

Spruce up Gardening Tools

By Rick Rich

Spring is sprung and a new set of gardening tools makes a fine gift. I looked at numerous gardening tool woodturning kits and they are just gardening tools without handles. And some cost more than very similar-looking handled sets I see at retail outlets.



Assemble the “kit”

I decided to reverse engineer my own kit and started with the purchase of an inexpensive gardening from the world’s largest online retailer (**Photo 1**). The manufacturer states these tools are “high-quality thickened aluminum alloy material.” Alloy is simply two or more metals, or even a metal and a non-metal fused together, so I’m guessing the aluminum content is likely the lesser of the fusion components here. Whatever the materials are, they are very light and hopefully are strong.

De-handle

Small gardening shovels and rakes with medium-long handles are all the rage according to a pretty and serious gardener I know. The three-piece set I ordered includes a shovel, rake, and transplant trowel; the latter will get a short handle. When the lightweight set arrived, I immediately removed the rubbery-plastic ergonomic handles. I used a coping saw on the first one, then realized I could more easily tap away the handle with a hammer and small block of wood (**Photos 2, 3**).

Remove stock handles



1
Acquire an inexpensive set of garden tools from a local hardware store or online retailer.



2
How you remove the stock handles depends on the set you acquire. The author used a coping saw for the first effort before realizing the rubber handles were simply pressure fit on this set. A hammer and scrap block of dimensioned lumber made quick work of the second and third handle removals.



Ferrules

With the handle material removed, I inspected the wide and curiously grooved tangs. They would require a 1" (25mm) ferrule to get enough wood around them for strength, and the only ferrule material I had on hand was copper plumbing pipe with a 1" ID and 1-1/8" (28mm) OD (**Photo 4**). I cut three ferrules from the pipe, each one about 3/4" (19mm) long. I also made sure to use a deburring tool to ream the end of the pipe before cutting to length—this allows the deburred end to slide smoothly onto the handle.



Handle choices

For the long handles, I decided on oak because I have several long planks and it needs to get used up. Ash and hickory are also traditional choices, but any straight grain, knot and check-free hardwood should be fine.

I decided 16" (41cm) would be about right for the long handle length. In terms of design, I didn't want to just turn large dowels, which I could simply purchase. I decided to modify two designs I located in Milton and Wholers' 1919 book, [A Course in Wood Turning](https://www.loc.gov/item/19005054/): <https://www.loc.gov/item/19005054/> (**Figures 1, 2**).

Handle designs

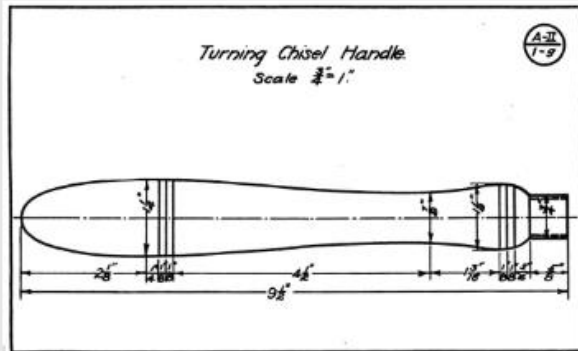


Figure 1. Taken from an old training manual, this woodturning tool handle is easily adapted to use as a garden tool handle.

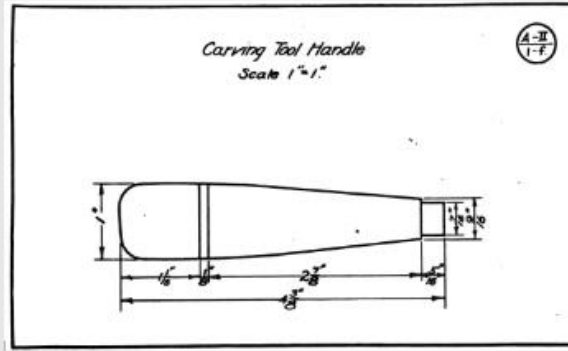


Figure 2. Similarly, this carving tool handle makes for a good starting point for a shorter-handled garden tool.

