

How to Fix Flaws and Mistakes

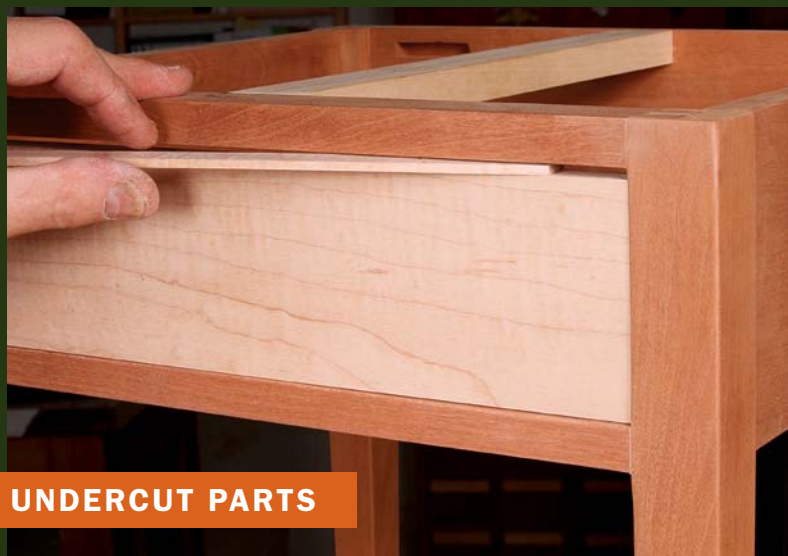
Invisible repairs that will save you time and frustration

BY MARK SCHOFIELD

DEFECTS AND DAMAGE



MISCUT JOINERY



UNDERCUT PARTS

It's an old chestnut, but it's true: The difference between a professional and an amateur is that the pro knows how to cover up his mistakes. We all make mistakes, so it is almost certain that the hole you find yourself in has been previously occupied—and that a former occupant found a successful way out. To compile a woodworker's survival guide, I talked to *FWW*'s top authors to get their greatest tips on fixing mistakes. I've divided the problems into defects and flaws in the wood, miscut joinery, and undersize parts, but there are some tips that apply to every mistake and every project.

Will Neptune told me about a student in the musical instrument department at North Bennet Street School who had almost completed a violin. He was applying a French polish when his pad stuck to the surface, leaving a blemish in the otherwise flawless finish. In a rage, the student smashed the violin to pieces.

Too bad he didn't take Garrett Hack's advice and sleep on the problem. More often than not inspiration will strike, either in the early hours or the next morning when you are no longer angry at yourself. In the case of the violin, rubbing the spot with an alcohol-dampened pad would have removed the error in minutes!

Michael Fortune said his universal tip is to hang onto every piece of scrap until a project has left the workshop. It's much easier to get a good grain and color match for a patch if you still have part of the board left over.

Mark Schofield is the managing editor.

Defect or damage? Don't lose hope

Nobody's perfect, not even nature. So as well as self-inflicted damage, someday you'll face a beautiful board marred by a loose knot or a large wormhole. Learn ways to overcome both.

Online Extra

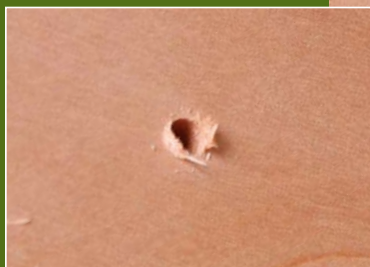
For more of our favorite fixes, go to FineWoodworking.com/extras.

Smart scoop, invisible patch

When **Chip Ogg** drilled through the top of a 48-in.-dia. tabletop, he knew his boss, Charles Shackleton, wouldn't be happy. So he did some fast thinking. Using nothing but a carving gouge, he created a repair that was so good, he challenged his fellow cabinetmakers to find it.



