Aluminum Pen Tutorial

A Tutorial by:

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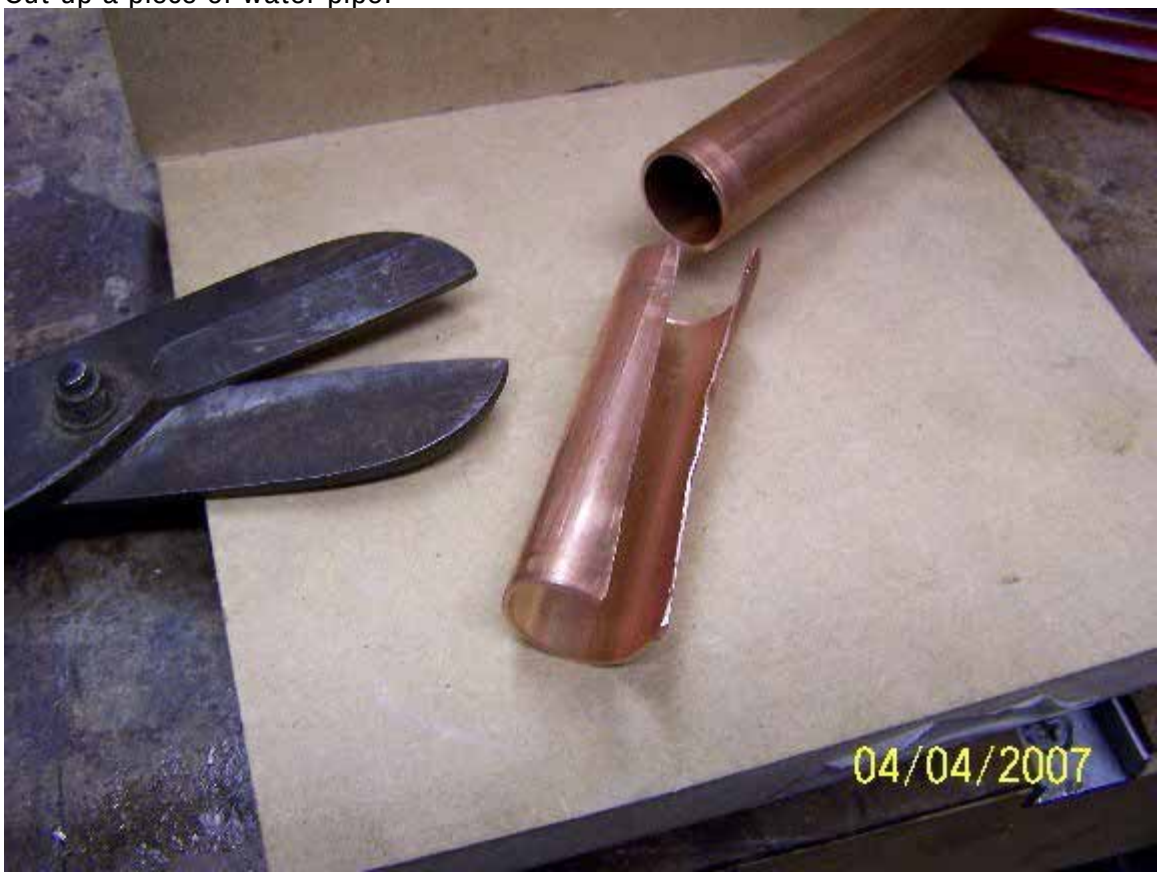
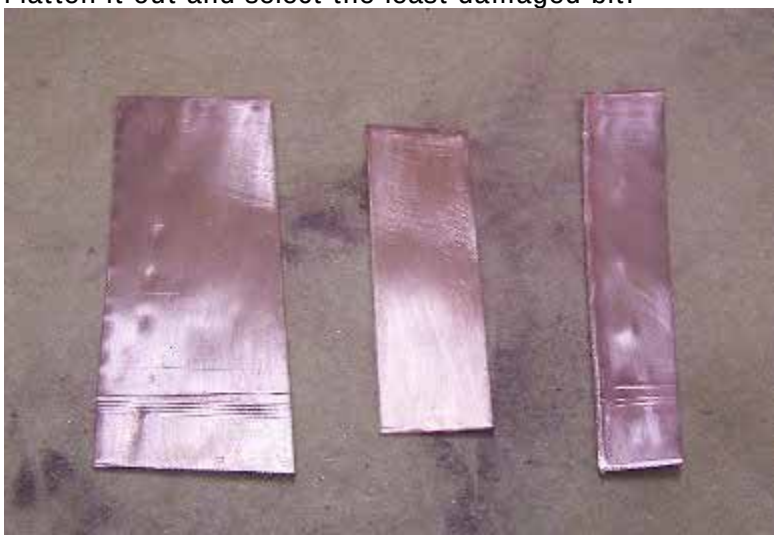
A.K.A "Skiprat"

