I’ve often heard it said that beautiful tools inspire beautiful work. Fine tools, new or old, are a beautiful sight to behold. They invite the hand to hold them and inspire the eye to use them to create more beauty. I started woodwork three years ago with just a few cheap power tools to call my own. My brother-in-law patiently taught me many basic woodworking principles as together we built my first two shop fixtures, my workbench and tool chest. I came to love hand tools and have since slowly built up my collection, buying the best new tools I can afford and spending a lot of time giving rusty, broken antique tools the chance for a second life in my shop.

Because I’m still in the beginner stages of learning woodworking, every new project is an opportunity for valuable lessons. I learned to use the lathe so I could convert some rusty metal I bought on eBay into a decent set of chisels. After turning my first set of handles, I was hooked. I’ve since made countless chisel, file, screwdriver and all manner of other wooden handles for my tools. Some woods have held up better than others. I’ve busted some handles and some steel along the way, but, thankfully, small wood scraps and old steel are pretty cheap and easy to come by.
I learned early on to use tight, straight-grained woods for handles that would take a beating, such as bench chisels. I’ve been able to get much more creative with wood choices for paring chisels and other tools that won’t be hit with a mallet. On many occasions, I’ve found fantastic wood for tool handles in the firewood pile. Scrap piles in friends’ shops have been another gold mine. Traditionally, woods such as apple, pear, oak, hickory and beech were used as tool handles. I’ve also had great luck with apricot, maple, walnut, cherry, hickory, and pear.

I use the same basic lathe techniques to make all sorts of round tool handles. Start with a square block slightly wider on all four sides than the widest dimension of the desired finished product and about 1” longer on the top side. Hold the block at a 45° angle and use a bandsaw to cut a shallow recess corner to corner on each end. These perfect x cuts mark the two centers used to position the block on the lathe. If you’re turning a handle to fit a socket, you’re now ready to mount the block on the lathe. (Be sure to account for the length of the socket when you’re cutting your workpiece to size).

If you’re turning a handle for something with a tang, the block should be pre-drilled before you turn. If it’s a round (not tapered) tang of uniform width along its length, such as the tang for a screwdriver, a straight hole can be drilled using a straight bit of corresponding size. The tang can be fitted and then glued in with super glue or epoxy when you’ve finished turning the handle.
If the tang is tapered, as it is with most tang-style chisels and files, you’ll need a tapered hole and, if you fit it right, you won’t need glue or epoxy for final fitting. There are special tapering drill bits available for purchase but, with a little elbow grease, a perfect mating hole for your tang can be made without using them. First, measure the thickness of the tang a little less than 3/4 of the way to the base of the chisel. This will be the width of the drill bit you should use. A lot of antique tool tangs aren’t straight. Don’t buy tools with crooked tangs; they will make your handle-making project miserable. You can try to straighten crooked tangs using a torch, a hammer and an anvil, but I’ve broken more tangs than I care to admit trying to do this. And if your tang is crooked, your tool will end up mounted crooked.

Drill straight into the center of one end of your block the length of the tang. It’s better to overestimate the length of the tang here, so, if in doubt, drill a little bit further. Insert the tang into the hole you just drilled. It should go a little less than 3/4 of the way into the hole. Flip the assembly around, holding the tang inside the hole with one hand, and give the back of the block a few taps with your mallet. This process, because of some reverse magical gravity rules I don’t understand, will drive the tang up into the hole you’ve drilled. A note to the accident-prone: Do this over a work table or at least a floor mat, not over a concrete floor. At some point, the tang is likely to slip out and become damaged when it hits the floor.

Next, take hold of the chisel steel with one hand, wood block in the other, and twist until the tang is again free of the hole. You are basically using the sides of the tang to ream out a perfectly sized tapered hole in the handle. If you get overzealous with the mallet and the tang gets driven in so that it won’t budge, mount the steel in a vise, grab a pair of gloves with good grip and try to twist the wood free. Be careful to not twist with so much force that you snap the chisel. Repeat this process until the tang is about 1/4” away from being fully seated (less if you are using a very dense wood that won’t compress much). Set the steel aside. Once you’ve turned your handle and added a ferrule, the tang can be driven the rest of the way home by resting the chisel tip against a scrap piece of wood and using a mallet to strike the back of the handle until it’s seated.
Next mount the block on the lathe. Those x cuts you made earlier should make mounting on the spur and centering the block between your lathe centers very easy. If you pre-drilled to accept a tang, insert your tailstock into the hole and snug the block between centers. The x cuts will also be great guides if you have to remove and replace your block to check for a properly fitted socket or ferrule. Turn the piece round on the lathe, being careful to remove the corners, but not removing too much material at this point, especially if you don’t have a lot of thickness to spare. Lay out the design of your handle with a pencil, marking your thickest and thinnest spots, the placement of any special features and the length of the socket or ferrule. Note the dimensions for repeatability’s sake. Also keep in mind the approximate amount of material that will be lost during the sanding process. I’ve played around with a lot of designs, but my all-time favorite is the old Stanley 720 pattern. I have an extra one I keep handy to use for reference whenever I’m making a new chisel set.