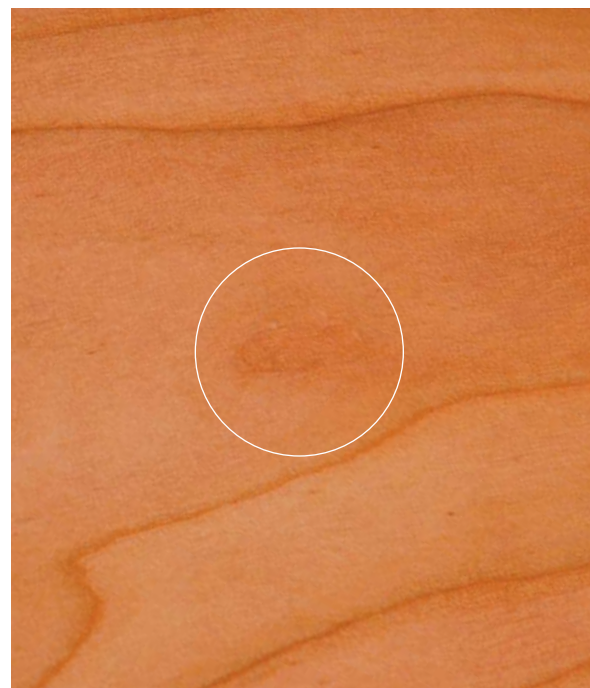
Scoop around the hole. Take a deep carving gouge that is slightly wider than the damage, in this case #8/10mm, and carve out a shallow depression around the hole. Practice on some scrap first.



Create a patch. Place the piece you just removed on a piece of scrapwood that closely matches it in grain and color. On a tabletop, your best bet is the underside. Using the same gouge, scoop out a slightly deeper patch.



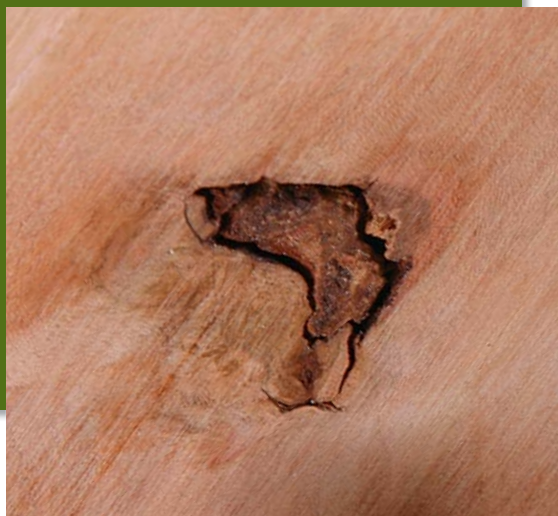
Glue and clamp. After dry-fitting the patch (it should fit evenly and be slightly proud), glue it and clamp it in place with plenty of pressure. Waxed paper prevents the caul from sticking to any squeeze-out.



An invisible repair. After the glue has dried, sand the patch flush with the tabletop. Even under a finish, a good repair is hard to find.

Replace a loose knot

A loose knot doesn't add character; it detracts from the wood's beauty. Instead of scrapping a nice board or cutting it in two, **Steve Latta** shows how to save it with clever plug that looks like an area of nice figure.



Trace the knot. Draw the outline of the loose knot on a piece of clear plastic, such as a three-ring file divider.



Find your patch. Use the transparent pattern to find a nice, tight knot of similar size on a piece of scrap and resaw it to about $\frac{3}{16}$ in. thick. Draw a similar outline and cut it out on a scrollsaw.



Draw around it. Place the patch so that it covers the whole knot and draw around it with a very sharp pencil.



Make a recess. Use a small plunge router or a rotary tool in a plunge base to excavate to a depth of about $\frac{1}{8}$ in. After that, work up to the layout lines with a small chisel or gouge.

Clamp the patch. Latta uses liquid hide glue because it is less visible under a finish. If the repair is not close to an edge, you can form a bridge as shown to extend clamping force beyond the reach of the clamp.



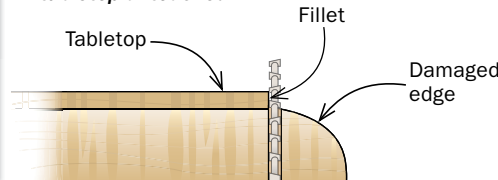
Scrape it flush. A good repair will look like natural figure in the wood.

Magic molding repair

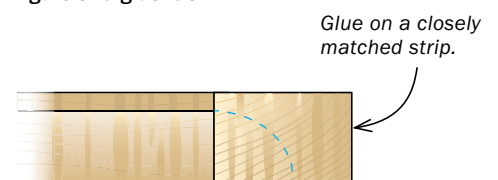
Sometimes tearout just happens, particularly on curly wood. If it occurs while profiling the edge of a tabletop, you may not be able to simply trim that edge and re-route, as that will affect the overhang. Instead, **Steve Latta** shows how to add a strip and conceal the joint in the profile.