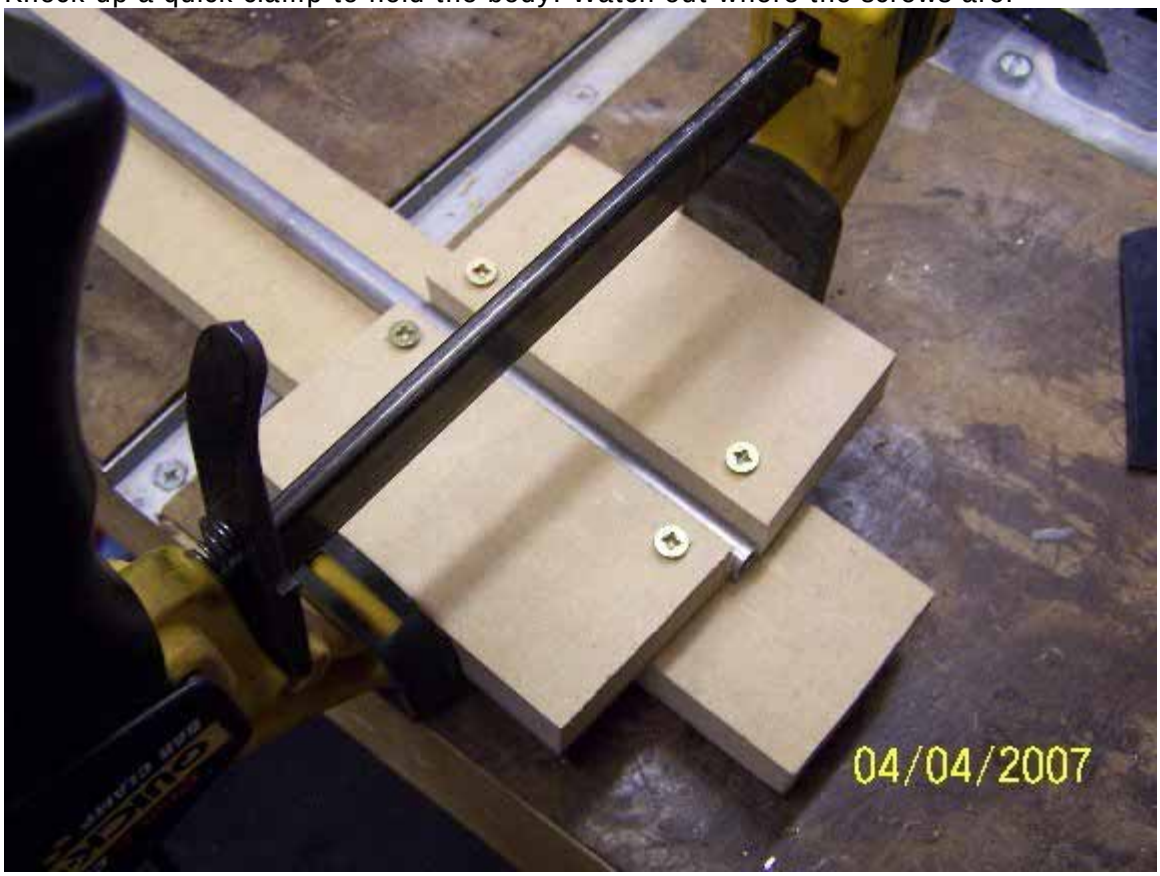
Thought you may like to see how I made my latest pen.
Cut up a piece of water pipe.



