

*Double bevel inlay  
with  
On the Scroll Saw*



# Over view

- Even though the table on our Scroll saw tilts many of us never take advantage of what that allows us to do.
- We set the table at 90 deg. Perpendicular to the blade and hope to never mess with it again.
- Well **mess with it** and have some fun.

# Changing the table Angle allows you to

- Raise or lower portions of your project  
Sheila Landry uses this for self framing projects.
- Cut stacked rings for making beautiful bowls as demonstrated by Carol Rothman
- Do precise delicate inlays.
- This presentation will focus on inlays.

# Sample of a relief cut

Center area is lowered.



Inner area is lowered  
I used a 3 degree table  
angle.



# Close up of inset using bevel



Pattern by Sheila Landry

# Inlay requirements

- Two or more different color woods of the **same thickness**
- A scroll saw
- Your favorite blade. Determined by the size and detail of your project. (I use 2/o Olson blades)
- The appropriate drill bit for the blade (#70)
- Your pattern
- **And most important**, a way to measure your table angle for repeatability.

# Wood

- I like to use wood that is  $\frac{1}{4}$ " thick
- I have used maple with a blood wood inlay
- I have also used mahogany, walnut and yellow heart as an inlay
- You can use whatever you want as long as you have a contrast in color
- ( otherwise what's the point)



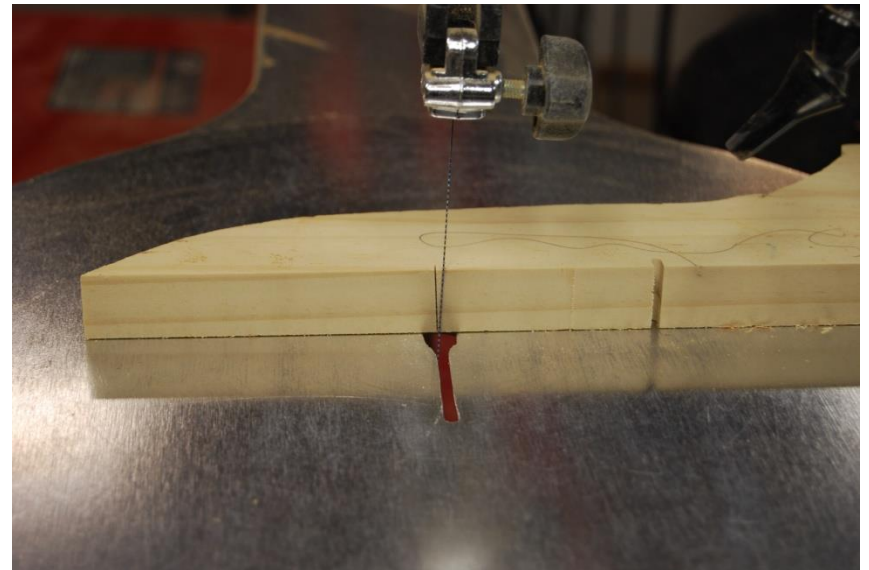
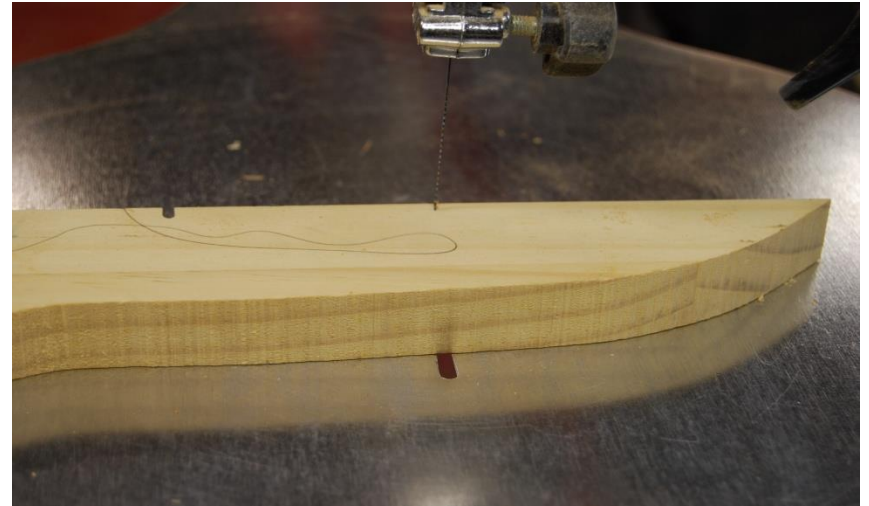
# Scrollsaw Angle

