

HAND SHARPENING OF SMALL TOOLS, ETC.

A DEMONSTRATION BY ROGER VAN DEWALKER

(Reported by Don Dressel)

Q25

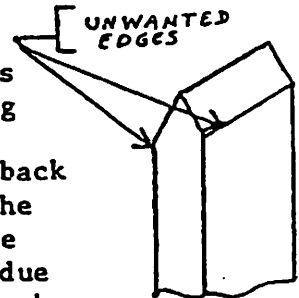
An excellent demonstration of small tool sharpening techniques was given by Roger at the March meeting. This is a brief synopsis of his demonstration.

First, the materials required are:

1. A hard red India stone (square). An optional stone is the hard Arkansas stone (both square stone and round stones are used for chisels).
2. No. 400 wet or dry sandpaper.
3. A piece of leather which is glued to a piece of wood, the leather being soaked in auto rubbing compound (3M or Dupont).
4. A thin oil (sewing machine oil or mineral oil and kerosene mixed 1 to 1).
5. A dull tool to sharpen. (A tool is dull if you can see a thin white line while looking at the cutting edge. Also, if a tool does not shave the hairs of your arm it is dull. Further, a tool which is dull is dangerous to use because it requires much more force to cut than a sharp tool and is more difficult to control.)

Next, the process to follow when sharpening your tool is as follows:

1. Wet the red India stone with oil (NEVER USE A SHARPENING STONE DRY).
2. With the red India stone grind all the sharp edges off the general shape of the tool (chisels mostly). This results in a clean cut when using the tool.
3. Using a smooth pulling and rocking motion (pull back and forth while rocking up and down), work on the stone until the thin white line can no longer be seen. Sharpen both sides (clean the black residue off the stone when finished). There should also be a little piece of steel left on the tip of the cutting edge.
4. Two methods follow. The first is to use the No. 400 wet and dry sandpaper, stroking from top to bottom until you have a nice polish on both sides of the tool. Then using the leather with rubbing compound, strop on this as above until you have a fine sharp edge (you can now shave your arm). You can finish up by stropping the tool on plain leather if you desire. The second method is to use the Arkansas stone instead of the No. 400 sandpaper (don't forget to use your oil on the stone).



For Uber and Xacto knife blades use No. 600 wet and dry sandpaper instead of No. 400, red jewelers rouge on the leather instead of rubbing compound, and finish as before with plain leather. This method gives a somewhat finer edge. For general information, the ideal cutting angle for softwoods is 20 degrees and 25 degrees for hardwoods. Finally, be careful of sharpening with power grinders - a few seconds can ruin a tool for good.