How to Sharpen Chisels and Planes
You can't do good work if your tools are dull. A sharp chisel or plane blade should be able to shave the hair off the back of your hand. If your edge tools can't pass the shaving test, you're working harder than you need to and probably getting poor results as well. It's easy to sharpen chisels and plane blades yourself with just a few basic sharpening stones and this step-by-step guide.

If you look at a dull edge under a magnifying glass, you'll see that it's ragged, rough and rounded. Your goal is to make this cutting edge as thin, straight and shiny as possible

**Step 1. Grinding**
Tools require less grinding than they require honing on an oilstone. They only need to be ground when

a) they have become gapped;
b) they have become worn to a thick dumpy edge by numerous oilstone honings.

If the edge is gapped the edge has to be made flat by holding the blade with the beveled side up and move it side-to-side against the wheel to remove.

Check that the end of the blade is square to the blade.
Adjust the angle of the tool-rest on your grinding wheel so that the bevel of the blade rests flat on the edge of the wheel. (25°)

Moving the blade sideways across the wheel make a light, smooth pass across the wheel.

After each pass, immediately dip the edge in water to cool it. Easy does it too much heat from friction will destroy the temper of the blade. (If the edge turns blue, the temper is shot. Gently grind off the discolored area.)

Inspect the edge and adjust the rest if necessary to get the correct angle. Make sure the edge is square to the blade.

Repeat the process until you have a cleanly ground edge.

**Safety:** ensure that you are wearing eye protection when using the grinder.

### Step 2. Honing

Honing produces a keen edge and is carried out:

- When the edge has become dull
- After grinding

Squirt a light film of honing oil (Neatsfoot oil) on the surface of the oilstone to reduce friction and to float off metal particles,

(i) Hold the blade at the proper angle of about 25° so the bevel sits flat on the stone. (A honing guide is an optional gadget that clamps on the blade to maintain the right angle.) Rub the bevel back and forth on the stone, keeping the angle constant. Avoid rocking the tool or you'll round its edge.

Keep rubbing until you raise a very fine "wire edge" on the back side of the chisel. You can feel this wire edge with your finger but won't be able to see it without a magnifying glass.

(ii) While producing the honing bevel a burr or “wire edge” is formed on the face of the tool. This removed by placing the blade bevel side up flat on the oilstone and again rubbing back and forth a few times.

The honing processes (i) and (ii) are repeated until the desired edge is obtained.