- Start with your blade perpendicular to the table using your favorite method
- I use a block of scrap wood. Make a cut about 1/16 deep, swing the block around to the back and the back of the blade should slip into the cut easily
- You can also use a small square. I have trouble with this method as it is difficult for me to see small offsets in the angle.

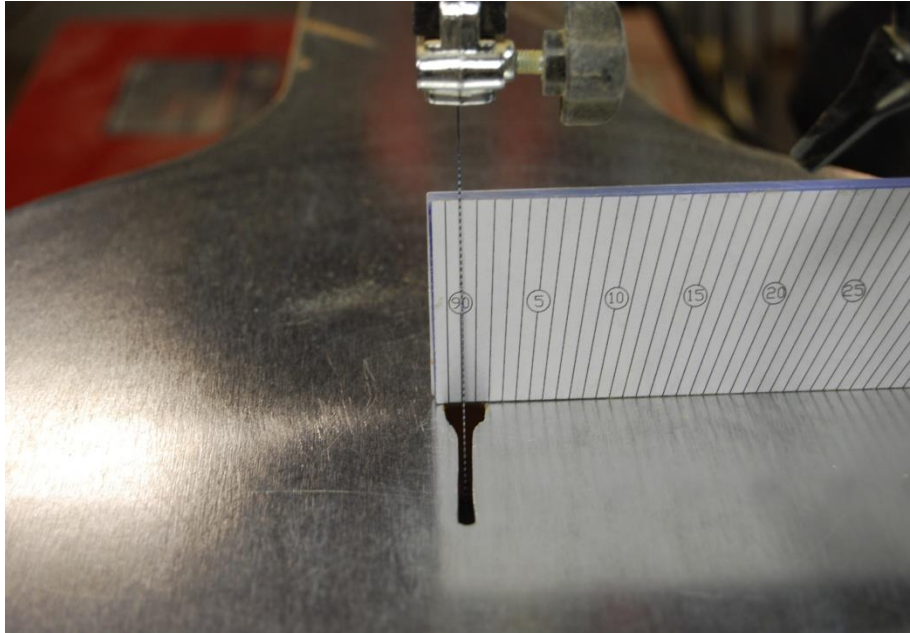


# Initial saw alignment

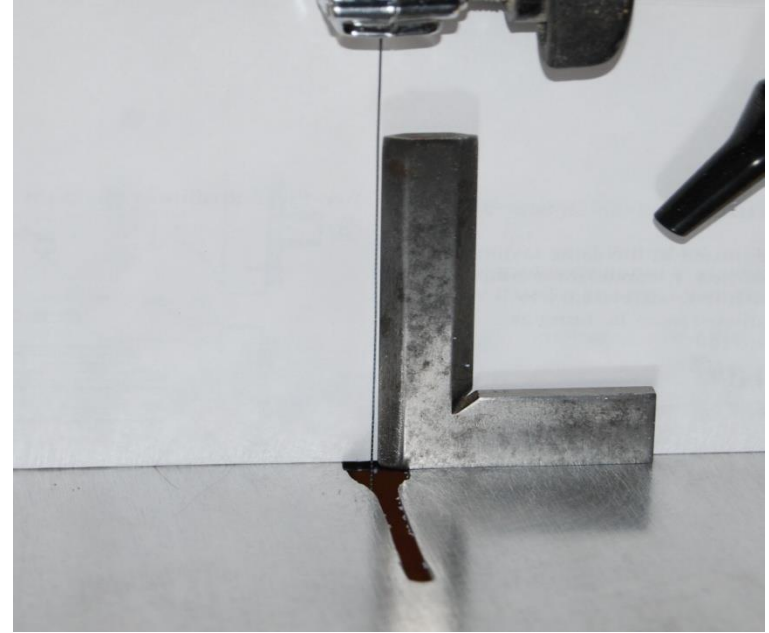
- This is the way I do it.
- Cut into the back of a piece of scrap 1/16
- Swing it around and the blade should slip into the slot. In this picture I exaggerated the misalignment to make it easier to see.



