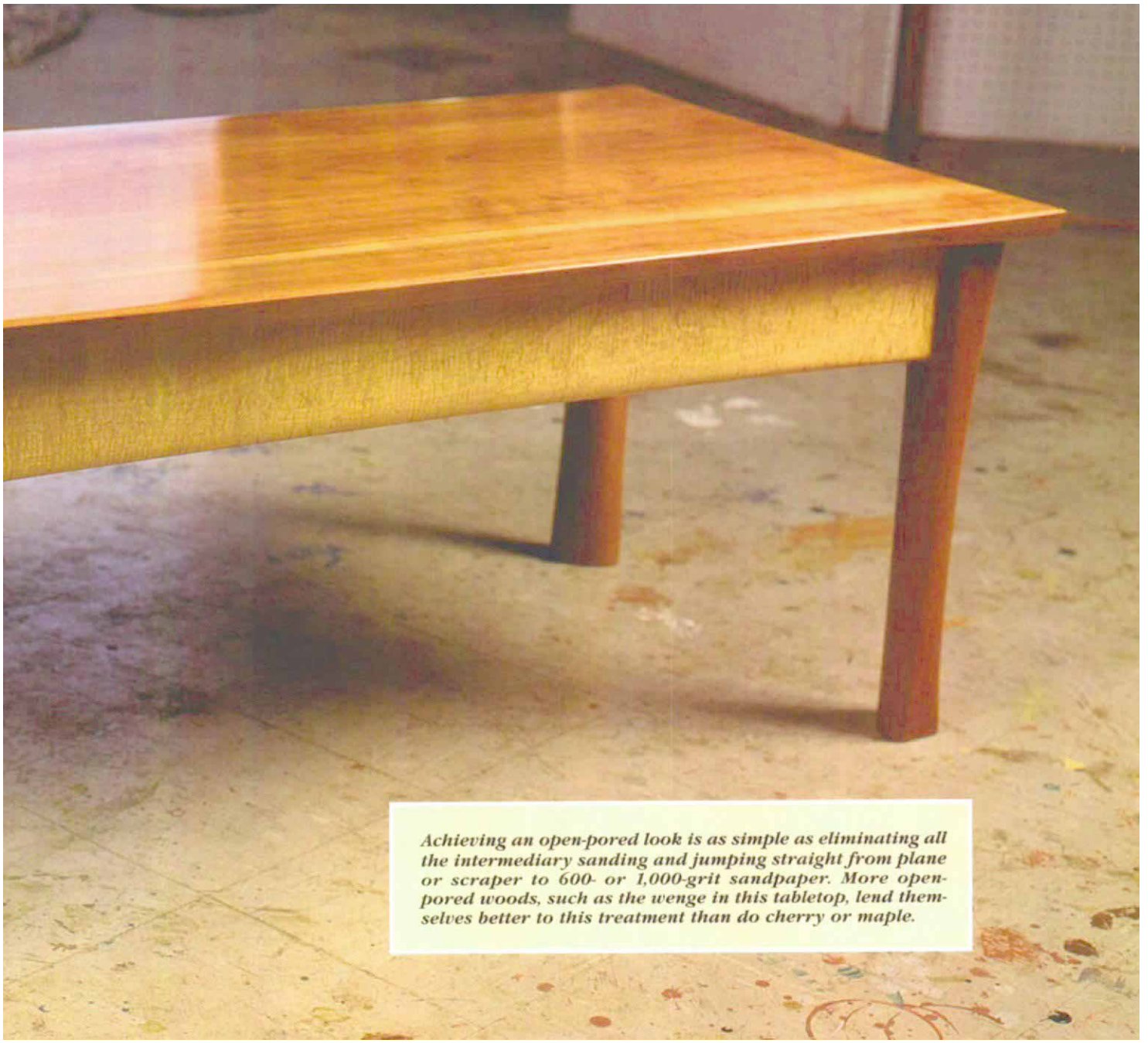
Surface preparation

Someone once said that you could put used motor oil on a perfectly prepared wood surface and it would look good. As shocking as that may sound, the statement points out a fundamental truth: An oil finish is only as good as the surface to which it's applied. You may be able to get by with a less than perfectly prepared wood surface if you plan to varnish or lacquer because these finishes form a relatively thick coating. But with an oil finish, any flaws in the unfinished surface will only become more evident when oiled, so you need to take extra care preparing the surface.

