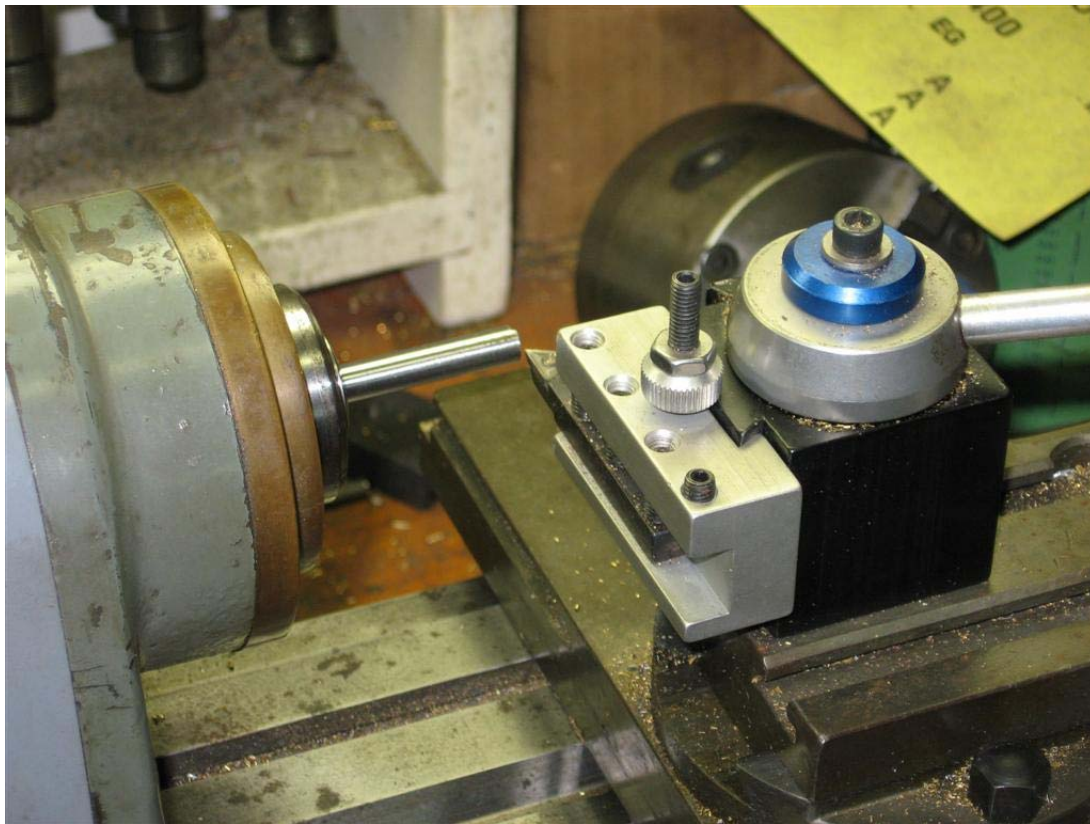


Making Small Screws for Clocks

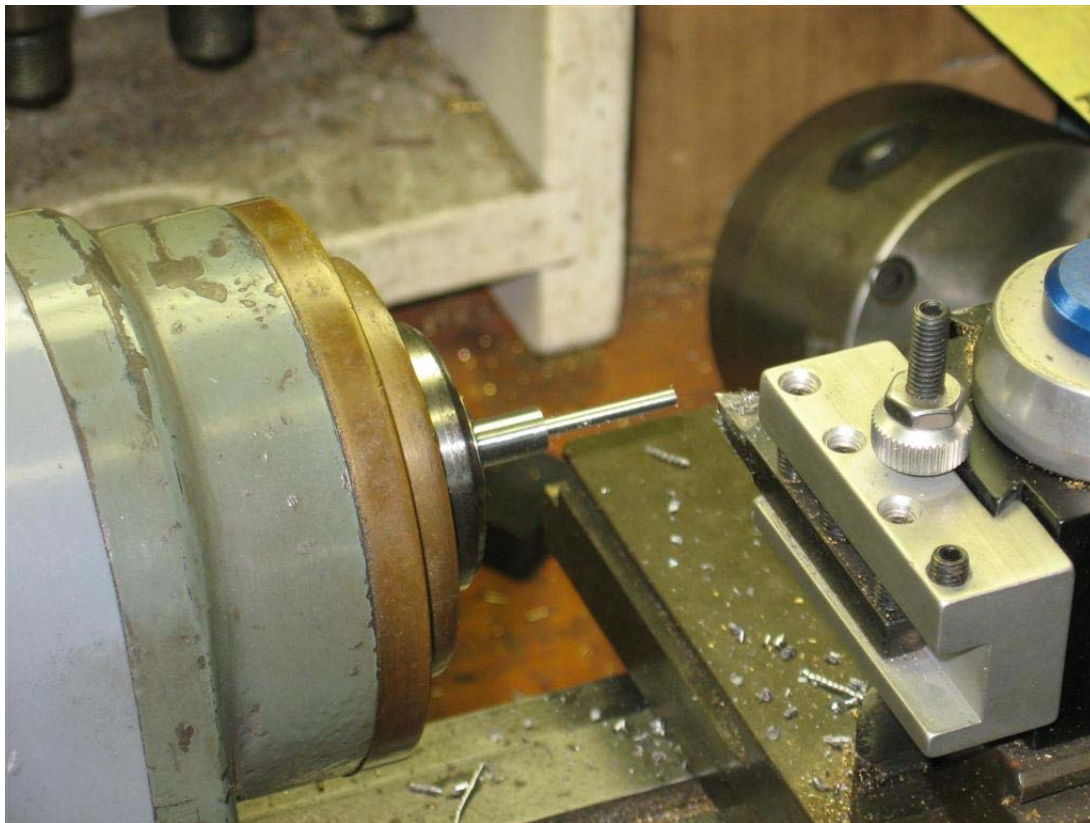
