

Making A Spiral Fluted and Wire Wrapped Dagger Handle

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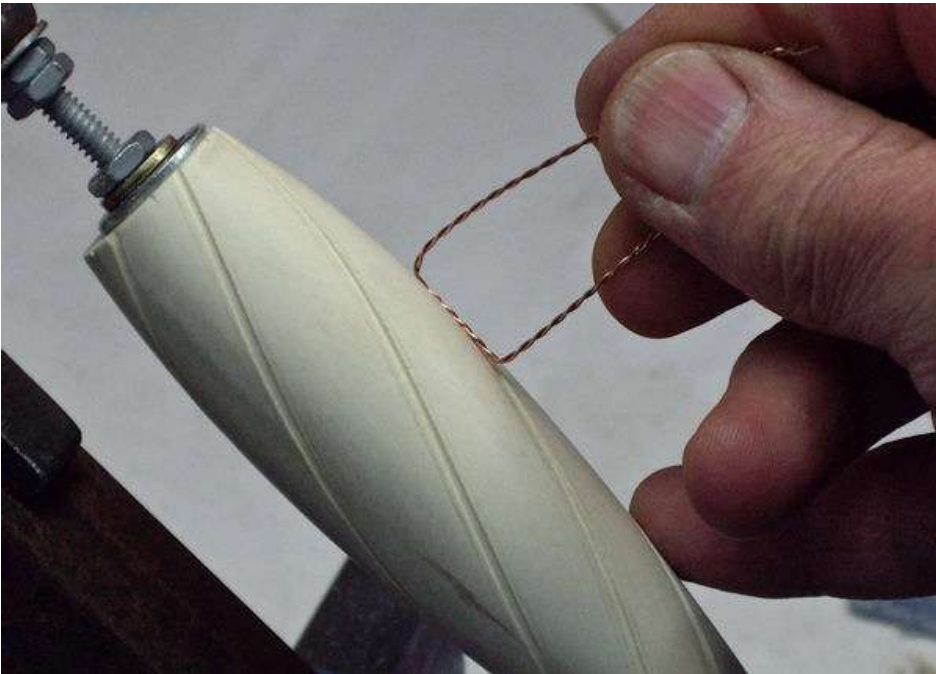
Part 2



Cutting in the wire grooves with the saw tool.



A couple strands of .020" copper wire were pulled from some automotive cable. These have been twisted and are used to check the depth of the wire grooves.



The handle material has been marked to cut in the flute. One leg of a divider was placed in the wire groove and used to mark lines for the edges of the flute. The divider was used again to make two lines to indicate the approximate center between the wire grooves. Lines were also placed on each end of the material to indicate where the flute cuts should be stopped.



A groove is cut with a three corner file down the approximate center of where the flute is to be cut.



The V shaped groove is changed to a round bottom groove with a small rat-tail file.



The groove is widened with a larger rat-tail file.



These are the main tools that will be used to cut in the fluting. They are sections from 12 inch rat-tail files that were 1/2" in diameter at the base. They are in bastard cut, second cut and smooth cut tooth patterns. The files were scored with a cut-off disc, about 1 inch from the bottom of the file teeth and then snapped off in a vice. The ends were ground clean and then they were also ground behind the tooth area to provide working clearance.

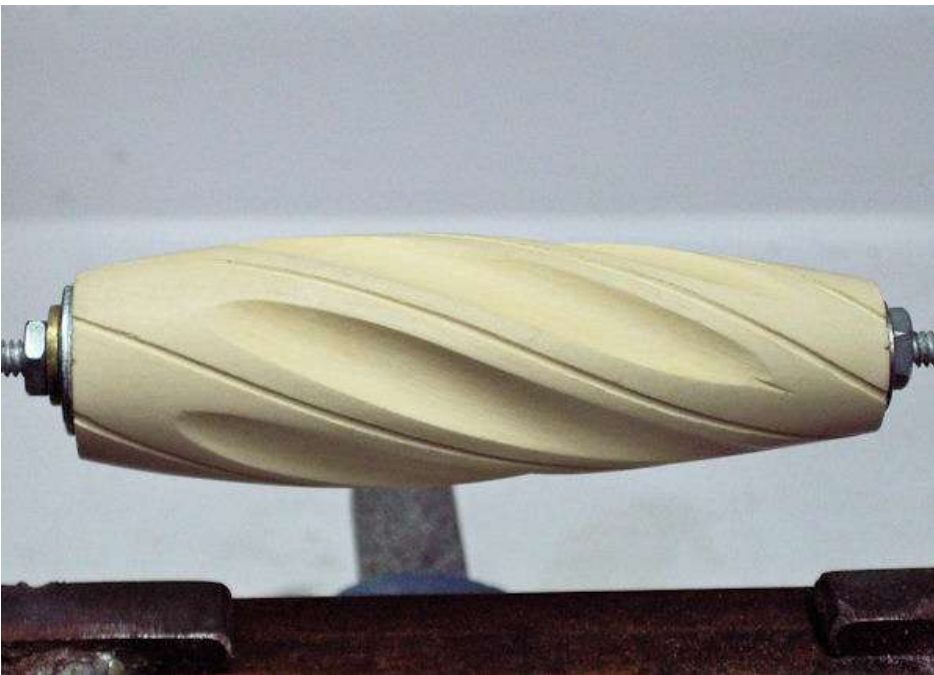


Cut straight down into the handle material and take out everything between the marked lines. Try to keep the flute centered between the wire groove lands.

This is a shot of the first flute, cut in with the bastard cut file. Notice that the cut doesn't go all of the way to the end marks. That will be done later.



All of the flutes cut and filed to the smooth cut file finish.



There are a variety of ways to deal with the ends of the flutes. They can be tapered out to the surface of the handle material. They can be continued to the fittings on either end. Or, the flutes can be cut through the fittings. If you use any of these techniques, you would probably cut the entire length of the flute, rather than stopping short of the end, as shown here.

On this handle, the flutes will stop short of the fittings and also plunge below the surface of the handle material. I find it easier to cut the ends of the flutes in a separate operation and then blend them back into the previously cut area of the flute.

Brass patterns are made to mark the shape of the ends of the flutes. This is the pattern for the flute near the top of the handle, a smaller pattern is made for the flute at the bottom.



The flute marked for filing the end.



Tip the file up onto the front teeth to gouge the material away and create the flute depression. Then blend the gouged out area back into the previously cut part of the flute.



A die-sinker's file is also used to contour and shape the end of the flute.



All of the flutes filed in. Ready for sanding.

