# Victorian Brackets

## Bandsawing gingerbread takes method and practice

by Simon Watts

Hap Tallman lives in Elk, Calif., and makes a wide variety of Victorian brackets, as well as other millwork items. He's climbed up on many a porch railing to take a pattern off a bracket he liked. Tallman moved to this northern California town from the San Francisco Bay Area in 1970, and began making wooden toys and stick horses. An appreciation for the Victorian architecture of nearby Mendocino got him started making gingerbread brackets, and he gradually built up a collection of over 40 patterns, to which he's still adding.

"Finding a good pattern is half the work," he says, "and the best way to lift it is by tracing directly onto hardboard or stiff cardboard" (photo right). Lifting patterns is like adapting an old song, Tallman feels—it's been done many times before. Smooth transitions and sweeping curves make all the difference between an elegant bracket and a clumsy caricature.

If the proportions of the original bracket are right, the pattern can be enlarged or reduced without spoiling it. Some photocopying machines will do this, and so will an opaque projector.

For the architectural brackets, Tallman uses vertical-grain redwood. If they are to be painted, he uses Douglas fir. A thickness of 1⅛ in. is about right for a 5-in. bracket; he uses 2-in. thick stock for one 15 in. long. Avoiding the standard lumber sizes of ¾ in. and 1½ in. adds vigor to the brackets. Since most brackets are roughly triangular, one can usually flip-flop the pattern to get a pair of brackets out of one rectangular block. By nailing two triangular blocks together, a pair of identical brackets can be sawn out at once. Tallman first edge-joints the pair after nailing them together, and then trims them to length on his radial-arm saw. He traces an existing pattern directly onto the blocks, but if he's making a new one, he nails it to the blocks and saws it out at the same time as the brackets.

The ¼-in. skip-tooth blade that Tallman uses on his 20-in. Powermatic bandsaw will cut down to a radius of ½ in. Smaller radii must be drilled out before sawing. To prevent tearout as the bit exits, he bores through both pieces until the point of the power-bore bit protrudes, then turns the blocks over and completes the hole from the other side.

The order in which the cuts are made is crucial. Drawing A on the facing page shows the sequence and direction of cuts for a typical bracket. All outside cuts are made first so the nails are not accidentally removed with the waste until the final cut. Note how a saw cut enters a hole near the center but exits along a tangent. This is so that the side of the hole can be used as a guide to pick up a curve when entering a cut. Use care when backing out of a long, curved cut, or the blade can bind in the kerf and get pulled out of its guides.

**To produce a durable pattern for bandsawn Victorian brackets, Hap Tallman uses hardboard, and traces the shape directly from the original bracket. So far he's collected over 40 bracket designs.**

Ideally, brackets should be made on a bandsaw that has a throat wide enough to let the block swing 360° (drawing B). If you don't have such a machine, mark the blocks on both sides so that they can be turned over and sawn from either side as necessary. You can use an edge and a drilled hole to position the pattern accurately on either side.

If you cut with a sharp blade and a confident, practiced hand, very little sanding will be necessary. Tallman just takes the bandsaw fuzz off the edges, dips the finished brackets in a 5-gal. pail half full of priming paint and hangs them up to drip dry. The paint softens the outlines and fits the brackets to a restoration job where some weathering is expected.

Chamfering the edges with a router is often done, but it reduces the apparent size and makes the bracket appear flimsier. Beveling only the leading edge can enhance the appearance, but a piloted router bit leaves a round on inside corners which must be squared up with a knife or chisel, as shown in drawing C. In Tallman's view, rounding the edges spoils the crispness of the design and introduces a contemporary look alien to Victorian houses.

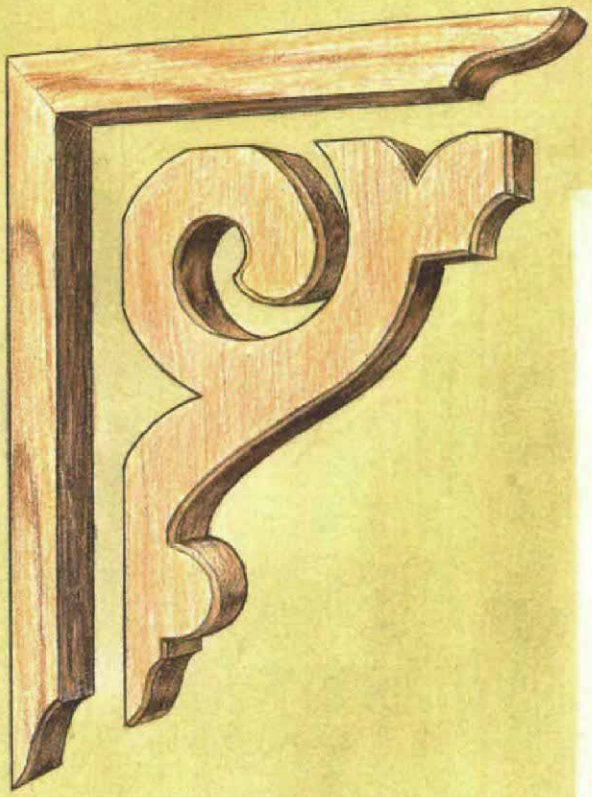
Brackets have no structural function and are fragile because of their sections of short grain. Carpenters can easily break them when nailing so Tallman often frames them (drawing D). Strengthened in this way, they're easier to handle and install. When bracket and frame are the same thickness, the outside cuts appear to be incised, and the separate pieces read as one.