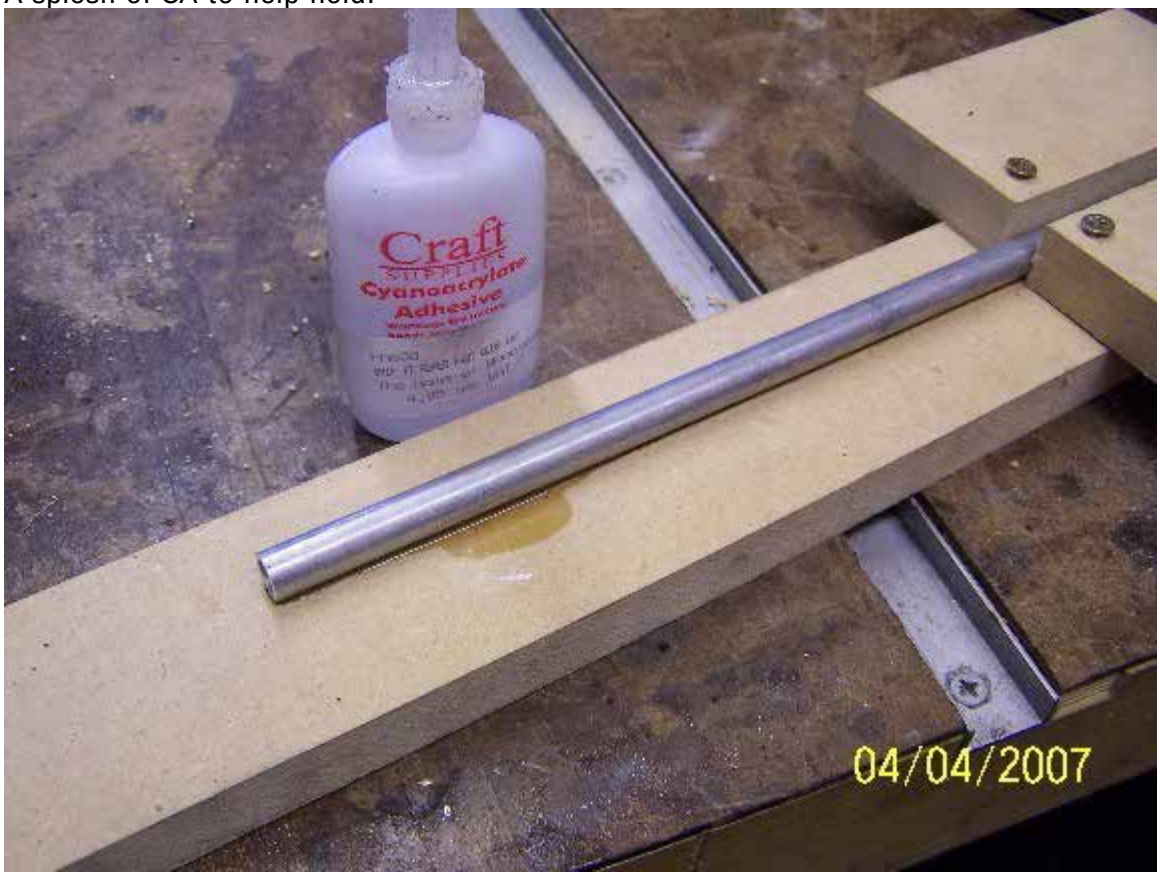
Flatten it out and select the least damaged bit.



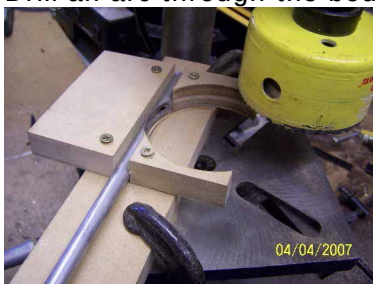
Knock up a quick clamp to hold the body. Watch out where the screws are.



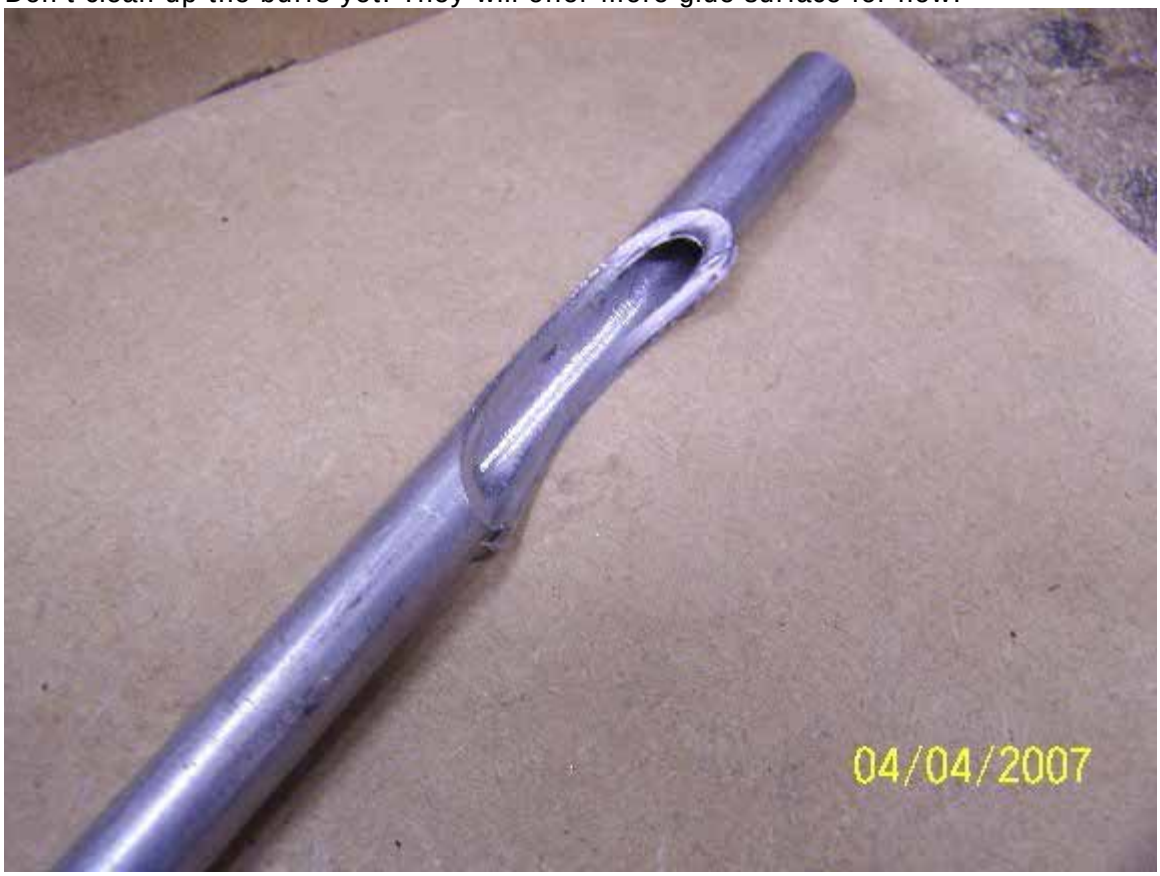
A splosh of CA to help hold.



