

## Applied carving

BEST WAY TO MAKE CARVINGS  
THAT STAND PROUD  
OF A SURFACE

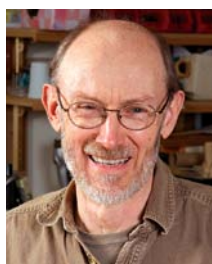
BY WILL NEPTUNE

Woodworkers often react to applied carving as “cheating,” a somewhat grudging admission of its effectiveness. It is a traditional but still very useful technique. Sure, every applied carving could be done “in the solid,” with the carving outlined by vertical stop cuts, and then the background lowered with numerous relief cuts or perhaps with a router. But achieving the smooth background normally needed for furniture can be very time-consuming.

With applied carving, the outline of the carving is cut with a coping saw or scrollsaw. You then temporarily attach the blank to a backing board, carve it, and glue it to the workpiece.

If the carving is particularly large and complex or narrow

**Carve, then apply.** By carving the pieces separately atop some scrapwood, and then gluing them to the workpiece, you avoid having to relieve the entire background and also the risk of carving into it.



and fragile, you take a different path: After sawing out the blank you apply it to the workpiece and carve it in place. I'll explain the first approach and show you when to use the alternative one. With a little practice, soon you'll be accused of cheating, too.

### Wood selection is critical

Grain that is straight and not pronounced generally gives better results than figured wood. In addition, the appliqué should match the background. A carving with clashing color or grain patterns will look stuck on.

One way to get a good match is to resaw a thick piece, using one piece for the background and the other as the carving blank. Remember to mark the parts and keep track of the match when you saw and carve. The other way to get a good appearance is to slip-match.

The carving blank comes from an adjacent section of the same board as the background and slides on top so that the growth rings nest when you look at the end grain.

This works best if the board has mild grain and a similar look along its length. Before I cut the carving blank to the pattern, I lay it on the background piece to see where it best matches the growth-ring pattern on the end grain.

### In most cases carve first, and then apply

Carving a blank before you attach it to the workpiece is the preferred method: Carving on a waste block reduces the risk of damaging the background, and mistakes can be discarded.

**Transfer the pattern to the blank**—You have several choices for transferring the pattern to the carving blank. Stencils are

### Another option: Attach the blank before carving

For fragile pieces, you can attach a roughed-out blank to the workpiece before carving. You still avoid having to lower the background around the carving. See p. 93.

worthwhile if the pattern is one you'll use often. I cut these from thick oak tag or matboard. You can leave small connecting tabs to secure thin, flexible areas. Soaking the edge with cyanoacrylate glue makes the stencil hold up better.

With identical parts, the sawing can be done in a stack to save time and parts can be flipped over to make lefts and rights. It's also easy to mount multiples in a row and carve them as a group.

For one-off carvings, you can photocopy a design and stick it down with low-tack spray adhesive. This method is great for dark woods where it is hard to see a pencil line. You will need to clean off the back of the carving with solvent before you try to glue it down.

For mirror-image carvings, I photocopy a drawing onto tracing paper from both sides to make matching patterns.

In all cases, put the pattern on what will be the underside of the carving. In this way, any tearout from sawing out the pattern will be on the top edges where it will most likely be carved away, instead of on the bottom where it would leave gaps against the background.

**Saw out the pattern carefully**—A jigsaw, a scrollsaw, or a coping saw with a bird's-mouth support are all good ways to cut out the parts. The more accurately you saw, the less cleaning up you'll need to do. There is always a tendency to saw a little wide of the line but this makes everything rather heavy.

Use files to clean up the edges. Don't sand or you risk carving into residual grit, blunting your tools. I usually hold the part in a hand screw clamped vertically in my vise, which makes it easy to see what I'm doing and quickly reposition the part. File away from the bottom to avoid chipping. Try to work right up to the lines while keeping the edges square.

### Carve the blank on a backer board

I mount the carving blank on plywood using double-stick tape. Scraps of 1/2-in.-thick Baltic-birch or marine meranti are excellent backers and very strong. Lightweight, thin carpet tape is good. Most of the carving force is downward, so you don't need a killer grip. I trim away the excess so it won't collect chips while I carve.

From this point, the carving is the same as if you were working in the solid with the ground established. Start by establishing the main contours, then sketch in as much information as needed to guide the detail work. If necessary, you can clean up the surfaces



**Break the bond and lift off the carving.** To loosen the grip of the tape, apply denatured alcohol to the edges of the carving (above). After the alcohol has had a few minutes to soak in, slide a putty knife under the carving and lift it off the backer board (right).

## Tape to backer and carve

Attaching the carving blank to a plywood backer makes it easy to clamp the workpiece in any position and protects your benchtop from gouges.



**Ready to work.** Use double-sided tape to attach bandsawn blanks to plywood backer boards. These should be square so that you can rotate them to carve from different sides with minimal adjustment of clamps.



