

The Art of Graining

by Nat Weinstein

Graining is one of the most useful decorating techniques an old-house restorer can master. It can hide a multitude of sins—damaged doors or woodwork, or furniture not worthy of stripping—and it is an authentic traditional treatment for painted surfaces.

As in finger painting, graining uses a semitransparent paint, streaked to produce an interesting design. But in graining, the design imitates the appearance of natural wood.

One of the easiest grains to imitate is walnut. A sample piece of finished walnut should be kept nearby as a guide. We will proceed step-by-step in preparing, undercoating, and graining a small piece of furniture. The principles apply to other wood grains and types of woodwork as well.

Unfinished or stripped woodwork usually requires little or no sanding. However, if the piece has several coats of old paint or varnish, medium sandpaper (120) should be used. Sanding is also required when the surface is too smooth. In this case, fine sandpaper (220) will roughen the surface enough to provide a tooth for the base coat.

Always sand with the grain. When working over old paint or varnish, wipe the surface after sanding with a rag dampened with lacquer thinner to etch the surface and increase the paint adhesion.

Base Coat

Base coat, ground coat, and undercoat are equivalent terms. Pour into a clean can enough oil-based enamel undercoater to paint the surface. Add colors (either universal or oil) to match the lightest shade in the walnut sample you have as a guide. Raw sienna is usually sufficient. A touch of burnt sienna or burnt umber—or sometimes a touch of raw umber—might also be necessary to match the walnut being copied.

Don't be afraid: A shade darker or lighter than the ideal color is not crucial. If the paint is lumpy or gritty, strain it through a piece of cheesecloth or an old nylon stocking.

Apply the base coat evenly with a good, two-inch hog-bristle brush. Brush the paint out—first against the grain—then finish it off in line with the grain, using the tips of the brush. Allow it to dry overnight.

After the paint dries, sand it lightly with 220 sandpaper, being careful not to cut through the paint at the corners and other vulnerable points. Here, too, sand with the grain.

Mixing the Glaze

A graining glaze must stay wet long enough to be manipulated, but set quickly enough that the pattern doesn't run together and obliterate itself. The best glaze, therefore, combines slow-drying boiled linseed

oil and faster-setting varnish.

You can add other materials to help the oil stay where put. Whiting, cornstarch, or rottenstone will impede the flow of the oil when added to the glaze. These can be used in place of or along with varnish.

Paint drier, another part of the glaze, has little effect on how the glaze handles. Mainly, it speeds up drying after the glaze has already set. Too much drier can cause wrinkling or checking. When enough varnish is used, driers may not be needed. But adding a few drops can safeguard against a long delay before you can apply the final protective coat of varnish.

Graining is an authentic traditional treatment for painted surfaces. It can hide a multitude of sins.

The following proportions are only a rough guide because materials and external conditions (heat, humidity) vary, affecting the performance of the glaze.

- Boiled linseed oil, 1 cup
- Varnish, 2 cups. Satin or velvet varnish is preferable.
- Paint thinner, 3 cups
- Paint drier, 1/2 teaspoon
- Color (universal or oil), 3 tablespoons burnt umber and 2 tablespoons raw umber. When using universal colors, mix in a little oil or varnish before adding to the glaze.

The only way to determine the proper amounts is to test. Brush on a little glaze, then drag a dry brush across the glaze. If the batch is too light, add more of both colors. If too



dark, add more oil, varnish, and thinner in the proportions given above. Other colors can be needed to match your sample.

A wide variety of effects are possible by varying the proportions of oil, varnish, thinner, and color. The control of these effects enables the craftsman to capture the spirit of the wood.

Graining Tools

All brushes should be good-quality hog-bristle brushes. A minimum range of brushes should include:

- Two 2 1/2-inch brushes: one for putting on the glaze, the other for drybrushing.
- One 3 1/2-inch flat-shaped "enamelling" brush for drybrushing.
- One two- or three-inch "over-grainer" or "top-grainer." A serviceable substitute is any cheap two- or three-inch, short-haired, coarse-bristle brush.

Only the top-grainer and the 2 1/2-inch applicator brush are ever dipped in the glaze. The other brushes are for drybrushing.

Doing the Stipple Shuffle

Practice a series of dragging and stippling brush techniques before you make your first graining attempt. A tabletop is a good place to experiment. You can wipe off each try and make another test immediately.

Brush on the glaze with one of the 2 1/2-inch brushes. Spread the glaze moderately—don't flood or overly extend it. Next, brush it out with the dry brush. Use the largest brush, and use the tips mostly.

Dragging the dry brush: Using the flat of the brush rather than the tips, drag it, handle first, in even, straight, parallel strokes in the direction of the grain.

Stippling (flat, patting stipple): With the flat of the dry brush as parallel to the tabletop as possible, move the brush, handle first, in short, patting strokes. Lift the brush slightly with each hop of an inch or so (Figure 1). Move systematically, following the parallel line created by the previous dragging of the dry brush.