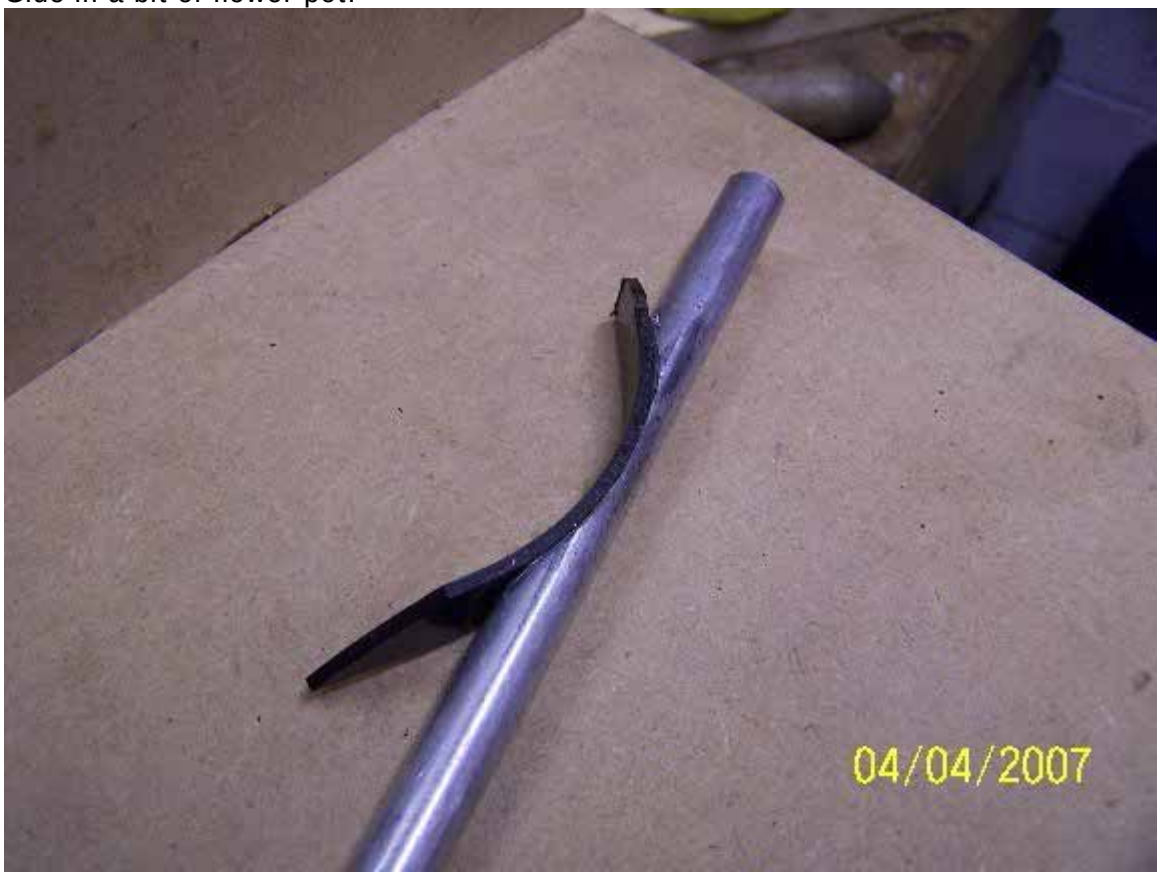
Drill an arc through the body.