Easy Process

3/1/2009

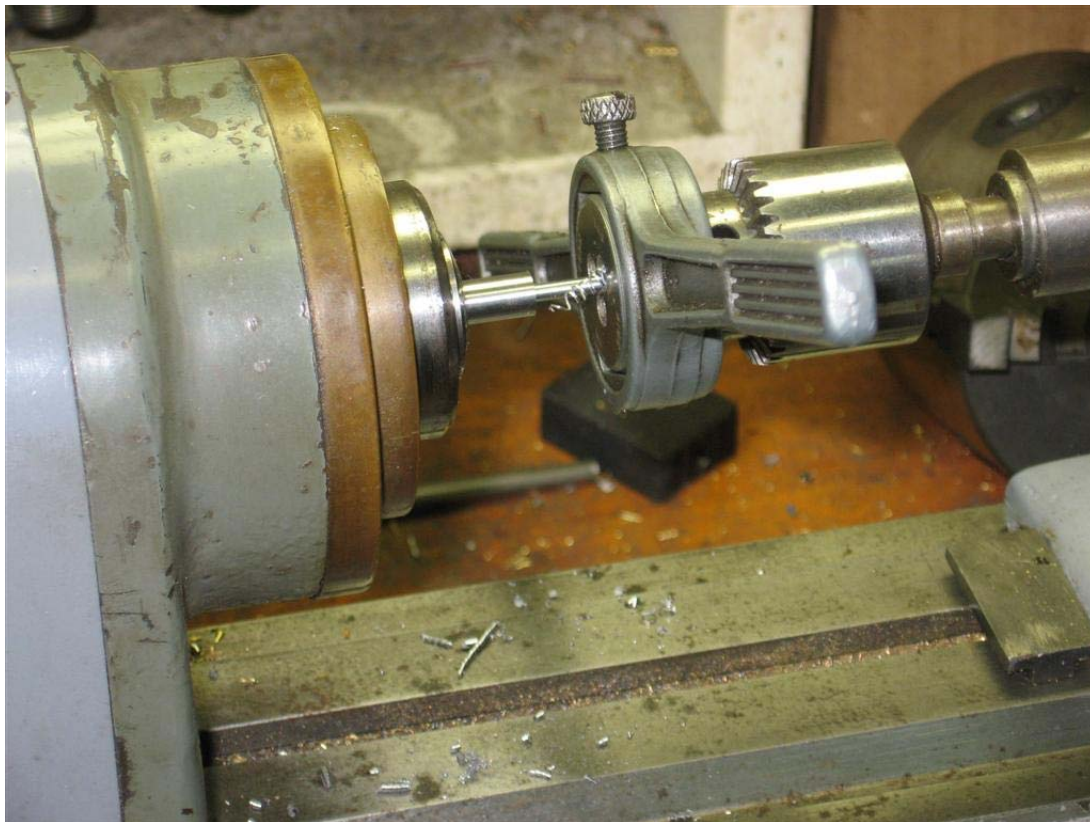
Jim DuBois