# Alternative Alignment methods



Home made Gauge

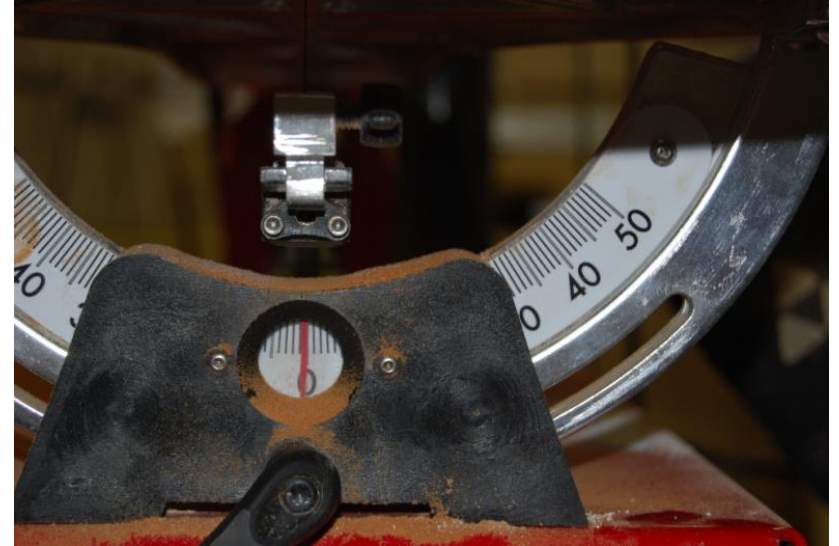


Small Machinist square

A piece of white paper behind the blade gives better contrast

# Setting the table angle

I find that most of the saws are not very accurate

