

Wiped-On

Varnish

Achieve a traditional look with multiple, thin coats and lots of elbow grease for the final polish

BY THOMAS E. WISSHACK

The use of a bristle brush for applying varnish is so commonplace that many woodworkers don't realize there is any other way. We tend to think of varnish as a traditional finish that must be applied in fairly heavy coats, usually with a brush. This is actually a myth. Some of the oldest and most beautiful finishes relied on numerous, thin coats of varnish that were rubbed onto the wood surface with a soft cloth and then polished to a delightful shine. I believe wiped-on varnish is an important addition to any wood finisher's arsenal of methods. I also think it's the most useful and versatile technique for



creating a beautiful finish. The advantages of using a wiped-on finish are all related to the fact that the individual coats are extremely thin and dry quickly. Let's look at a few of these positive features.

- **Minimal dust contamination**

Dust contamination is a major drawback for people brushing varnish; it dries so slowly foreign particles have plenty of time to land in it. But when the varnish is wiped on, the individual coats of varnish dry rapidly, so dirt doesn't have much chance to adhere. This is an enormous advantage for the wood finisher, because most of the time spent perfecting a varnish finish is a direct result of dust and foreign particles becoming embedded in it.

- **Minimal application marks**

Though varnish can be made to flow and level nicely when brushed on, it's hard to achieve a flawless surface without some sanding. If applied properly, a wiped-on varnish virtually eliminates runs, sags and application marks. The marks that do exist are much easier to remove because the finish layer is thin.

- **Less buildup**

It's rarely necessary to build a thick layer of varnish. Aesthetically, a thinner application is more appealing. By wiping on the varnish, you have infinite control over the final thickness because you can apply as many or as few coats as you want.

Candidates for a wiped-on finish

It's difficult to build up a wiped-on varnish finish to a thickness suitable for a much-used kitchen table or bar top. I've used it on small tables, chests of drawers, frames, boxes, woodwork and numerous other projects that don't normally receive hard use and aren't exposed to spillage or constant moisture. But I don't want to give the impression that wiped-on varnish is not durable. I've used it, with multiple coats, on dining room tabletops where an elegant finish was required. A wiped-on finish will hold up remarkably well, provided a certain amount of common sense is used in caring for it. For example, a wiped-on finish resists mild abrasion and occasional spillage, but if you plan to place a hot dish on the surface or expect it to resist deep scratches, you'd be better off with some other type of finish.

Remember that the number of coats you wipe on has a tremendous effect on the durability of the finish. One or two coats will afford only marginally more protection than several applications of a Danish-type oil finish. Six to 10 wipe-on coats begin to approach the durability of a single thickness of varnish applied with a brush. Determine whether you are willing to spend the time a wiped-on varnish finish requires. The very nature of the process causes you to slow down and approach the finishing of your project with care.

Most varnishes can be wiped on

Virtually any kind of varnish can be applied with a cloth. It's simply a matter of learning a particular varnish's characteristics and



FIRST STEP IS THE SEALER

The important thing is to work the sealer—two parts thinner to one part varnish—into the wood. A natural bristle brush works well. After the surface is completely coated, wipe off all the sealer with a rag.

developing a technique for applying it successfully.

Polyurethane is a good example. Strikingly beautiful finishes can be created by wiping on some polyurethanes, but polyurethane is normally thicker than standard varnish, and it takes a little more practice to master. Waterborne varnish can be built up in many layers with a cloth and rubbed to a lustrous sheen, though it tends to dry very quickly when wiped on, which limits its use to relatively small projects. Certain tung oil varnishes, sold as wiping varnishes, are actually designed for cloth application and have a consistency that makes them appropriate for a good finish.