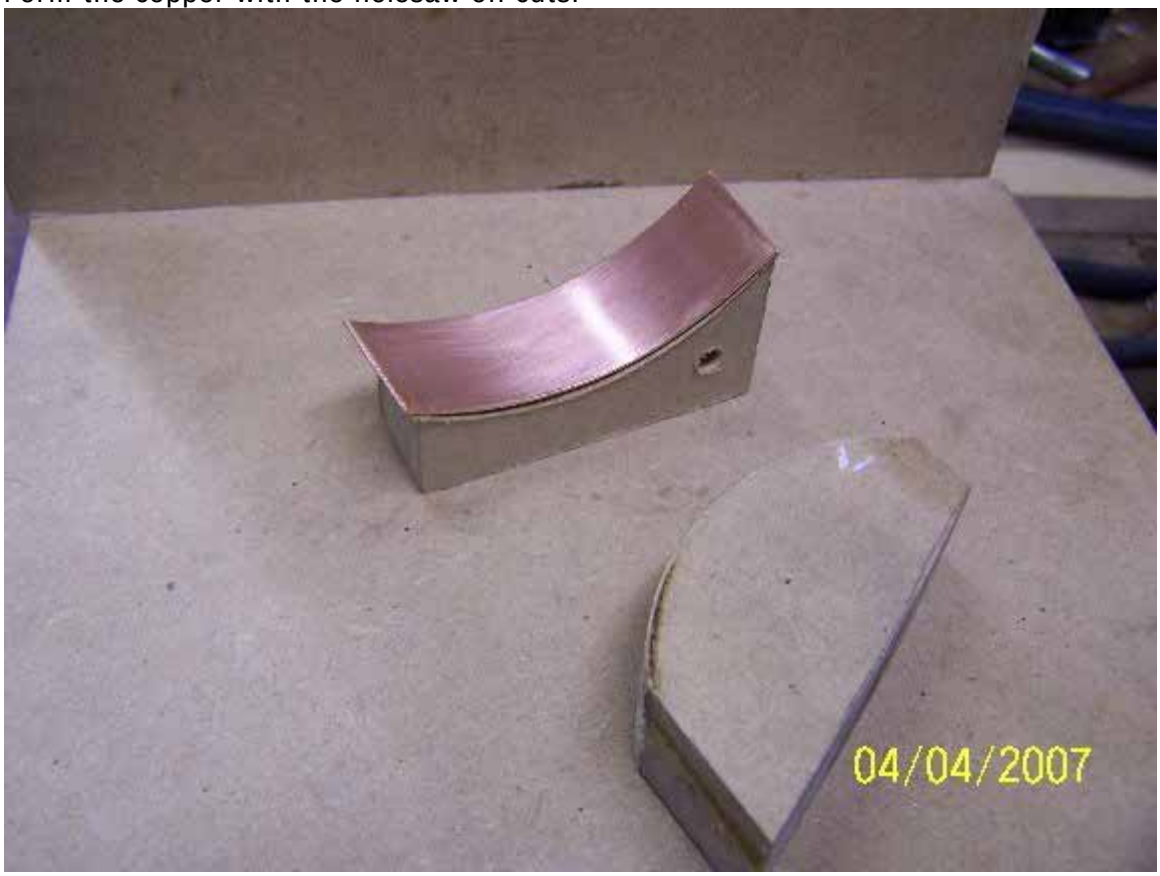
Don't clean up the burrs yet. They will offer more glue surface for now.