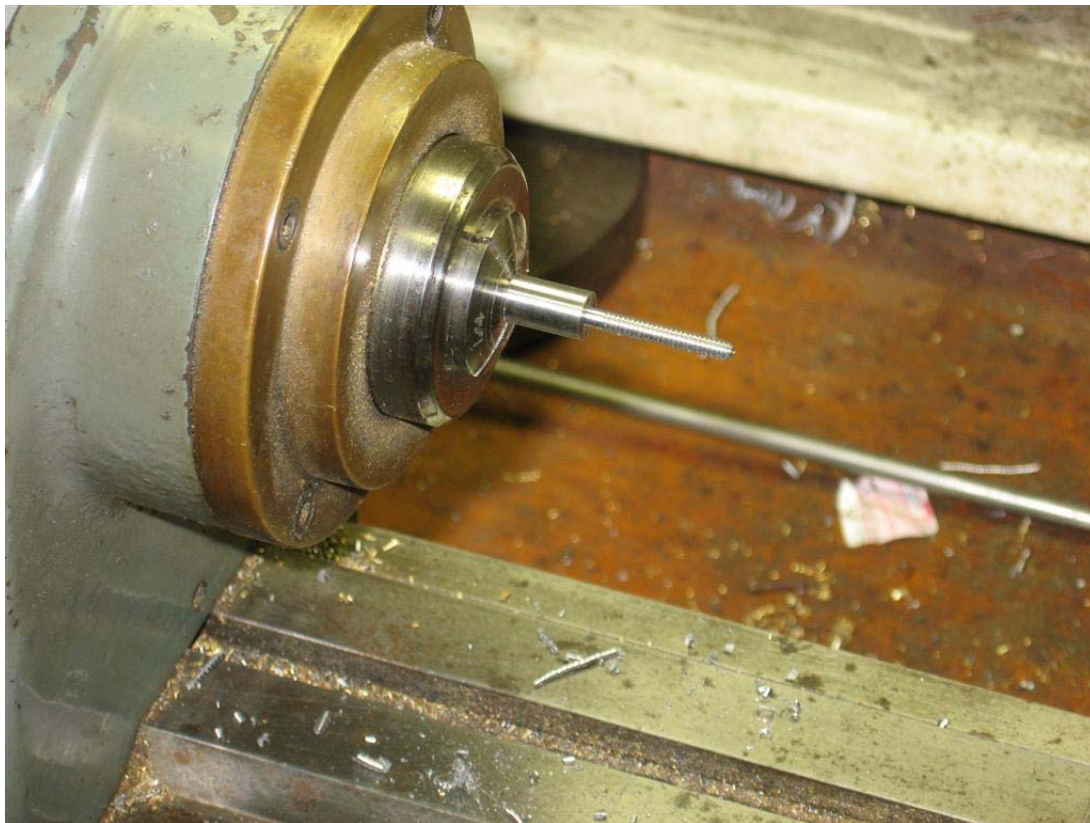
Stock (free machining steel) turn to size of head



