

## Keep track of your progress with squiggles and lines

One of my clients came into the shop one day very excited about an 18th-century desk with bookcase that he had just purchased and the fact that the desk had a signature beautifully written in faint chalk on the underside of its bottom panel. Curious to see who the maker was, we laid the desk on padded sawhorses and took a close look. Lo and behold, the famous maker turned out to be "BOTTOM." What the client thought was a signature simply was a cabinetmaker's notation used to keep track of the many parts and mating joints. Upon further snooping, we turned up markings that indicated the top and bottom of the bookcase, again artfully written in chalk in inconspicuous places.

That early American furniture maker knew something that every woodworker today eventually learns: If you don't mark your parts as you progress through a job, you'll waste time trying to remem-

stand and that can be recognized at a glance. I label parts as I work through the milling, joinery and assembly of a piece.

### Cut and mill stock, labeling parts as you go

Following a stock list, I cut all of the parts to rough width and length. As I go I label each part—rail, stile, top, bottom or panel—on the end grain (this way it will not be planed off during milling).

Once the rough cutting is complete, I step to the jointer and flatten one surface. I put a squiggle on this surface so that I can keep track of it as I mill. On the planer, once the other rough side has been planed flat, I alternate the surfaces as I thickness the board, to try and remove an equal amount of material from both (boards tend to move if all of the material is planed from one side). The squiggle mark is removed, but I don't need it anymore.

**Develop your own marking system.** These simple symbols allow you to keep track of what's been done during the course of the project. After he begins milling stock, the author marks the first jointed face with a small squiggle.



**After the board has been thickened, one edge is run through the jointer.** A straight line marks the square corner between the jointed edge and the face that ran against the fence.



**Two small lines mark the first squarely cut ends.** These ends will be placed against the stop when the pieces are cut to final length.

ber what goes where and what you have already done to which parts. You also will make costly mistakes, such as ripping a board with a roughsawn edge against the fence or placing the out-of-square end against a stop when crosscutting a board to length. The accumulation of mistakes like these builds larger inaccuracies into your project, creating problems that become too big to correct later on. Keeping track of reference surfaces is a big step toward elevating the quality of your work. The time you spend up front making a few marks and squiggles will pay for itself many times over.

The exact way that you keep track of parts and processes is up to you. The trick is to have a marking system that is easy to under-

After thickening, I joint an edge on each part. As I run each piece, the edge cut by the jointer knives is squared with the surface that runs against the fence. These are the two most important surfaces, and I mark each one with a straight line to indicate the square corner. I make the same marks when I use a jointer plane to straighten an edge. Next I rip the parts  $\frac{1}{16}$  in. wider than necessary, keeping the freshly jointed edge against the rip fence. This allows me to set the jointer to a  $\frac{1}{16}$ -in. depth of cut to remove saw marks and to bring each piece to final width.

**Matching panels—**At this point, just before jointing the final edge, I match the boards that will be glued up into panels. I lay out

# Rules of Thumb (continued)

each set of boards on two battens. I first want to match the grain so that the color differences and joints are as inconspicuous as possible. When I am happy with the match, I draw a large triangle on the first panel, spanning all of the joints. On the second panel I draw two lines across the first joint, three lines across the second and four lines across the third. If there is a third panel, I draw small triangles across the joints. This way all of the panels have separate markings and can be easily matched again if they become mixed.

For the parts that will be glued up into panels, I usually run alternating surfaces (grain allowing) against the jointer fence. If the fence is slightly out of square, this procedure will give me compensating angles between mating edges, ensuring that the panel ends up flat. The marks I made on the reference surfaces help me keep track of the process.



**Panel boards are matched for appearance.** A large triangle records the order and placement. When gluing up multiple panels, use different marks to distinguish them.

When cutting parts to length, I first cut each piece square on one end and then mark this cut end with a couple of lines. This way I know which end to rest against a stop when cutting parts to final length, ending up with both ends cut squarely.

## A few marks deliver better joints

Joinery calls for its own set of marks. A few lines on a corner indicate which surface I use as a reference when laying out the mortise. A squiggle or an X marks the single surface or edge used to lay out a tenon. By using the same edge to lay out each part of a tenon, instead of flipping my square or marking gauge around to the other side of a board, I can be sure that I am laying out a square shoulder line, even if some of the other surfaces of the board are not perfectly square. This concept carries over to laying out and cutting many other joints, whether by hand or by machine.

**Marking for reassembly**—I always like to mark each corresponding mortise and tenon with small letters, numbers or Roman numerals. And I am careful to replace these marks if they get planed or sanded off later. The tenon cheek (after the tenon has been fit) is a good place for these markings. I also mark the mor-



**Place letters, numbers and Roman numerals in inconspicuous places to designate mating joints.** Here, a table leg is matched with a drawer rail and apron.

tise with a small symbol right alongside its opening, so the mark will get covered by the shoulder when the joint is assembled. On antique pieces I sometimes find the mortise and tenons marked in similar places with matching chisel cuts.

When I dovetail a drawer or case, I need to know that the matching pins and tails go back together. So I use numbers or letters to mark the corresponding pins and tails in places that are easy to find but will be hidden when they are assembled.

A couple of other markings that I use and see quite frequently on antique pieces are the designation of surfaces—boldly written as "bottom" or "inside." These markings indicate what the part is or how it relates to the case or table.

Whatever markings you choose, the objective is to keep track of what you have done to each part and how each one relates to the overall scope of milling, layout or assembly. Squiggles, lines, triangles, letters, numbers or other personal hieroglyphics become your road map as you make your way through the construction of a piece of furniture.

Perhaps the most important markings of all are your signature and the date of completion, placed so they can help to identify and acknowledge your work for as long as the piece lasts. □



**Last but not least are the furniture maker's signature and the date of completion.** These are placed in an out-of-the-way spot for future generations to discover.