The real prerequisite for a varnish that is to be wiped on is the hardness and durability of the film it leaves on the wood's surface. Because the final layer of finish is much thinner than a brushed-on varnish finish, it only makes sense for you to

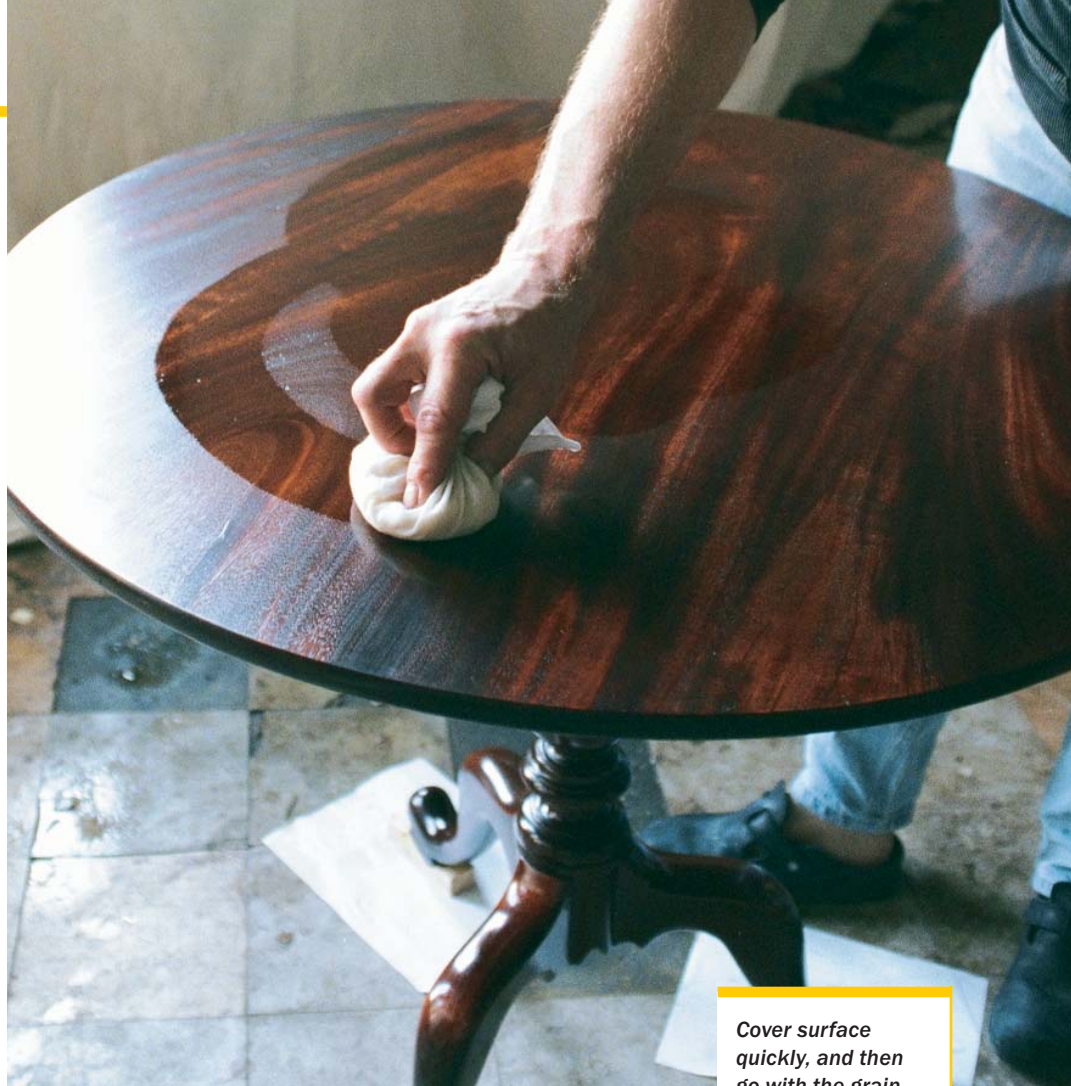
For the finish coats, make a finisher's ball. Make a pillow of cotton cloth filled with cheesecloth, and hold the ball together with a rubber band. A shallow pan makes a good vessel for dipping varnish.



SECOND STEP IS THE VARNISH COATS



Start with the intricate details, and finish the top last. For the detailed parts of furniture—pedestals, legs, carved pieces—it's not always possible to wipe on the varnish with the grain of the wood. Quick coverage and a gentle touch with the finisher's ball are what's important to avoid drips and runs.