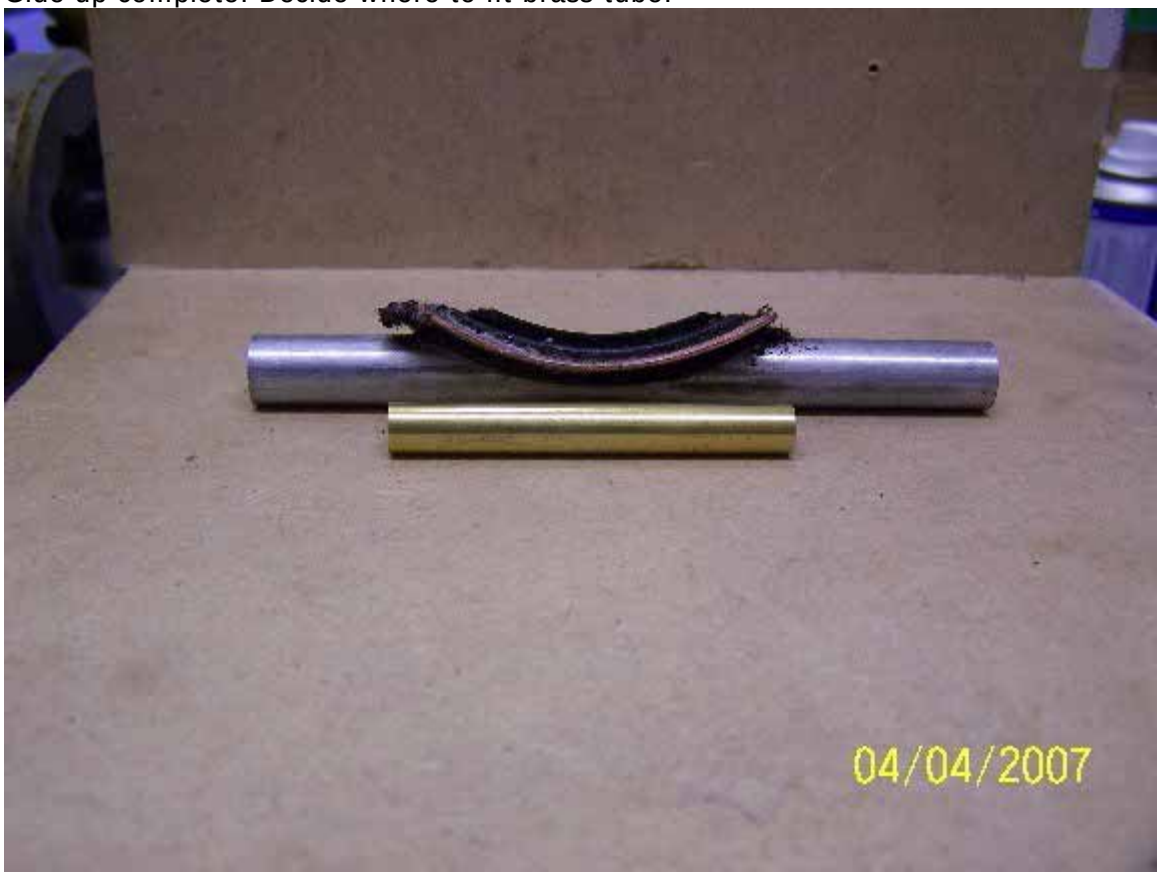
Glue in a bit of flower pot.



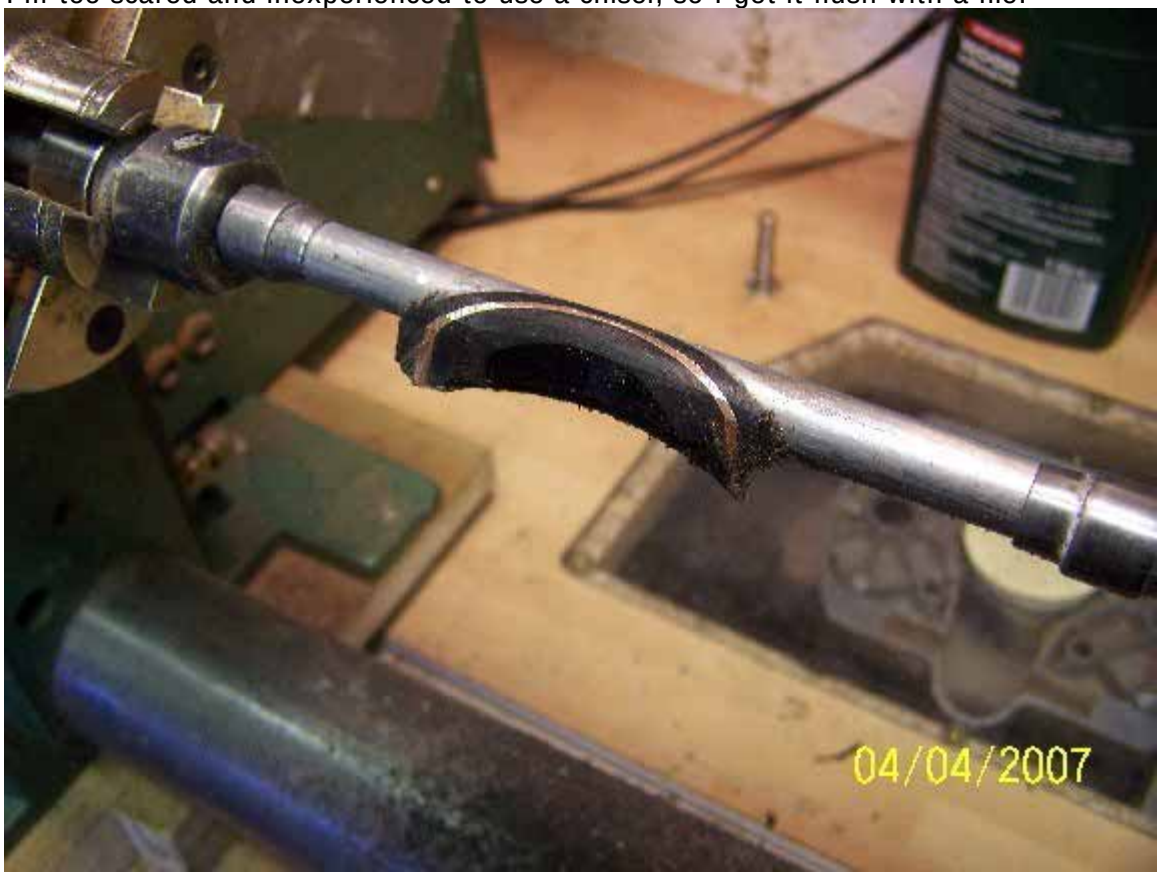
Form the copper with the holesaw off cuts.