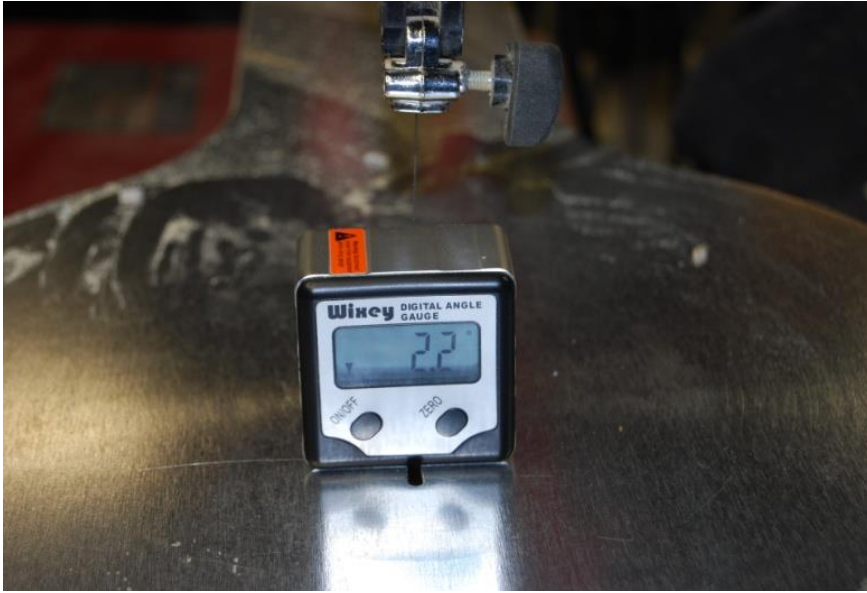


Hawk G4

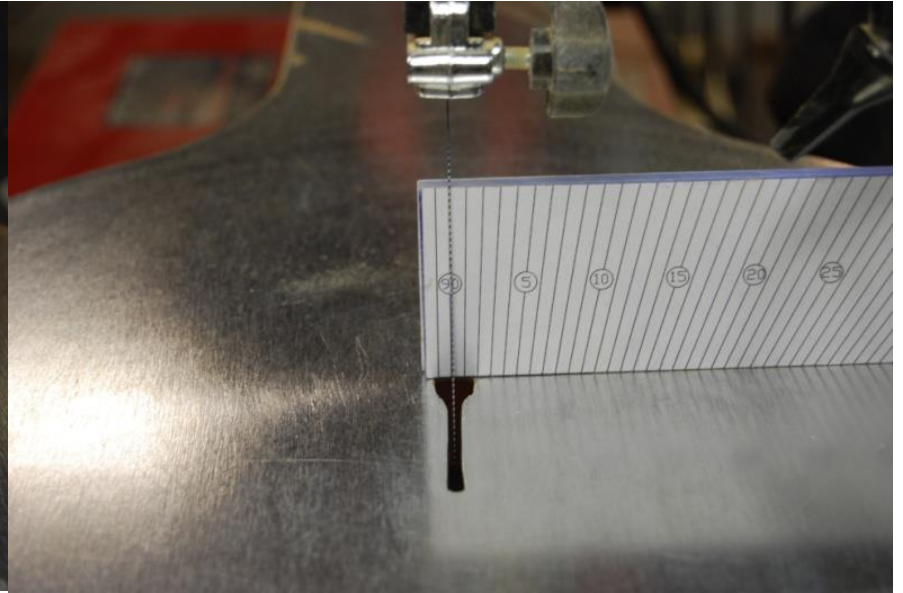


Delta SS 350

# More accuracy



Most Accurate  
About \$40

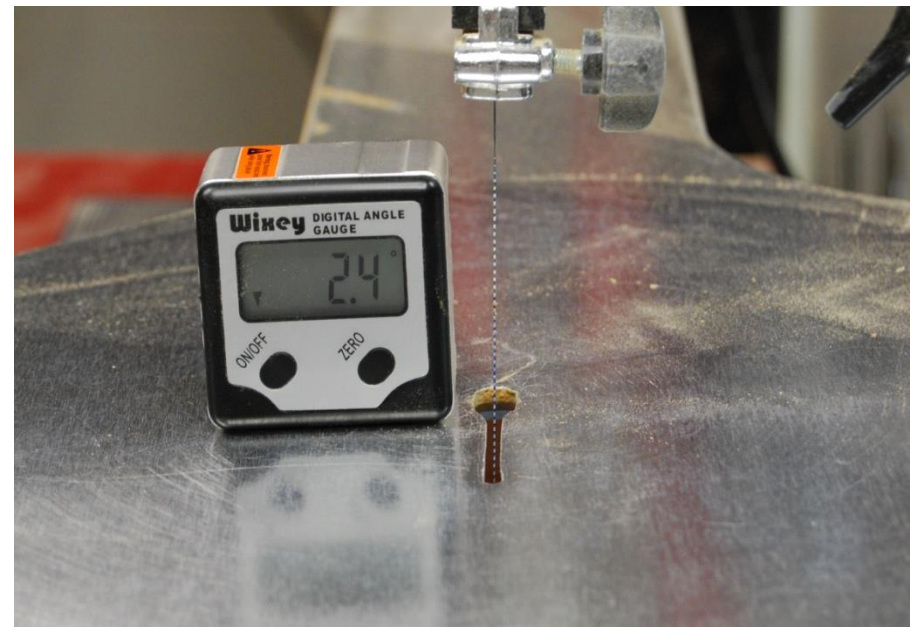