Many brackets are found supporting shelves, decorating entryways or hanging plants. A thick bracket is easily cut into several identical slices on the bandsaw to be bookmatched and used as decorative applique on door frames, outdoor signs and windows. Such brackets are mostly made in hardwood and need more careful finishing—sanding and varnishing—which about doubles the time to make them. To smooth the edges Tallman converts his bandsaw into an edge-sander by removing the guides and blade supports and changing the blade for an abrasive belt. He makes these from 1-in. cloth-backed sandpaper available in rolls. He cuts a strip 2 in. longer than the bandsaw blade, scrapes the grit off one end and glues the two pieces together with white glue. He uses his hand as a platen to back up the sanding belt. Eighty-grit cloth works well for rough sanding; 120-grit for finishing. It takes a while to acquire the knack of sanding contoured surfaces smooth without creating flat spots or gouging trenches in the wood with the edge of the belt. □

*Simon Watts is a woodworker, boatbuilder and peripatetic freelance writer. For photos of Victorian detailing, see* Painted Ladies *by Morley Baer et al (E. P. Button, 2 Park Ave., New York, N. Y. 10016; 1978; $11.50). For a set of eight Full-size patterns with directions for sawing, write Hap Tallman, 1751 Cameron Rd., Elk, Calif. 95432. The cost is $10.*



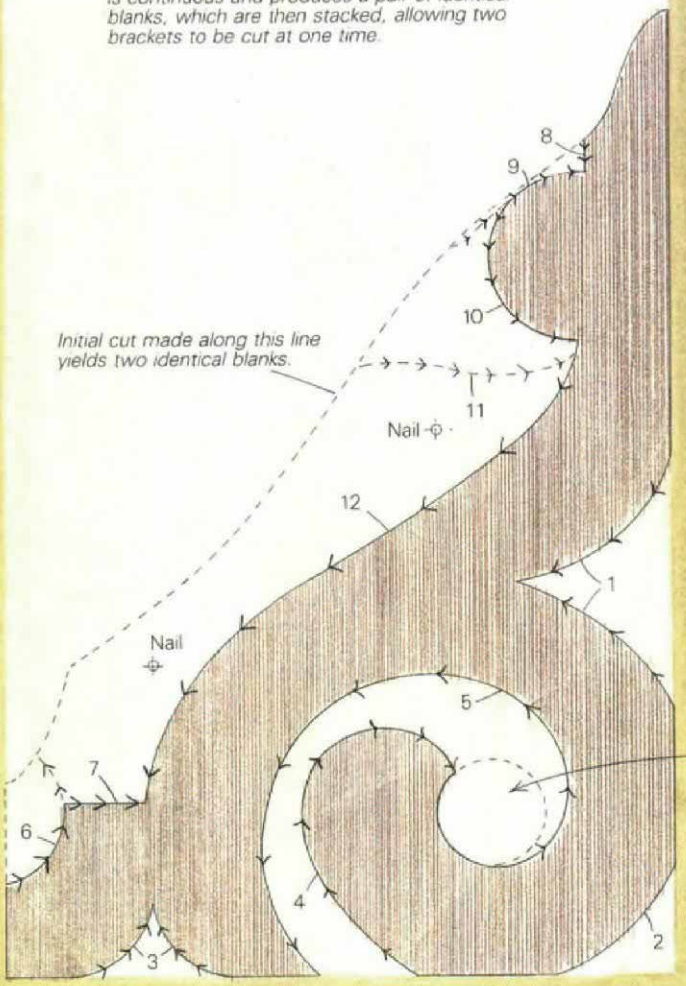
Drawings: Chuck Lockhart; Photo: Simon Watts



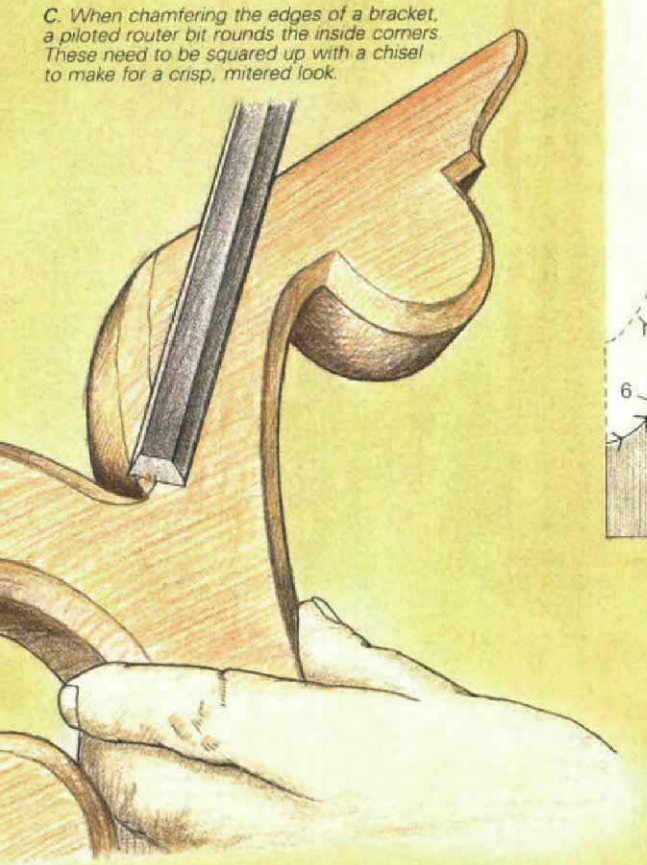
*D. Brackets can be fragile because short-grain sections are liable to crack when a carpenter tries to nail them in place. To avoid this, they can be glued and nailed carefully to a partial frame. The frame strengthens the scrollwork and takes the nails when attached to the house.*