Some craftsmen prefer a handplaned or scraped surface to one that has been sanded a great deal. A surface finished by a cutting tool rather than sandpaper possesses a different tactile quality and will respond quite well to an oil finish. Most of us, however, find it necessary to sand at least a bit; how fine a grit you stop at is largely a matter of personal taste. A surface that has been sanded to 1,000-grit will respond as well to an oil finish as one that has been handplaned only, but the characters of their surfaces will differ.

After planing or scraping to remove any mill marks or other imperfections from the wood's surface, you should raise the grain with a sponge or rag soaked in hot water. This will make any unseen flaws in the surface evident, so you can scrape or sand them out. It will also make your project easier to repair if it comes into

Photos: Vincent Laurence



Achieving an open-pored look is as simple as eliminating all the intermediary sanding and jumping straight from plane or scraper to 600- or 1,000-grit sandpaper. More open-pored woods, such as the wenge in this tabletop, lend themselves better to this treatment than do cherry or maple.

contact with water after it's finished.

I usually begin sanding with 220-grit wet/dry sandpaper on an orbital sander or hand-held sanding block. I follow up with 320-, 400- and 600-grit paper, always sanding in long, straight strokes with the grain. A pine block faced with sheet cork (available from art-supply stores) will keep you from creating valleys as you would if you held the sandpaper in your hand; this is more important with the coarser grits because of their greater cutting effect. By the time you finish with the 400-grit, you'll start to see the wood grain and color come into focus. With the 600-grit, you're actually burnishing the surface. You may wish to use intermediate grits, or follow the 600-grit with finer automotive sandpapers, but I find the above routine generally sufficient.

After attending to all flat surfaces, I take a piece of worn 600-grit paper and gently round any sharp edges and corners. This will prevent finishing rags from catching and will also give the piece of furniture a slightly used or worn look. If you wish to retain a more open-pored look, or would like handplaning marks to be evident in the finished piece, skip straight from plane to 600- or 1,000-grit paper to polish the surface quite beautifully without filling all the pores (see the photo above).

It's important either to vacuum or to clean the surface thoroughly with compressed air after each successive grade of sandpaper to avoid scratching the surface with particles left over from the previous, coarser grit. I also check the surface with a strong light between each sanding and again when I think I'm done. This will often reveal minor flaws I might otherwise have missed. The wood's surface, ready for oil, should have a sheen and be glass-smooth even before any finish is applied.

I like to let a piece of furniture sit for several weeks after preparing its surface and before I apply any oil. This time allows the surface to oxidize somewhat, giving it a head start on the rich color it will acquire with age. Cherry, for example, will look rather greasy and anemic and may have an unpleasant orangey tone if finished with oil right away. By letting the wood mature prior to finishing—even for just a couple of weeks—a richer tone results and the patina will build up more quickly. Not all woods respond to this waiting period, and not all craftsmen can afford to wait or are willing to do so. For me, the results are well worth it, and because I normally have several projects going at once, time isn't a problem.

Repairs and rejuvenation

An oil finish needs to be maintained. I'll refurbish one of my own pieces every couple of years, or sooner if it's damaged. To rejuvenate a surface that is intact (no scratches, water marks or abrasions), I simply rub my homemade oil finish into the surface for a couple of minutes and then remove all traces of oil with a dry rag. Finally, I rub the surface with another dry, clean rag until the surface has a satiny sheen.