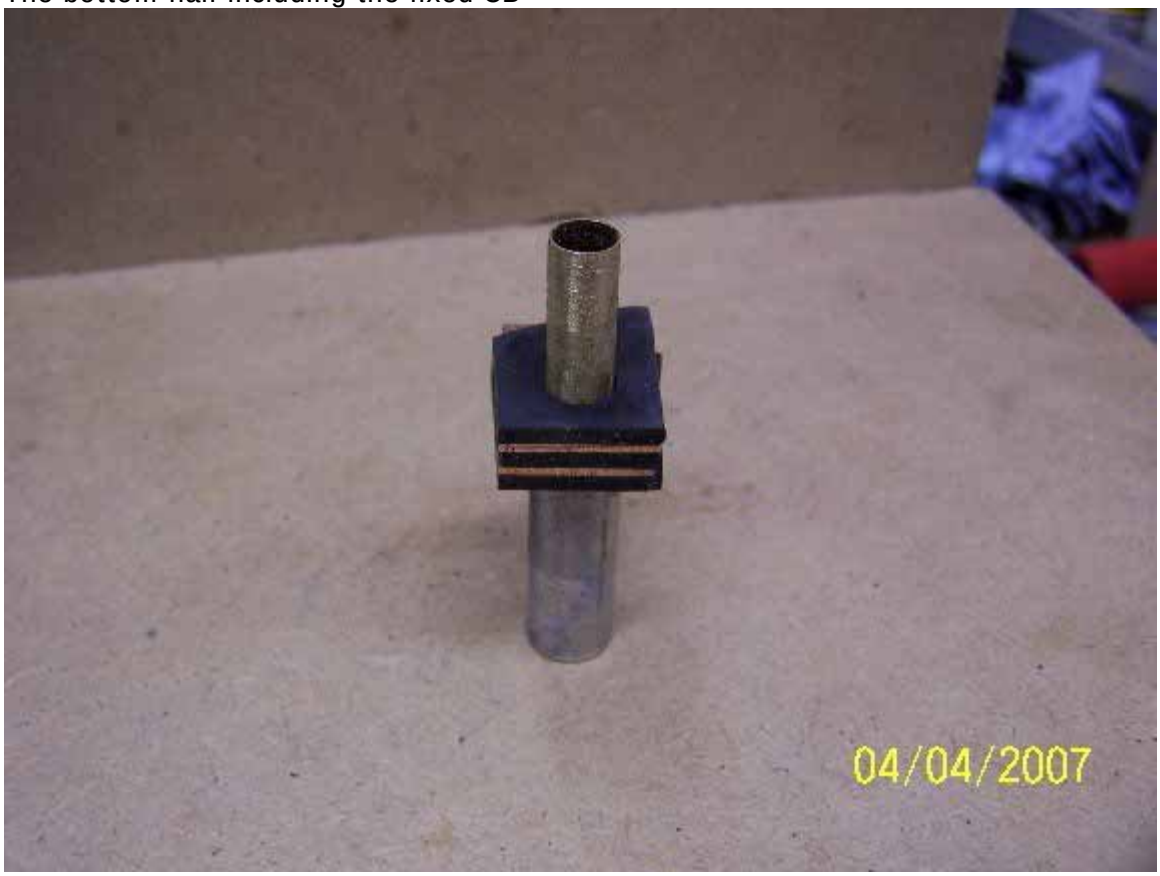
Glue up complete. Decide where to fit brass tube.