Measure the inside and outside dimensions of your ferrule or your socket and turn your piece down so the metal will seamlessly meet the wood. Fitting takes a bit of practice, so don’t get discouraged if it doesn’t go well the first time. A big helper when measuring those inside and outside dimensions is a quality vernier caliper. For socket chisels, leave the tapered portion of your handle a few sixteenths of an inch long and a few thousandths thick along the taper so the wood fibers can compress as you drive the handle home with your mallet. This also allows for seasonal swelling and shrinkage of the wood.

Turn off your lathe every so often and check your progress. Test how the handle fits your hand, look for balance. Go back to your “inspiration piece” if necessary and then continue to refine.
As you turn down the taper of your handle, using a wide bench chisel, plane blade or timber-framing slick bevel down on your tool rest can help you to keep the angle correct and your cuts straighter. Do this with extreme caution and take very light cuts.

Once you have the basic shape of your handle and the majority of the fitting done, it’s time to part the top of the handle away from the piece of wood securing it to the head stock of the lathe. (This is why you left that extra 1/2” at the top). Use your parting tool to part away the top of the handle until only about 1/4” of material remains. You will want to keep this attached for the time being, as you may need to re-mount your handle to the lathe for a few finishing touches as you fit it. Sand and add finish to the handle, except for that small bit remaining at the top. Don’t sand or finish the wood that will be inside the socket or a ferrule.

When fitting the chisel to the handle, if the fit is initially too tight, don’t try to pound the steel home. You risk busting apart the socket of the chisel or splitting the handle with the tang. As you’re fitting the socket or the ferrule, if things get stuck before they’re driven home, secure the metal in a vise and twist the wood by hand to free it. Again, a pair of gloves with good grip come in handy for this. You’ll see where the wood is too thick and the metal is rubbing because the wood fibers will be compressed and slightly shiny. If it’s too tight a fit all around, try re-mounting the handle on the lathe and taking a few more hairs off with the chisel. If you can’t get it re-mounted on the lathe and running true, you can carve or sand away the fat areas that are rubbing against the metal using 80-grit sandpaper. (Remember, no one will ever see this part once the handle is driven home.)
With regard to ferrules for your tanged chisels, files or screwdrivers, you can be thrifty or get fancy. Many tool and hardware stores sell pre-made ferrules. I’ve harvested a lot of brass ferrules off of old chisel handles and reused them on new ones. I’ve been on a major copper kick as of late though, so I found some old copper piping and cut it in 1/2” increments to use as ferrules for all kinds of things.

A ferrule is fitted just like a socket. You measure the outside dimension of the ferrule, turn the mating portion of the wood down to that dimension, then measure and turn the interior portion to match the inside dimension of the ferrule.

Copper is a great metal to use for ferrules because it’s soft and can be cut on the bandsaw and worked a bit with your lathe chisels. When using copper, don’t bother taping it off for finishing, just finish it right along with the wood. (I use several coats of tung oil followed by beeswax burnished in with a cloth.) The copper will retain its nice shiny state for quite some time. When it starts to tarnish, you can either let nature take its course or you can touch up the finish with some 0000 steel wool and a smidge of oil and wax. I’m careful to make sure my tools are clean before I store them and I also wipe them frequently with jojoba oil on a microfiber cloth. This keeps both the wood and all metal bits in good condition.
Once the handle is turned, sanded (to whatever grit satisfies you, I like to go to 400), finished (using whichever method you prefer), and the tang and ferrule or socket are fitted, you are still left with the bit of wood on top that attached the top of the handle to the head stock of the lathe. Carefully cut it off with a handsaw (or bandsaw) and use a chisel, carving knife or sandpaper to smooth out that last bit on the top of the handle.

For socket chisel handles, the portion that will go inside the socket can be mounted in a drill motor or in your drill press, then the back sanded smooth with sandpaper and a sponge while it spins. This leaves a very professional looking finish which is especially nice for paring chisels and other tools that won’t be hit with a mallet.

Pound the socket or tang home, then add finish to the newly exposed area. Give the whole tool a few extra drops of oil and a bit of wax rubbed on with a microfiber cloth (also known as a “Woobie”) just for good measure, and the tool is ready for another 100 years of faithful service.

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