The sliding stipple: If the glaze is still wet enough, drag the dry brush over it again. If not, wipe the glaze off and reapply it, dry brush it, and drag it again.

Now practice a motion similar to the patting stipple. But instead of lifting the brush completely off the surface, pull the dry brush in short, half-inch jerks as you follow the lines made by the dragging operation (Figure 2).

The shuffle stipple: In this technique, as the dry brush is slipped along, alternately press and relax pressure with a slight retreating motion at the same time that the pressure is applied (also Figure 2).

Graining Materials

Enamel Base Coat: Oil-based undercoater is best. Its high proportion of white pigment covers well. It flows on smoothly, dries overnight, and sands easily. When a fast-drying undercoat is necessary, pigmented shellac serves nicely. It dries hard enough to glaze over in 10 to 30 minutes.

Tinting Colors: Oil colors are the most familiar, but are generally limited to tinting oil-based paints. "Universal" or multipurpose colors can tint oil-, latex-, acrylic-, and shellac-based paints.

Universal colors can be used in graining except where otherwise specified. But note: They need at least a small amount of paint or other binding medium since they

have no effective binder of their own.

The Glaze

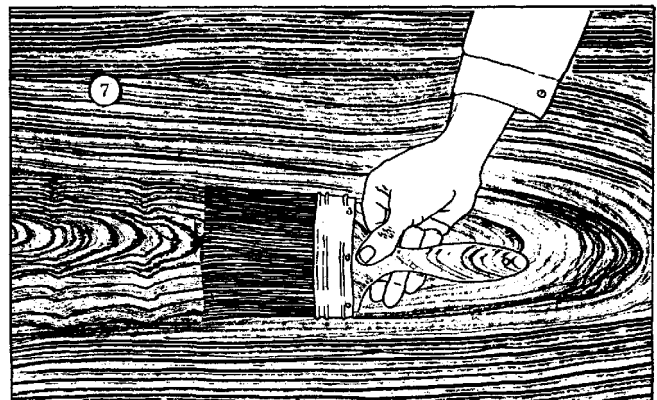
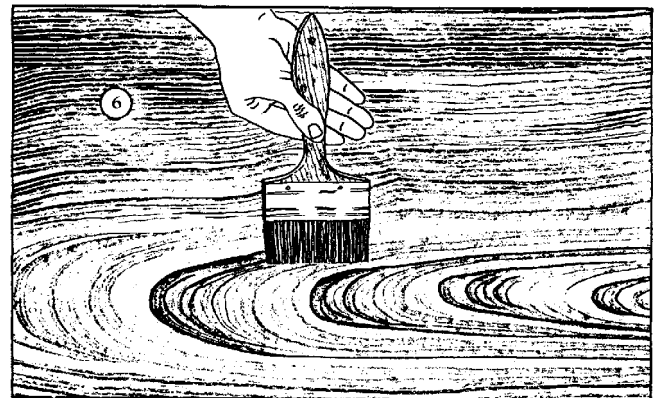
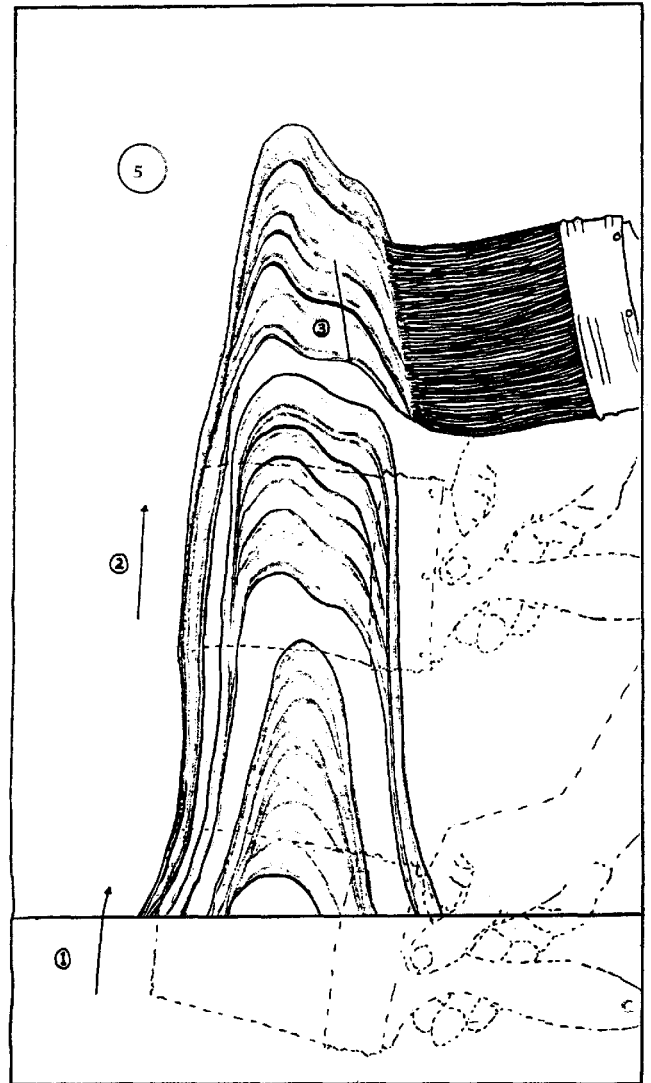
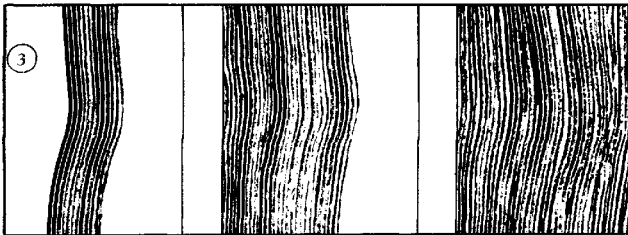
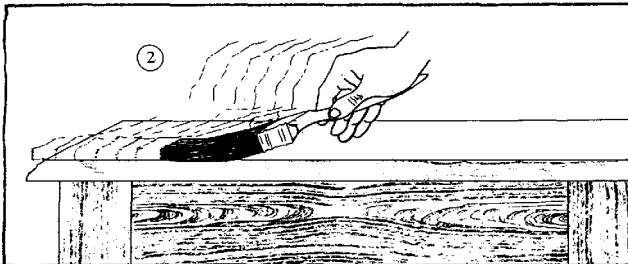
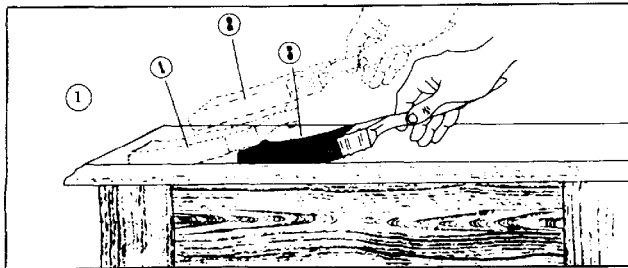
This is the medium that binds the pigments together and to the painted surfaces. Understanding its components and gaining control of the glaze is the key to mastering graining.