**Carve at will.** After roughing out the shape, add the details. It doesn't matter if you damage the backer board.





OR



## Attaching the carving

The challenge is to securely apply a delicate carving in an exact location with the minimum of squeeze-out.

**Stop the squirm or corral the carving.** If your carving is thick enough, you can push it onto small brads clipped close to the surface (left). This will stop the carving from moving around when clamping pressure is applied. Another way is to attach thin wood tabs with double-sided tape in a few key spots (right).

with fine files and/or sandpaper.

When you're done, a thin putty knife and some solvent make it easy to dismount the blank. Fanning the carving with a heat gun will also help to loosen the tape's grip.

### Clever tricks for gluing and clamping

Attaching the carving securely and completely is very important. If you use too much glue, cleanup will be almost impossible without damaging the background. Too little glue or uneven clamping pressure and you risk parts lifting later on.

The first step is to prepare the background as you would

before finishing. Be sure all mill marks and tearout are cleaned up. Position the carving dry and mark the location with tape or light pencil marks.

One of the problems when clamping small pieces is that if they slide while you're clamping them down, you may not notice with cauls and clamps in the way. I have a couple of ways to overcome this: If the carving is fairly sturdy, without narrow branching parts, I tap two or three fine brads into the background board and nip them off to leave short nibs. Then I press the carving into place, making dimples that hold it there.

If the carving is more fragile or flexible, I trap it with thin tabs of wood taped around its edges. These strips can be shaped as necessary to control every part of the carving.

The trick for gluing is to "ink" the back of the carving with an even coat of glue (see photo, below left). You should do tests to learn how heavy a coat is needed. Too light a coat and the



**Molded caul.** To apply uniform pressure to complex carvings, make a custom caul. Place a piece of plastic food wrap over the carving, then build up a layer of non-hardening modeling clay (left). Remove the plastic and clay carefully (right) and refrigerate for at least 30 minutes to harden.



**The "inking" trick.** Roll glue onto an impervious surface and then lower the carving straight down onto the glue. This way, you get an even application of glue on the bottom of the carving and none on the sides. Use the point of a knife to lift up the edge of the carving before removing it.



**Even pressure for a good bond.** Place the carving on the workpiece in the marked location and apply the cold, stiff, molded caul followed by a plywood caul. Then apply the clamps. The clay will stay stiff long enough for the glue to set.

## ALTERNATE METHOD

### Apply, then carve

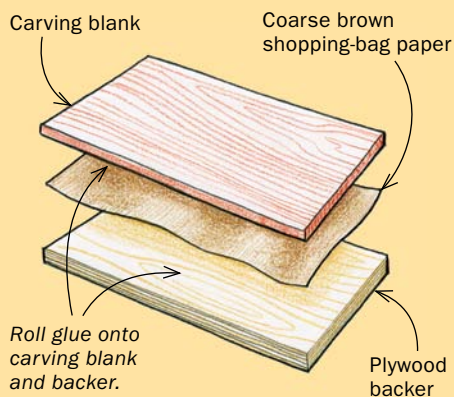
Complex or delicate carvings may need to be carved in place. It is more time-consuming, but still easier than working in the solid. As before, the blank is temporarily mounted on plywood.



#### Add a backer and plane to thickness.

Roll PVA or hide glue on the plywood and the carving blank, and then clamp them with a layer of coarse brown shopping-bag paper in between. The paper holds moisture, so these joints dry slowly. Once dry, you can thin the blank in a planer if necessary.

#### MAKE A SANDWICH



background will absorb it and starve the joint. Too much and you get messy squeeze-out.

#### A variety of clamping techniques

Clamping pressure is as important as using the right amount of glue. The goal is to get small dots of squeeze-out along all of the edges, without any areas having a continuous bead.

Simple shapes can be clamped with cork or Homasote pads. On complex carving, one easy way to get even pressure is to use a vacuum bag without a caul. If there are pointy areas, cover the carving with soft leather to protect the bag.

Whatever clamping method you choose, remove the clamps when the glue is dry but not fully cured, so it is easy to remove the squeeze-out. I use a Popsicle stick sharpened like a skew chisel. Don't try to wash off extra glue with water and a brush. This risks washing out glue from under the carving and weakening its bond, or getting glue in the background wood, which will show up under a finish. □

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**Saw out the pattern.** Spray-mount the pattern to the blank and then cut it out on the band-saw. The plywood keeps the carving blank intact.



**Locate the carving.** On delicate carvings, tabs of wood attached to the workpiece work better than snipped brads, which might split the workpiece.



**Plywood acts as clamping caul.** The plywood now distributes the clamping pressure. Once the glue is cured, split the paper joint with a wide chisel to remove the plywood, as shown.



**Start carving.** The carving is done as before but you have to work next to the finished background. The risk is no greater than when carving from the solid and you've avoided the labor of removing all the background waste.