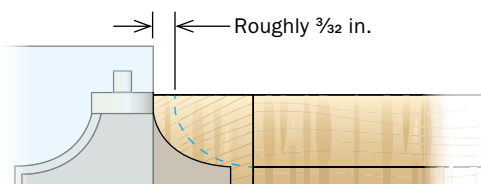
Cut away the damage. Saw in line with the fillet (step) of the profile to leave the center of the tabletop untouched.



Glue on a strip. Find a piece of scrap that closely matches the rest of the top in color and figure and glue it on.



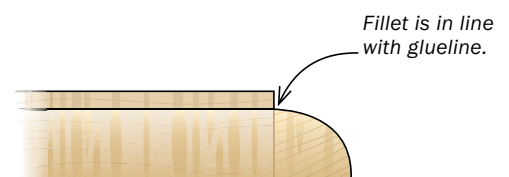
Make a test cut. After trimming the strip to leave the tabletop approximately $\frac{3}{32}$ in. wider than the desired final width, re-route the profile.



Dial in the location. Measure how far the fillet of the profile is from the glue line of the repair. Set the tablesaw to rip off this exact amount, leaving a flat edge (as shown).



Last pass. Make one final pass on the router table to bring the fillet of the molding in line with the joint for a nearly invisible repair.



Miscut joinery: What was I thinking?

We've all had that sinking feeling when we realize we've cut a mortise on the wrong face of a leg, or a groove on the wrong side of a drawer side. Instead of starting from scratch, probably using a board that doesn't match, there are ways to achieve near-flawless repairs.

Hide a misguided mortise

The secret to many repairs is to avoid straight lines. They aren't found in nature and they will attract the eye. **Michael Fortune** shows that even a large patch will blend right in if it is curved.



Rescue boat. Find a piece of similar-looking scrapwood and cut out a long, $\frac{1}{8}$ -in.-thick, boat-shaped patch on the bandsaw or scrollsaw. Taper the sides 1° to 2° on some sandpaper and mark the orientation with an X.

Cut around the patch. Glue a piece of tracing paper over the damaged area, then glue the patch to the paper over the hole. When the glue is dry, mark around the patch with a knife. Then break off the patch at the paper line.



Remove the waste. Chop a $\frac{1}{16}$ -in.-deep recess for the patch using knives and small chisels.



Check the fit. Adjust the size and shape of the patch using sandpaper until it fits seamlessly.



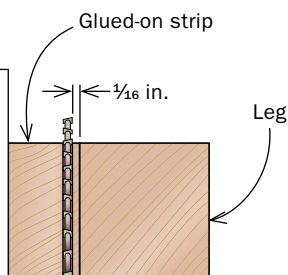
Where's the repair? The curved shape of the patch helps it blend into the background.

Or reface the whole face

Sometimes it will be impossible to hide a patch. However, **Steve Latta** has a super-smart way to add a thin piece of wood to the whole surface, with no one the wiser.



Cut and paste. Run the damaged face of the leg across the jointer to remove $\frac{1}{16}$ in. Then glue to the same face a slightly longer piece of wood that closely matches the color and grain.



Rip trick. Now just rip away the waste, leaving $\frac{1}{16}$ in. glued to the damaged face. Trim the strip to match the leg's taper, then break its edges to conceal the seam.

Remove a groove

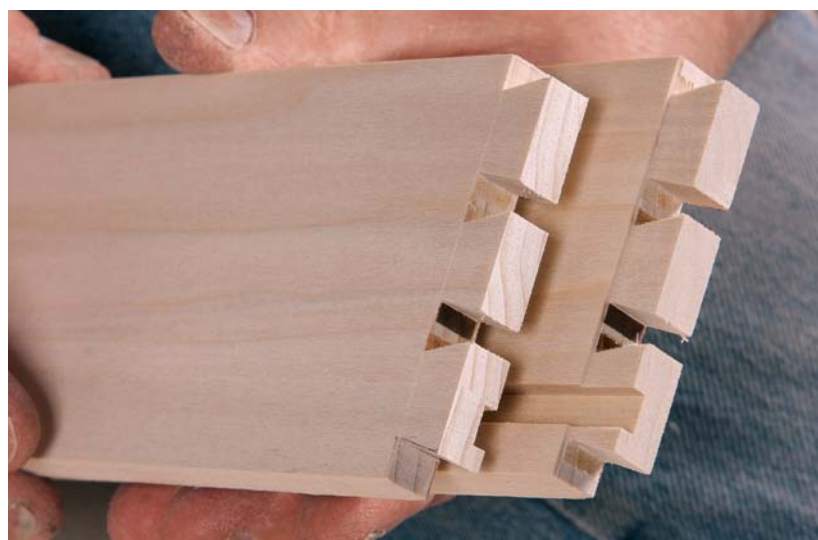
It's a common mistake to cut a groove for the drawer bottom on the wrong side of a drawer side. Instead of cutting all those dovetails again, **Latta** shows how to quickly replace the miscut section only.