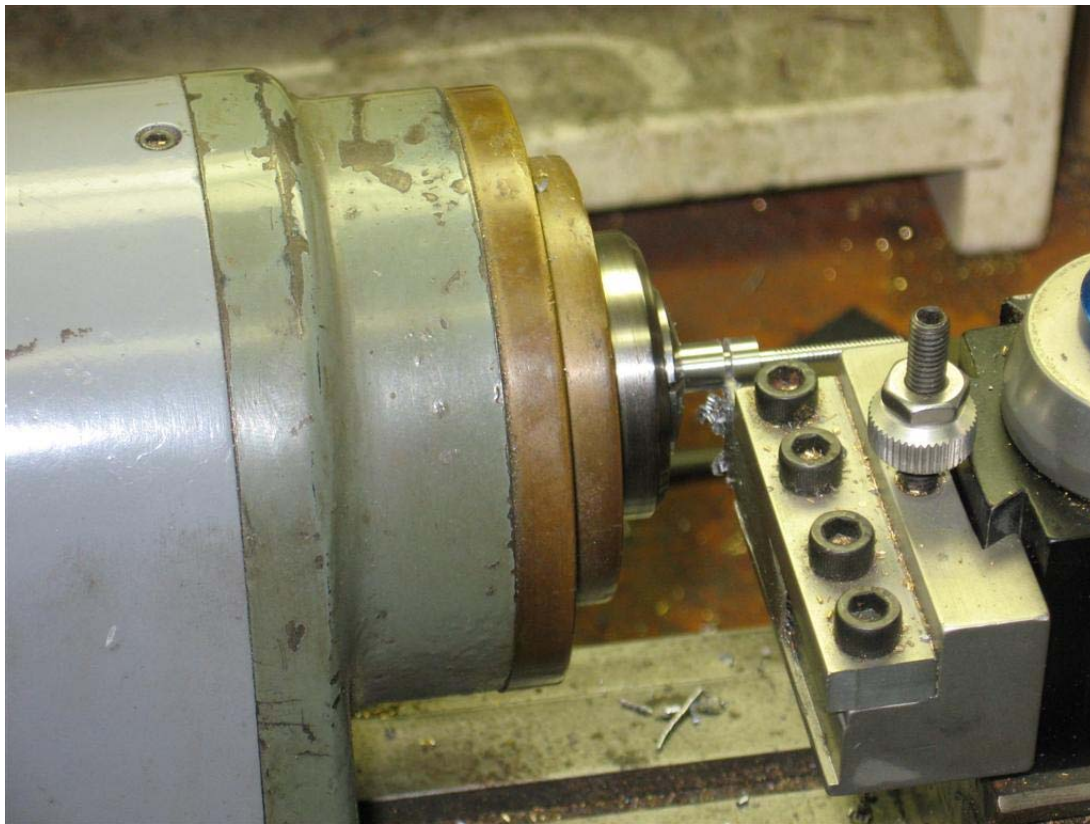
Turn to size of thread OD



I use the tailstock to keep the die starting and running straight on the blank



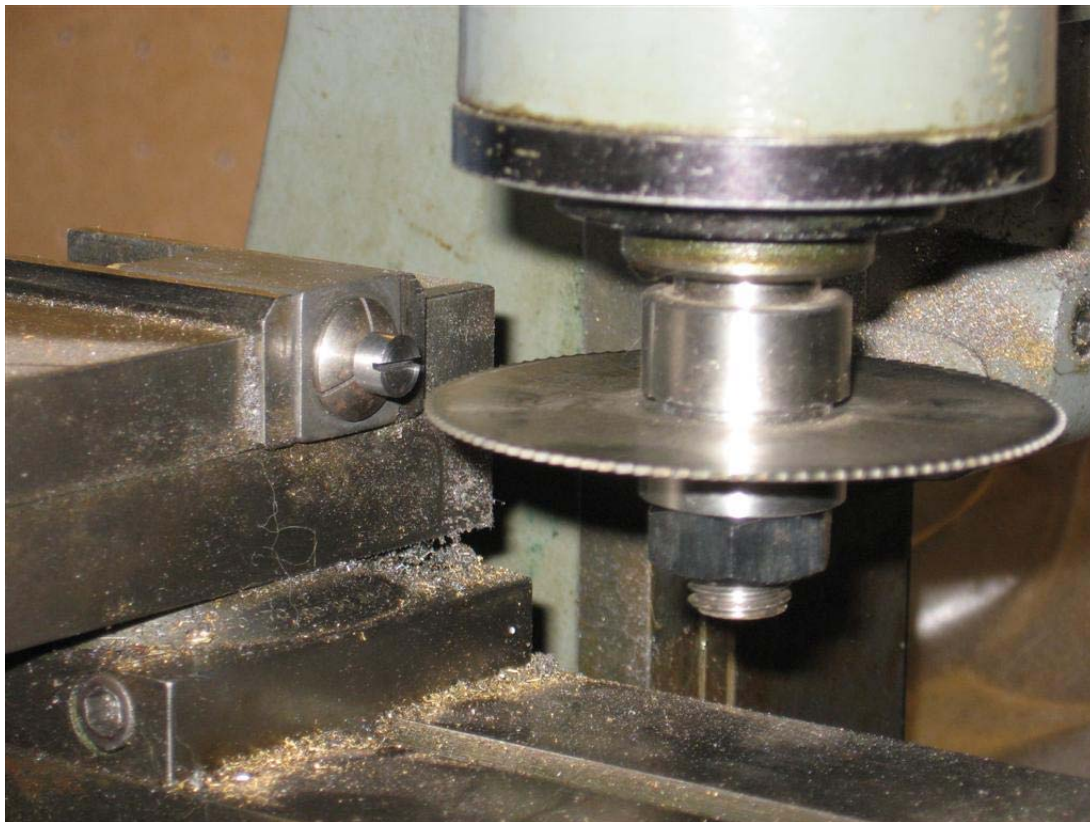
Threads completed in short order, I use Tap Magic for cutting fluid