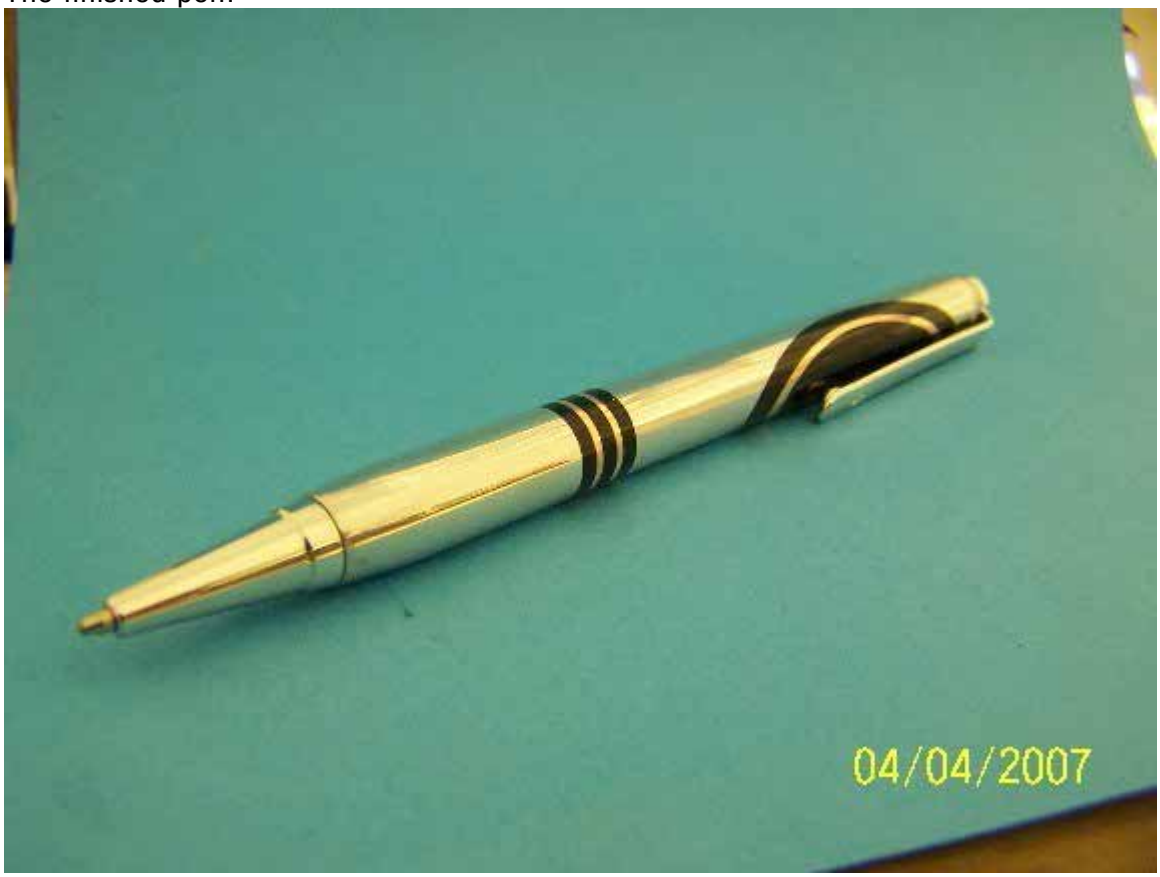
I'm too scared and inexperienced to use a chisel, so I get it flush with a file.



The bottom half including the fixed CB



The finished pen.



This one is a standard slimline with the brass tubes in the normal positions.
However, the lower half only has about 2/3 a blank on it. The other 1/3 goes into the longer body.
The other one is what has been called a 'twist nib' modification.
As you can see in the pic, there is a bit of a cheat. I make the metal part of the refill pass through the plastic end screw. If you wanted to sell a pen like this then you may want to extend this plastic bit, or use Russ Fairfields method, where he uses another slightly larger tube that does the reinforcing and a bare normal tube inside it. I don't sell pens so this is not a problem for me. You may have noticed that all of my twist nib pens are metal near the nib. This is planned, so I don't have to worry about very thin un-reinforced material at the nib end. Hope this helps.
The copper is just any old scrap water pipe. This one was 22mm dia with a wall thickness of 1mm. Any diameter and thickness will do, as it is cut and flattened anyway. The other material in the body is aluminium (aluminum in US) this was originally an antenna that I got out of a skip (dumpster)
It is 11mm OD and 7mm ID. This can be bought at most DIY shops though.
In the other pic showing two pens, the one with a copper body is also just small bore water pipe. This is also available from a DIY store. It too has 11mm OD and 7mm ID.
Of course if you could get hold of solid material, you would just drill a hole.