Not too bad  
and it is free

# Setting the bevel angle with the Wixey

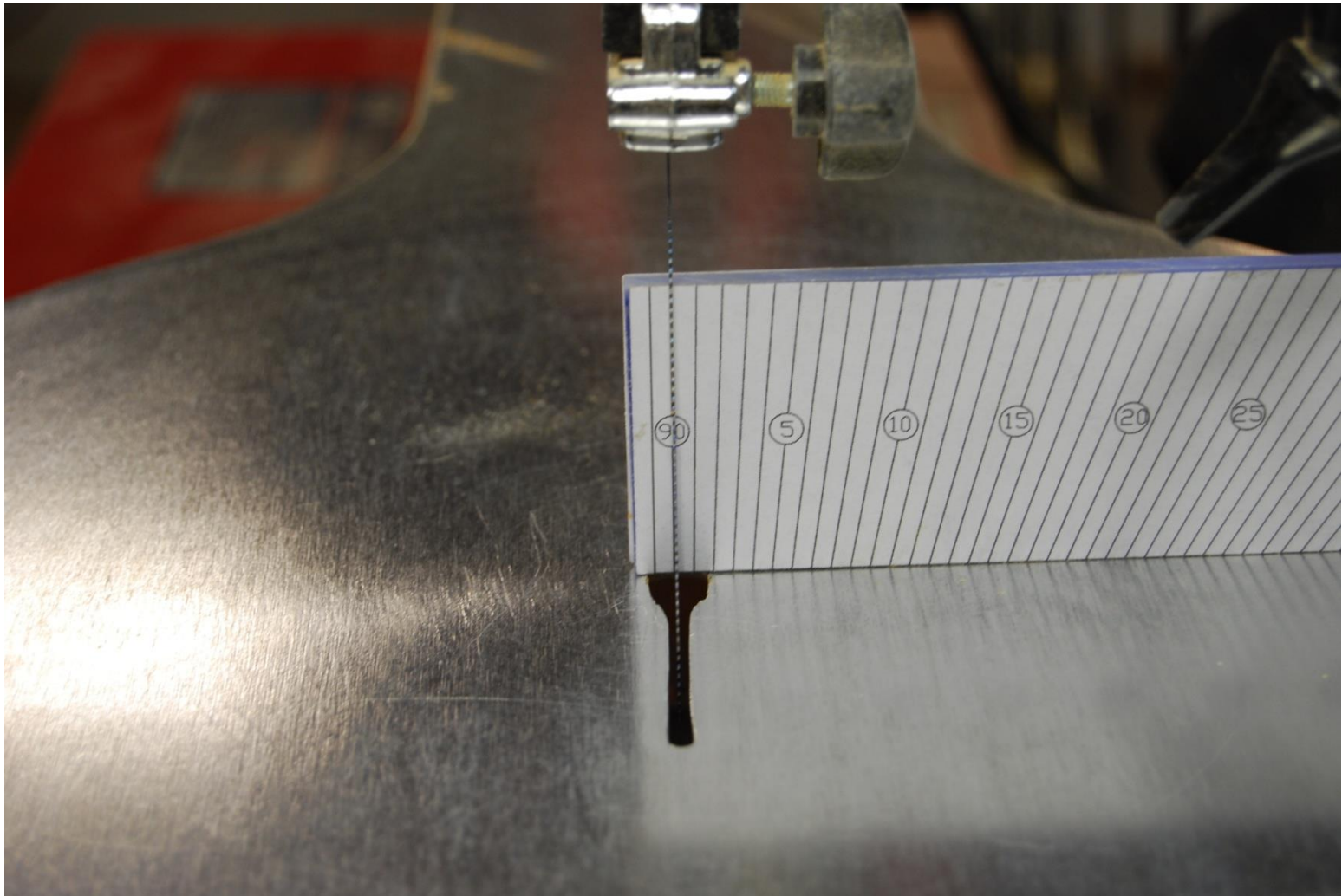


For me the Wixey Digital is the easiest way to set my saw Angle and be able to return it to 90 deg when I am done