Fit the tangs

The tangs measure slightly wider than 5/8" (16mm), and I decided to drill the blanks first and fit the tangs to the holes. I started with a drilling technique that I often use. With a drill chuck and bit in the headstock, I use the toolrest as a brace to prevent blank rotation and advance the blank into the bit by turning the tailstock handwheel (**Photo 5**). I removed the blank after about an inch of drilling and then drilled to depth with a 5/8" brad point bit and cordless drill (**Photo 6**). The drilling on the lathe gave a straight and true starting hole but following with the brad point was a faster way to drill 2-1/2" (6cm) deep. Forstner-style bits need frequent retraction to clear swarf when drilling holes that deep.

With a little filing, the tangs fit precisely in the drilled holes (**Photos 7, 8**).

Drill, file, fit tangs



5 Measure the tool tangs and drill an appropriately sized hole in the end of each blank. Here the blank is braced by the toolrest and advanced onto the bit by turning the tailstock wheel.



6 Once the hole is centered and started on the lathe, it may be quicker to complete the task at the workbench. Any bit will need to be withdrawn multiple times to clear the accumulating chips.



7 Use a file to adjust the tang fit, if necessary.



8 Test the fit frequently until the tools seat with just a little hand pressure.

Mount the ferrule

The turning starts with a blank mounted between centers. I rounded the first blank with a spindle roughing gouge by taking lots of small cuts along the blank (**Photo 9**). This nearly eliminates the chance of splintering off large pieces of stock, making for safe and happy turning. Once round, I sized the ferrule tenon with an outside caliper and a parting tool (**Photo 10**). This got the tenon almost perfectly sized, and peeling a little off at a time quickly made for a precise fit (**Photo 11**).

Shape the tenon



9
Shape the spindle using a spindle roughing gouge. If your timber is prone to splintering, a series of shallow cuts across the blank will mitigate that problem.



10
Use a caliper and parting tool to size and cut the tenon for the ferrule.



11
Sneak up on the fit; just a little hand pressure and twisting action should seat the copper tube. A skew chisel presented flat for light peeling cuts is a good choice for this cut.

Turn the handle

With the ferrule in place, I remounted the blank and used a skew chisel to shape the handle. I also shaved the copper ferrule down a little to make it shiny and get a seamless connection with the handle (**Photo 12**). Copper cuts fairly easily with a sharp tool but go slowly and be careful because the shavings can get hot. I then added the incised lines, sanded through 180 grit, and applied beeswax for a finish (**Photo 13**). Nothing fancy because it's destined for hard work in the garden.

Shape the handle



Use a skew chisel to shape the handle. You can also take this opportunity to shape the transition to the ferrule, and even cut the ferrule itself. Copper is soft enough to yield to a turning tool. Proceed slowly and watch out for those hot copper shavings.



Add embellishments as you see fit. A few incised lines add interesting details and will help the user grip the tool.

The second long handle replicated the first. I simply transferred the locations of the two largest diameters and the waist and used a parting tool to establish the diameters (**Photos 14, 15**). I used my skew chisel to connect these locations, sanded, and finished (**Photo 16**). Turning the small handle for the transplanting trowel was the easiest of the three tasks and took only a few minutes.

Handle for template



To turn a matching handle, bring the second blank to round and transfer key landmarks from the completed handle.



Transfer dimensions to the second handle.



Connect the locations and established diameters using your skew chisel. Replicating designs is a great exercise and the gateway to production turning.

Attach the tools

I used plenty of epoxy to connect the tools to their handles. After mixing the two-part epoxy, I poured some into each tang hole, seated the tangs, and allowed the epoxy to cure. Overall, I was

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happy with how all three turned out, and happier still with the price paid for the set. If they last a single gardening season, they will be well worth the cost.

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