Rip and replace. Rip the drawer side in line with the top of the groove. Glue on a new strip, and rip the side to width.



Cut a half-dovetail at each end. This goes quickly compared to dovetailing a brand-new side completely.



Ready to assemble. The last step is to plow the groove. With only a little time invested, you've created a hard-to-find repair.

Undercut parts: Just add wood

Did you measure twice and still get it wrong? Instead of throwing out a component that's too short or too narrow, there are creative ways to lengthen or widen a piece. The final result may end up looking better than the original design.

Stretch a drawer front

Nothing looks worse than big gaps between a drawer front and the carcass. Instead of starting over and cutting a new front, **Latta** shows how gaps can be filled invisibly.

TOO SHORT: BEAD THE FRONT

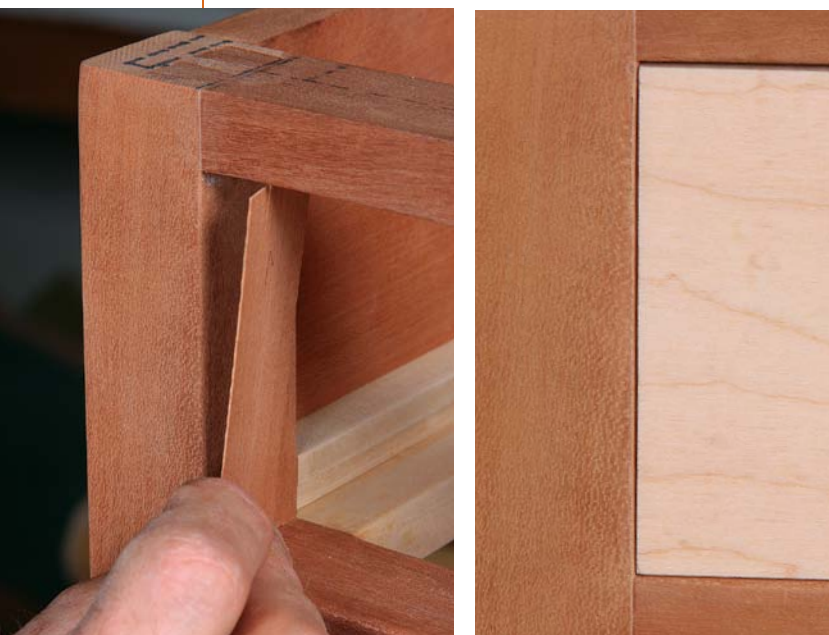


Fill the gap. A gap along the top or bottom of a drawer front is unsightly. Add a strip whose thickness closely matches the width of a small bead made by a scratch stock.



No-worry beads. Scratch or rout a bead along the bottom of the drawer front and another along the top (left). The quirk of the top bead conceals the repair's seam. You may not have intended to bead the drawer front but it adds a pleasing detail (below).

TOO NARROW: SHIM THE POCKET



Veneer to the rescue. Add a strip of veneer up to $\frac{1}{16}$ in. thick to one or both inside faces of the legs between the drawer rails (left). When the front edges of the strips are broken, they blend right into the face of the leg (right).



Widen a raised panel

Perhaps you mistakenly cut a panel to match the inside width of the frame, forgetting about wood for the grooves. Or perhaps the perfect board for the panel is just too narrow. In either case, **Latta** shows how to save the panel by adding a strip and cunningly concealing the joint.



Add a strip. Find a piece of wood that matches in grain and color and allows the main board's figure to be centered in the frame.

Add a strip a bit wider than one edge of the raised panel.

Wide board



Start shaping. Rip the panel a little over width and start to cut the raised-panel profile on the router table or the shaper (above). Joint and mold the edge of the board until the fillet of the profile falls in line with the joint in the panel (right).



Beautiful result. The panel now looks centered in the frame and the joint with the strip is only slightly visible on the ramp at either end.