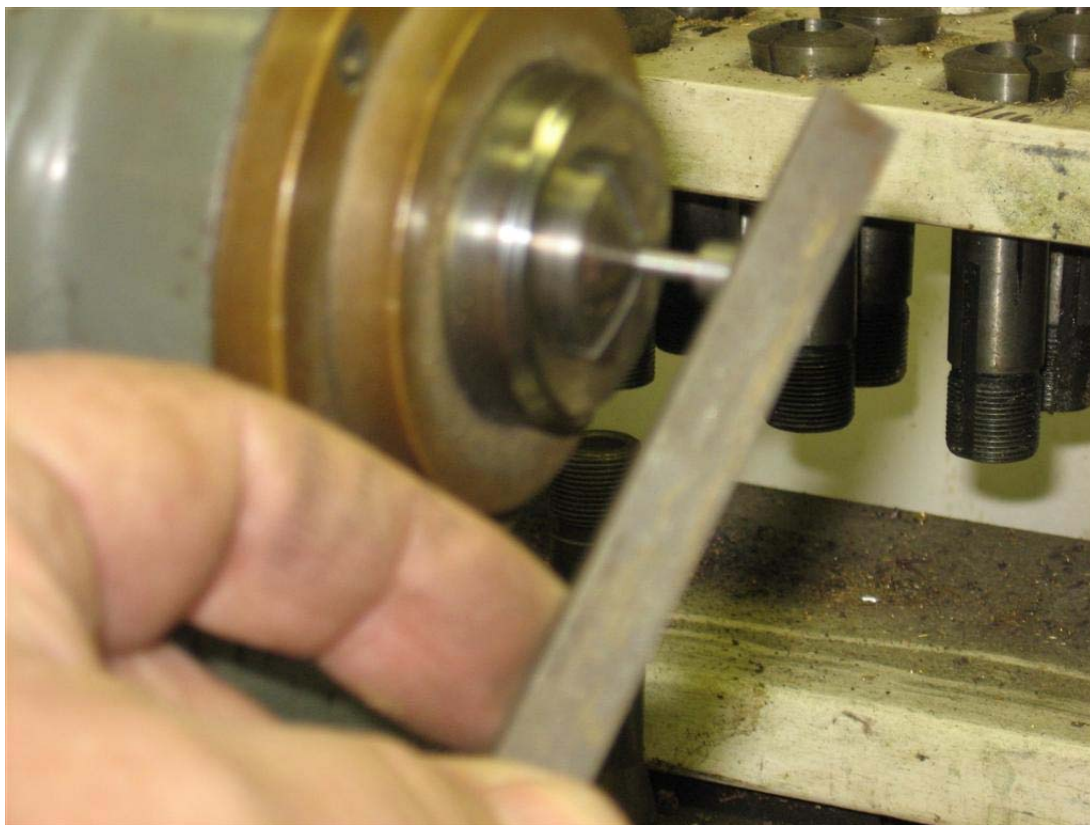
Cut off the incomplete screw from the stock using a Sherline cut off blade



I then grasp the threaded blank in a WW collet and a square collet holder



Slotting the head using a slotting saw in a Derbyshire 10MM vertical mill



Dressing up the edges of the screw head and forming slight chamfers. I also use an emery board to polish the head a bit



Finished screw ready for use in a clock project. Please note this material is fairly “soft” and I have made no attempt to harden or blue it. Most screws used in most clocks are soft steel. This same process can be used in making screws in tool steel, just requires annealing and then hardening when done. Tool steel is much more abusive to even very good dies, so I use it only when I have to, and that is not often in screw making.

Also, the screw blank can be severed from the stock using a small hand (hacksaw) saw with a fine blade, it is about as quick and easy as using the cut off tool. Also, the screw head slot can be filed using a slotting file, or it can be hand cut using the same fine blade saw as used for cutting off