Boiled linseed oil: Other oils, such as Penetrol (the brand name of a paint-extending additive) may be used with—or in place of—linseed oil for specific purposes.

Varnish: Any of the common oil-based (i.e., oil compatible) varnishes will work.

Drier: A variety of agents can be added to speed up the drying (oxidation) of oil-based paints.

Paint thinner: Mineral spirits. ■



Which stippling technique to use depends on the sample being copied and on how the glaze is working. Sometimes a mix of techniques works best. Varying the stipple adds interest to the graining.

Dragging variations: Most wood grain is neither straight nor parallel. Variations from straight lines are therefore desirable, but don't get carried away with cute, curvy grain patterns.

Apply the glaze and brush it out as before. Drag a slightly curved path a little off the center of your tabletop. Then gradually straighten out this wood grain toward a straight pattern on either side. Immediately execute an appropriate stipple (Figure 3).

Dragging to simulate planked boards: This variation simulates solid planks joined edge-to-edge in the shop. This effect is achieved by sharply interrupting the curved pattern with straight grain (Figure 4).

Working in the heart grain: Wipe off the tabletop and start again. Coat the surface with the glaze and do the initial smoothing. Using the 3 1/2-inch brush, draw in the heart grain (Figure 5).

Top-graining: Dip the top-grainer brush into the glaze. Shake it thoroughly to remove excess glaze. Trace over the previously executed heart-grain pattern. The top-grainer will superimpose the sharper grain lines usually found in the heart of walnut (Figure 6). Sweep it lightly with the tips of the dry brush, moving from the open end of the grain toward the closed end (Figure 7).

You can modify the sweep by lightly dragging the brush in one-inch (or so) jerks in a manner similar to the sliding stipple. A little sidewise wiggle every five or ten inches adds extra interest.

Practice stippling and top-graining at different intervals after applying the glaze. Subtle patterns are possible through timing control. For sharper top-graining, put some of the glaze in a separate container and darken it with a little raw or burnt umber or lampblack.

Adjusting the Glaze

After getting a feel for your glaze, you will most likely need to adjust its action or color.

If you keep passing over the target color—first too dark, then too light—try adding a small amount (a tablespoon or so) of white undercoater. This will make the glaze grayer and more opaque, and can compensate for a too intensely colored undercoat.

Perhaps the glaze is setting too quickly. Adding a small amount of oil will slow it down. On the other hand, if the glaze sets too slowly—flowing together and blurring the grain effects—a little varnish or thinner (or both) will help. Spreading the glaze farther—over a larger area—also helps.

When you are satisfied that the glaze is working right and you have a feel for the techniques, wipe off the tabletop you've been using for practice. Now you are ready to begin graining in earnest. ■

Nat Weinstein is a painter and decorator who has practiced graining and marbelizing for over 30 years. Reprinted with permission from The Old-House Journal.