

Making Your Own Tools Incorporating Leather Into Your Woodworking Tools

**Text and Photos by
William Johnston**

I like to make woodworking tools. The materials I use include exotic wood, carbon steel, drill rod, cold rolled steel, and brass flat stock and rods. A number of my tools incorporate the use of leather.

Early on I was fortunate to come across a large box of leather squares, thick shoe sole leather, and various leather scraps. Shortly after, I acquired a “new” but very old piece of leather four inches wide and ten feet long. It is double thick (about 3/8 inch) and was intended for a pulley belt in an old shop that ran on a belt line.



I do very little actual “leather” work but still incorporate leather into a number of my woodworking tools. Much of the application is just cutting and gluing but some involves sewing as well.

There was a time when I was 11 or so that I discovered that baseballs were much in demand but short on supply. But baseballs that had lost their cover were in supply but low in demand. I started sewing the covers back on the baseballs.

The sewing is much like lacing a shoe. You start by acquiring a recently lost cover and the ball that has not been hit around and lost string or covered with electrical tape (duct tape had yet to be invented ... the olden days). The leather cover must be thoroughly wet with warm water so that it will stretch and cover the ball.



I used two needles, each threaded on the opposite ends of the same thread. It is best to use needles of some size with a curved end. I started the thread through two opposing holes and pulled until the ends were even. Like lacing a shoe I proceeded to go around the ball until I came back to where I started, tying a knot at the finish that was down inside the leather. When the leather dried, I soaked it in neat’s-foot oil to remove the stiffness.

As a lark, one time I sewed a leather cover, missing the ball, onto a hard rubber ball favored by retrieving dogs. The first time I pitched it to a friend, he swung hard and hit the ball. It went nearly flat like a flying saucer. From that time on, I could run his hit, because he wouldn’t know if I were throwing a real baseball or the rubber one.

Along with collecting old woodworking tools, I’ve picked up a small collection of leatherworking tools as well. I’m sure you’ve seen the half-moon shaped knife used by leatherworkers. Mine was likely sold for cutting tobacco but is essentially the same as the type used by leatherworkers. I also made a similar knife out of an old handsaw. Picked up along the way was a large needle with a rosewood handle, large curved end needles, spurs for marking and spacing where the threads pierce the leather, and various punches and

awls. Not to be forgotten is the sewing awk with the hollow wood handle and the roller for thread built in.

Back when “Fine Woodworking” magazine was young, Tage Frid wrote an article about how to build his European workbench with the large shoulder vice. After I built the bench I fitted two thick pieces of shoe sole leather to pad the jaws of the shoulder vice. Since that time I have routinely fitted leather to a number of vice jaws. Leather is perfect for this application. Leather grips the wood, preventing slipping. If the leather wears out, it can be easily replaced. I glue the leather to the wood jaws with epoxy. Cut a slightly oversize piece, spread glue on the wood and leather, place the pieces and clamp lightly together ... hay, it's on a vice. Leather planes down nicely to fit with a sharp plane and can be removed altogether with a chisel.



I finish the leather with whatever I am using to finish the wood, usually linseed oil, tung oil, a penetrating resin, or lately cherry Chapstick (just kidding). Really, I often use a mixture of beeswax and lanolin on tools. This product is sold for leather waterproofing under the Kewee Brand. It makes the leather grip better and is great on wooden tools, especially handles.



I have made several mallets ...finished by gluing thick shoe leather to the business ends. The large mallet is for general woodworking. The smaller with leather on both ends of the head was made for tinsmithing. It's softer heads will bend the tin over a form without damaging the metal.



One of my favorite tools is a small carver's mallet. The wood is Osage Orange (hedge apple). I cut and sewed a piece of leather on the handle section to give a softer easier grip to the mallet. Attached is a short leather thong.

A number of my tools have leather thongs for hanging. Both square and round 1/16 to 1/8 inch 'laces' are inexpensive and come in handy for a number of tasks from thongs to substitute for thread in lacing.



I am amazed how expensive a piece of leather glued to a stick can be. You find these in the sharpening section of your favorite woodworking store. Make it yourself ... here's how. Glue a piece of leather to a stick! The stick can have a flat part, a round part, a wedge shaped part ... to accommodate different irons, chisels and gauges. This 'stick' is used for stropping a blade during sharpening to take off the wire edge. Make several. Leave some plain; coat others with sharpening oils and jewelers rouge. They work great.



Leather works great on the striking end of chisel handles. I cut the leather oversize for the handle, clamp it between two scrap pieces of wood. Drill through the wood and leather with a forstner bit to make the 3/8 inch hole in the leather. The leather is glued to the handle with a small tenon of wood through the leather. The excess leather can be gently abraded away on a grinder or trimmed with a knife. Leather glued to wood also turns well in a lathe.



Recently I made a journeyman's toolbox with rope handles. Where the ends of the rope joined I sewed a piece of leather for the hand to grip.



The toolbox also has a sewn leather strap to support the lid ... complete with bells to announce intruders when the box is opened.



You should also consider making a leather apron. Leather is good protection around heat and will protect better than cloth against fast moving objects flying at your belly (I no longer use a radial arm saw). Your leather apron can incorporate an 'over the shoulder' suspender so you don't have the weight hanging around your neck.



So make friends at your local leather shop, keep an eye open for scraps, and watch out for leatherworking tools at garage and estate sales. You'll find numerous opportunities to incorporate leather in Making Your Own Tools.

Your comments are invited and welcome and may be addressed to:

William Johnston
johnston@everestkc.net
913-492-6942