Cover surface quickly, and then go with the grain. For the finish coats of wiped-on varnish, you have to work fast before the varnish dries. After you've covered the surface with varnish, land the ball at one edge, taking a light stroke with the wood grain. Lift the ball from the surface just before you get to the far edge. It takes a little practice.

work with a high-quality, brand-name product.

Certain precautions should be taken to reduce dust in your finishing area. If at all possible, do the finishing in a separate room of your shop. This is not always practical, but you can still minimize the problem by raising your work off the ground, cleaning the area and sprinkling the surrounding floor with water. Wet a 10-ft. area around your project, as well as the path you will be using to exit the shop. For small projects, you can build a cardboard hood over the finish area, or you can place a cardboard box over a small object while it dries. Vacuum the cardboard box, and mist the inside with water before placing it over your project.

Brush on the sealer

The first step in a wiped-on finish is sealing the wood. The sealer coat makes the finish coats glide on more smoothly, and it results in a smoother, more professional-looking final product. Whatever varnish you plan to use will make a good sealer. Thin the varnish with two parts of high-quality mineral spirits or turpentine. Avoid thinning varnish with naphtha because the naphtha will cause the sealer to dry too quickly.

Apply the sealer with a natural bristle brush to one section of your project at a time. Use the product liberally, making sure everything is covered. Work it into the pores of the wood in all directions. Let it soak in about one minute, and then remove all superfluous varnish with cloths.

It's wise to let this sealer coat dry overnight—two days is even



better—before attempting to apply subsequent coats of finish. This ensures that the surface you're working with is completely dry. A distinct advantage of the sealer coat is that it stabilizes the moisture content in the wood, allowing the subsequent coats to level and dry much more reliably.

The dance of the finisher's ball

The ideal applicator for wiping on varnish is a wood finisher's ball made from a soft cotton cloth filled with cheesecloth, forming a small pillow. A rubber band holds the ball together and makes a convenient handle.

Before you use the varnish, be sure to strain it through a cone-shaped painter's strainer or a piece of lint-free cheesecloth stretched across the top of an empty can. Dilute the varnish to a 50/50 mixture with the same thinner that you used for the sealer. Then pour the mixture into a thin aluminum pan such as the type pot pies come in.

Dip your finisher's ball into the mixture, and then tap the sides of the pan lightly so that nothing is actually dripping from your cloth. I always start with the smaller more intricately detailed parts of a piece of furniture before I finish the large planes. When I applied finish to the table shown in the photos, I started with the pedestal and legs and finished the tabletop last.

Apply the finish in a circular motion, and don't worry about neatness at first. You will need to work quickly because the thinly applied coats dry rapidly. Next use long, gliding movements, holding the wood finisher's ball in the air and landing it lightly on the wood's surface.

Work with deft strokes in the direction of the wood grain. At the far end of a flat surface, lift the ball from the surface just as you come to the edge. Repeat until you have deposited a smooth, continuous layer of varnish. Dip into the pan for fresh varnish when your cloth becomes dry or begins to drag. When you are finished with a large flat surface, such as a tabletop, dip the ball into the varnish mixture, and gently apply a coat of varnish to the top's edges.

It's a good idea to let a coat of varnish dry overnight before applying the next coat. Here's a quick test for dryness: Lightly stroke a surface with your finest paper. If the paper produces a white powder on the surface of the wood, it's dry enough and ready for the next coat.

Possible pitfalls

Here are a few of the common problems that can occur when applying varnish with a cloth, along with appropriate solutions.

● Varnish dries before a coat can be successfully applied

You may need to practice on small boards before attempting a large piece of furniture. It takes a little time to learn to apply the finish quickly and evenly. It's also possible that your varnish is drying so quickly that you don't have enough time to apply a thin coat. Try thinning the varnish slightly, increasing the amount of solvent in very small increments until it seems to be easier to work with. If a particular finish continues to give you trouble, switch to another brand.