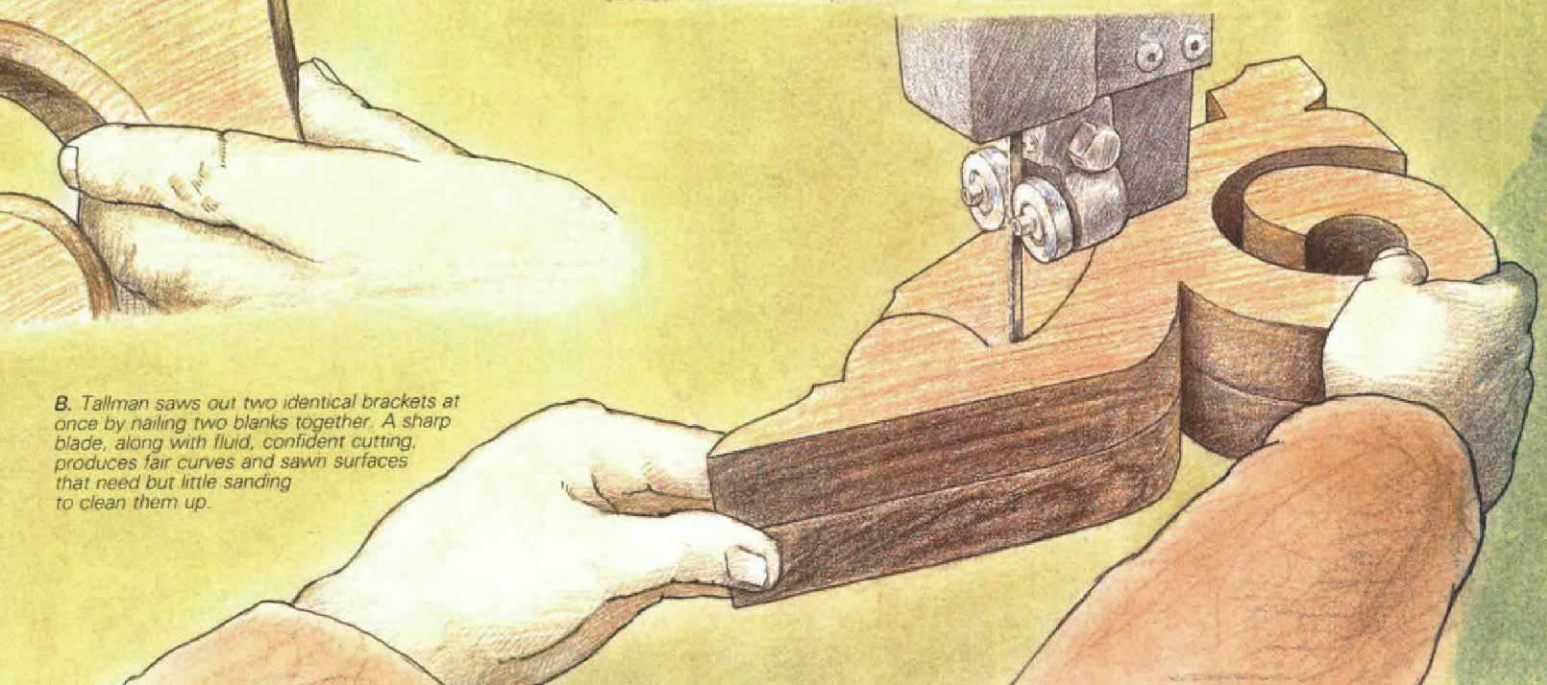
**Cutting diagram for typical bracket**

*A. The sequence of cuts is important and must be thought through ahead of time so you don't have to back out of long, dead-end cuts. The initial cut is continuous and produces a pair of identical blanks, which are then stacked, allowing two brackets to be cut at one time.*




*C. When chamfering the edges of a bracket, a piloted router bit rounds the inside corners. These need to be squared up with a chisel to make for a crisp, mitered look.*





*B. Tallman saws out two identical brackets at once by nailing two blanks together. A sharp blade, along with fluid, confident cutting, produces fair curves and sawn surfaces that need but little sanding to clean them up.*