If the surface is scratched or otherwise blemished, it's usually possible to remove the blemish by rubbing it out with a pad of 0000 steel wool soaked in the oil finish. Sprinkling a little rottenstone (a gray, abrasive powder much finer than pumice) onto the wood surface while rubbing will restore its original sheen. If you're removing a blemish from one area, in order to keep the same color and sheen over the whole piece, it's important that you not forget to rub the whole piece out. With each rubdown, the wood gets more beautiful and begins to form a patina. A table I made about ten years ago has had its top rubbed down about six times and is quite striking in appearance.

If a blemish doesn't respond to nibbing out with the steel wool, you may need to use wet/dry sandpaper with the oil solution. Although it depends on how deep the scratch is, as a rule, I don't use anything coarser than 320-grit for repairs. I use a sanding block (to prevent my fingers from digging into the wood) and follow the grain of the wood. Once I've removed the blemish, I work my way through the various grades of sandpaper until I have a perfect surface again, and I finish up with 0000 steel wool and rottenstone. I'm very careful not to sand too deeply because this would expose the underlying (nonoxidized) wood color, necessitating a much more extensive repair. Using the finest grade of sandpaper you can get by with will generally keep you out of trouble.

If you need to repair a piece of furniture but don't want to darken it, rub the piece down with mineral oil instead of a finishing oil. I have a walnut writing table that the sun had started to fade. I liked its color and wanted to retain it, but the tabletop needed some attention. Using the mineral oil just as I've used the homemade finish on other pieces (with a pad of fine steel wool and some rottenstone), I was able to repair the table without changing its color.

The hue of sun-bleached walnut *suited the author, but the tabletop needed work. Using mineral oil and rottenstone, he rubbed out numerous minor scratches and scuffs, as well as gave the surface a new shimmer, without changing the color of the wood.*

Choosing and applying oil

As I've tried to stress already, the kind of oil you use isn't nearly as important as the preparation prior to the actual finishing. I generally use a homemade oil finish (see the sidebar on the facing page), but there are also a host of commercially available oil finishes. Danish oil finishes are among the most popular because they're simple to apply and the results are predictably successful.

Second in popularity to Danish oil finishes are tung oil finishes. The working properties of these finishes are similar to the Danish oil finishes, although tung oil generally cures faster and offers a bit more protection than most of the Danish oil products. (Keep in mind, however, that there is tremendous variability in formulation, drying time and working properties from one manufacturer to another. I've used tung oil finishes that have gone on like Mazola and stayed that way and others that started to tack up almost immediately upon application.) I find tung oil finishes too shiny, and in some cases, streaky for my tastes, especially with more than two coats, but a final rubdown with fine steel wool will generally both even out the finish and tone the gloss down to a satiny sheen.

My application procedure is similar for Danish oil and tung oil finishes. I brush on a first coat—liberally—and allow it to soak into the wood—about 10-15 minutes for Danish oil finishes but only 2-3 minutes for the tung oil finishes. Then I wipe up all oil remaining on the surface with a clean rag. I let this first coat dry for a few days (for either finish), and then I apply subsequent coals with a rag, wiping in a circular motion. Again, I eliminate all traces of oil remaining on the surface, using a clean, dry rag. Although there's no definite rule on how many coats you should apply, I usually give my pieces three to five coats. It's important to wait as long as possible between coats to avoid the greasy, hurried look that is characteristic of so many oil finishes.

Something to keep in mind, particularly with the more heavy-bodied oil finishes such as the tung oil finishes (although it's true to some degree with all oil finishes), is that the more coats you apply the more you lose the open-pored look. To retain this look on some of my contemporary pieces, I've applied only one coat of oil, and then followed that up a couple of weeks later with a coat of quality paste wax.

In instances where I want to finish a piece with oil, but a greater level of protection is required, I use Formby's Low Gloss Tung Oil Finish. The combination of tung oil and alkyd resins provides considerably more protection than most oil finishes, and the Formby's finish dries quickly and reliably. □

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