● Finish appears streaky and uneven or has rough areas

Roughness usually means you have overworked the varnish and portions of it have begun to dry. Don't go back in and tamper with it. If an application is

extremely rough, remove it right away with solvent rather than attempt to sand it smooth when dry.

● Varnish takes several days to dry or stays gummy

Chances are, the sealer coat was not given ample drying time, and trapped moisture is affecting your finish. This is common in damp weather, but it can also be caused by wood moisture. Put the object in a warm, dry place. If it does not begin to dry after 24 hours, scrub the piece with 0000 steel wool and naphtha. Wipe off all bad finish, let the piece dry overnight and reapply the sealer. Wait several days; then apply the wiped-on coats as usual.

How many coats?

For wiped-on finish to be at all durable, four coats should be thought of as a minimum; beyond that, it depends upon the look you are trying to achieve. I sometimes apply six to 10 individual coats to a small project, such as a box made of exotic or unusual wood. I have applied as many as 20 coats to very special projects. More coats give greater depth to the wood surface and are ideal when you want to show off a particularly handsome piece of wood. Keep in mind that with practically any varnish, regardless of whether it is marketed as semigloss or satin, the gloss will increase, and the grain will begin to fill when multiple coats are applied.

The final rub

Let the final coat of varnish dry about two days before attempting to do any rubbing. Less time could cause a too-soft finish to be



THIRD STEP IS LEVELING

After the last coat of varnish and before the final polishing, the author levels the surface with 600-grit paper, a foam sanding block and a little water. It takes a light touch. The intent is to knock off dust or debris that might have dried into the varnish despite precautionary measures.

FINAL STEP IS POLISHING



Unfold a pad of 0000 steel wool, and dry rub all surfaces to a dull sheen. Then mix mineral oil and powdered rottenstone into a slurry, and rub the steel wool for several minutes more. If the slurry seems dry and too abrasive, add more oil.

Wipe with cotton cloths to remove oil and rottenstone. Continue changing soiled cloths until the cloth stays clean when you wipe the surfaces.



ruined; more time could cause it to harden to the point where it's difficult to rub out. There are two very important steps to the rubbing-out process: leveling and polishing.

Even a flawlessly applied wipe-on finish will need a little sandpaper leveling to remove the tiniest specks of dust that might have accumulated in the finish when it was drying. If you attempted to rub such a finish with steel wool alone, the abrasive would ride over high spots caused by debris and create a superficially smooth, yet bumpy surface. Leveling cuts through these high spots and prepares the finish for the polishing of the surface.

I use new 600-grit wet-or-dry sandpaper, lubricated with a few drops of water. A soft rubber sanding block keeps fingers from digging in and aids in the leveling process. Keep in mind that a few strokes is often enough to do the job. Avoid too much pressure on the ends of boards. It's fairly easy to damage a thin finish, though using the 600-grit paper makes this less likely.

Polishing is the final step in producing a superior wiped-on finish. Open a pad of 0000 steel wool to maximum size, and begin rubbing dry along the wood grain in long, even strokes. Stop before you run over the edge of the surface you are rubbing to avoid



going through the finish where it is vulnerable. Rub until the surface has been uniformly dulled down, using only moderate pressure. The process will take several minutes per section. Stop frequently to examine your progress using a light held obliquely to the surface.

When the surfaces have a dull sheen, lubricate the steel wool with mineral oil and rottenstone to make a slurry, and continue rubbing in the direction of the grain for two or three minutes. This evens out any streakiness that is a result of the dry rubbing. Also, it leaves the surface, when wiped down, with a very attractive semidull sheen that will not smudge or remain oily. Special rubbing lubricants for wood finishing are made, but after trying them all, including paraffin, I find mineral oil the least greasy and easiest to remove completely.

After a few minutes of rubbing, use a clean cotton cloth to remove the rottenstone and the oil, wiping with the grain and changing cloths when they get soiled. When the cloth remains clean, picking up no more oil or rottenstone, the finish is, at last, finished. Beautiful! □

Tom Wisshack makes and restores furniture in Galesburg, Ill.