

Coloring Wood Grain with Wax by Steven McLoon

White colored paste wax, often called liming wax, can be used to fill the pores in wood. When the wood is dark or stained dark, the contrast between the white pores and dark background can have an interesting effect. This process is called liming or pickling wood.

The process works great on turned wooden eggs. Here is the standard procedure. Sand the egg up to 400g, and then stain it with Behlen Solar-Lux stain. The dark colors such as blood red, work well. Wipe on the stain with a paper towel. Allow each coat several minutes to dry, and keep applying coats until the desired color density is achieved. Next spray the egg with a minimum of three thin coats of lacquer using a spray can of Deft clear semi-gloss lacquer. Once the lacquer is completely dry, rub on white liming wax with 0000 steel wool. I have tested a number of variations on this method and have learned several things.



Wood selection: Ring-porous wood, as opposed to diffuse-porous wood, works best. Ring-porous wood comes from trees that make larger vessels at the start of the growing season. The larger vessels are seen as pores in cross-section in kiln-dried wood. Thus, large pores are concentrated in distinct rings in the wood. Since colored wax is held in the pores of the wood, the rings of large pores filled with the colored wax alternating with relative color-free rings makes an interesting contrast. The native ring-porous woods that are most readily available include ash, oak, elm and chestnut. I found that ash and oak work well. The pores of elm are less obvious. I have not tried chestnut.

Project: I mainly turned solid eggs or spheres for my tests. Perfect spheres are much more difficult to turn than eggs. The egg shape is pleasing to the eye and in the hand. I found it helpful to look at a real chicken egg just before heading into the shop so the shape was fresh in my mind. I also tested colored wax on one pen. I did not care for the look, and the wax and finish did not hold up well to use. Liming wax also worked well on a turned lidded box and on the lid of a jewelry box that I ebonized (i.e. flat work, not turned).

Grain cleaning: After turning and sanding the piece, I found the effect of the colored wax is enhanced by cleaning the grain. Sanding fills the grain with a fine dust. A fine brush is very effective at cleaning the dust out of the grain. I mainly used a brush with plastic bristles sold for brushing suede. A soft bronze brush made by Liberon for cleaning wood grain also worked well (available from Tools for Working Wood). I thought a brush was more effective than compressed air for grain cleaning. Aggressive brushes should be avoided as these make scratches in the wood that will hold wax. It was best to clean the grain after sanding and before staining. Brushing after later steps caused problems.

Stain: I tested several colors of Behlen's Solar-Lux stains, including lemon yellow, sea blue, jet black and blood red. These stains use an alcohol solvent, which is fast drying and does not raise the grain. Stain can be applied with a paper towel or cotton cloth. Dabbing the stain worked better than wiping. I continued to apply stain until the piece reached an acceptable color intensity and uniformity. Some areas of the wood were slower than others to take up stain. All

colors worked well. Lighter colored stains require a darker wax color (see below). I never got around to testing colored wax on unstained, natural colored wood. I suspect that lighter woods such as white oak or ash would work well with a dark wax. I did bleach an ash hollow form, and it looked great with black wax.



Lacquer: I did not test any variations with the spray lacquer. Intuitively, I would suggest that it is possible to apply too much lacquer so that the pores become filled and will not take up wax.

Wax selection: There are lots of possibilities for wax. I tested two brands of white liming wax, Liberon and Briwax. I thought Liberon's worked a little better. The white wood grain contrasts nicely with the red, blue and black stains. For the yellow

stain, I used Liberon black patinating wax. Black and white waxes traditionally have been used for this technique, but I saw no reason to be constrained by tradition. I have been using Rub n'Buff gold leaf paste wax to emphasize my engraved signature on the bottom of my turnings. This gold wax worked great for filling the grain in wood stained black. There are many other wax colors to explore. The companies that sell supplies for woodcarving carry small tubes of wax in many colors (e.g. Treeline).

Wax application: I had good luck applying the wax with oil-free, 0000 steelwool. (I normally apply clear wax to all my turnings using steelwool.) The only brand I have used that I like is sold with the Liberon label. Apply a thin coat of wax. Use pressure to rub it into the pores of the wood. Allow the wax to dry several minutes. Remove excess wax and buff with a clean cotton rag. I typically apply several thin coats until I am satisfied with the effect. I tried putting a coat of clear Renaissance wax over liming wax. This, however, displaced some of the liming wax. A clear over-layer may work better if the colored wax is allowed to dry for several days.

Egg stand: I am sure a bowl or basket of turned eggs would be wonderful. However, you might want to display a single egg or sphere. I purchased a brass 'egg stand' (from Craft Supply). It is good quality, well-polished brass, and looks great. I also turned several stands, which was more fun than just pulling out the credit card to buy one. I have hardly started to explore the creativity that could go into the stand. So far, my stands have been small and unobtrusive. The only rule I have is that the radius of the cup upon which the egg rests needs to be less than the radius of the curve of the egg, otherwise the egg will rock on the cup and not be stable.

I recommend that you try colored wax on turned eggs for Easter decorations. Please let me know if you discover anything else.

Liming Wood – A Short List of the steps

1. Sand wood to at least 400g.
2. Use a fine brush to clean the dust out of the wood pores.
3. Use a cotton rag to apply stain. Dabbing works better than wiping. Keep dabbing until the desired color density is achieved. Different area will take up stain differently, so more stain will be needed in some area.
4. Allow it to dry completely.
5. Spray thin coats of Deft semi-gloss topcoat. Hold the can 10-12" from the surface. Start spraying off the surface and then pass the spray over the surface. Give it a minute to dry, then rotate the work and spray again. Try to give 3 thin coats to all surfaces.
6. Allow it to dry completely.
7. Use 0000 steel wool to apply colored wax to all surfaces. Use pressure to rub the wax into the pores of the wood.
8. Allow the wax to dry several minutes.
9. Use a clean cotton rag to remove excess wax and to buff.