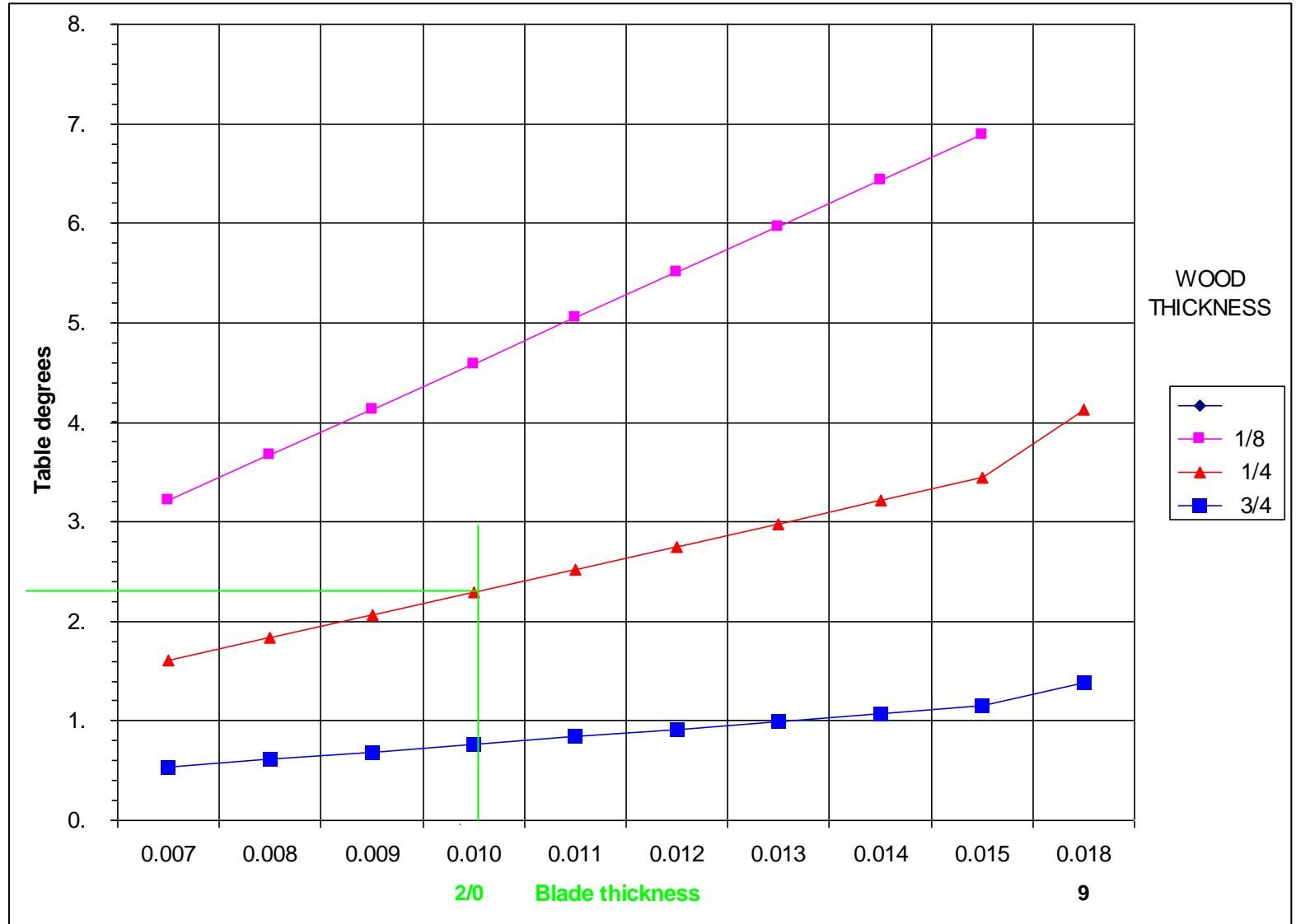


# Home Made gauge

It might be better if printed in RED



# Angle guideline



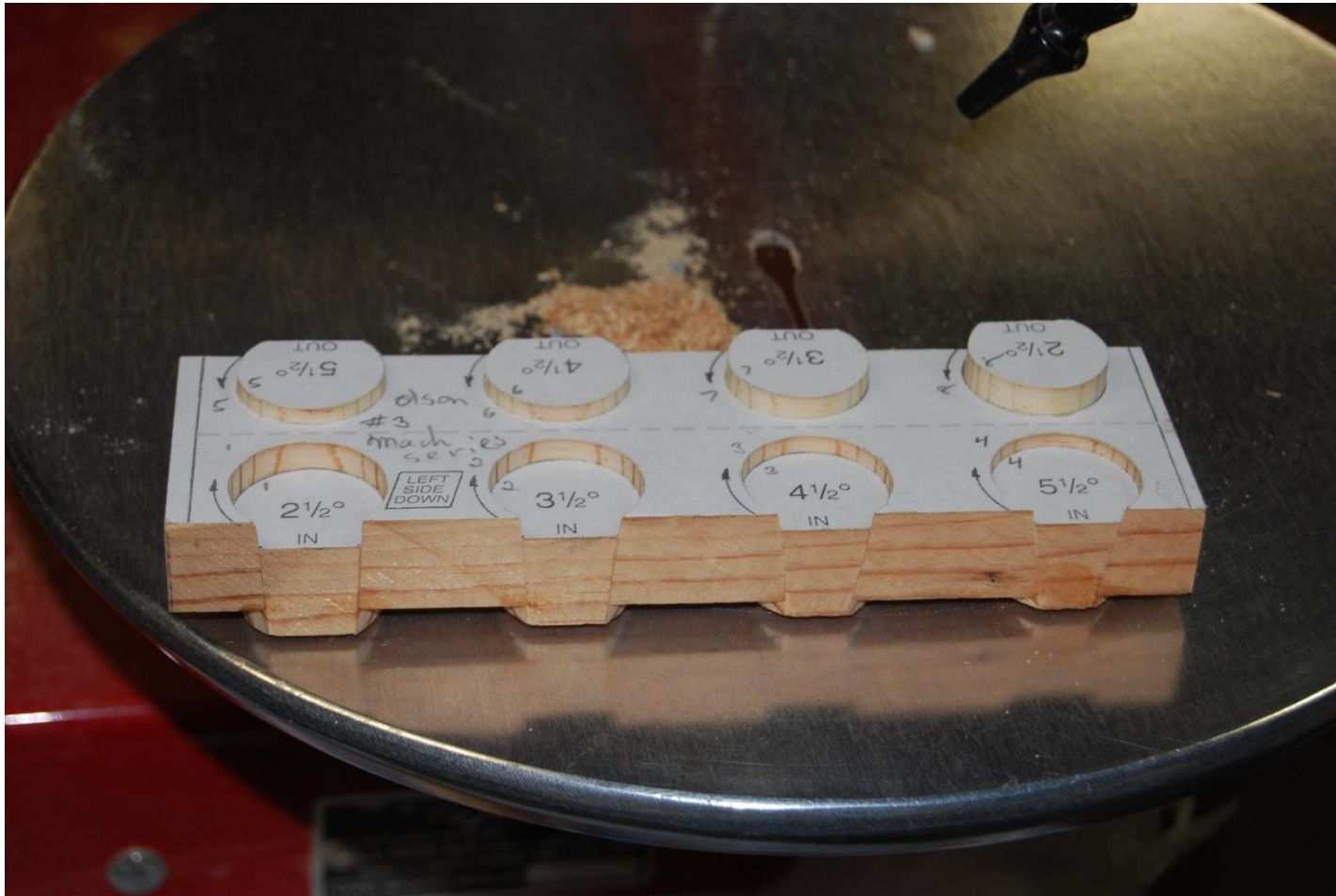


Enough babble

Lets get to the  
Fun Stuff

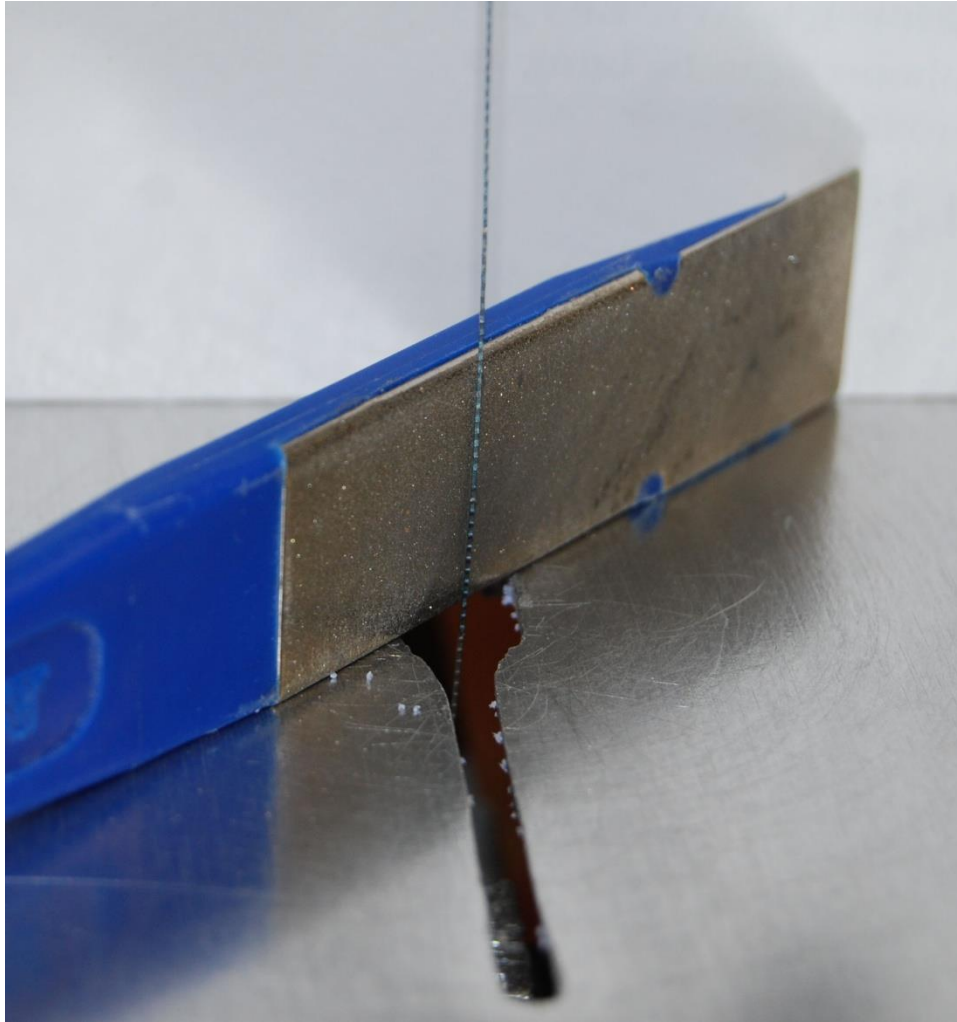
# Reference cuts pattern @

[HTTP://bit.ly/fj9fe](http://bit.ly/fj9fe)



- This reference cut is very helpful.
- Make note of the blade you used, it makes a difference.
- It shows the direction the blade is cutting and the effect that it has.

## Another helpful tip



- Round over the back edges of the blade it helps when making tight turns. **Done with the saw running. Stay away from the teeth.**

# Wood and pattern



# Blue tape and Spray Adhesive



The pencil is **Important, it is** used to mark the direction of cut

# Wood taped together



Blue painters tape

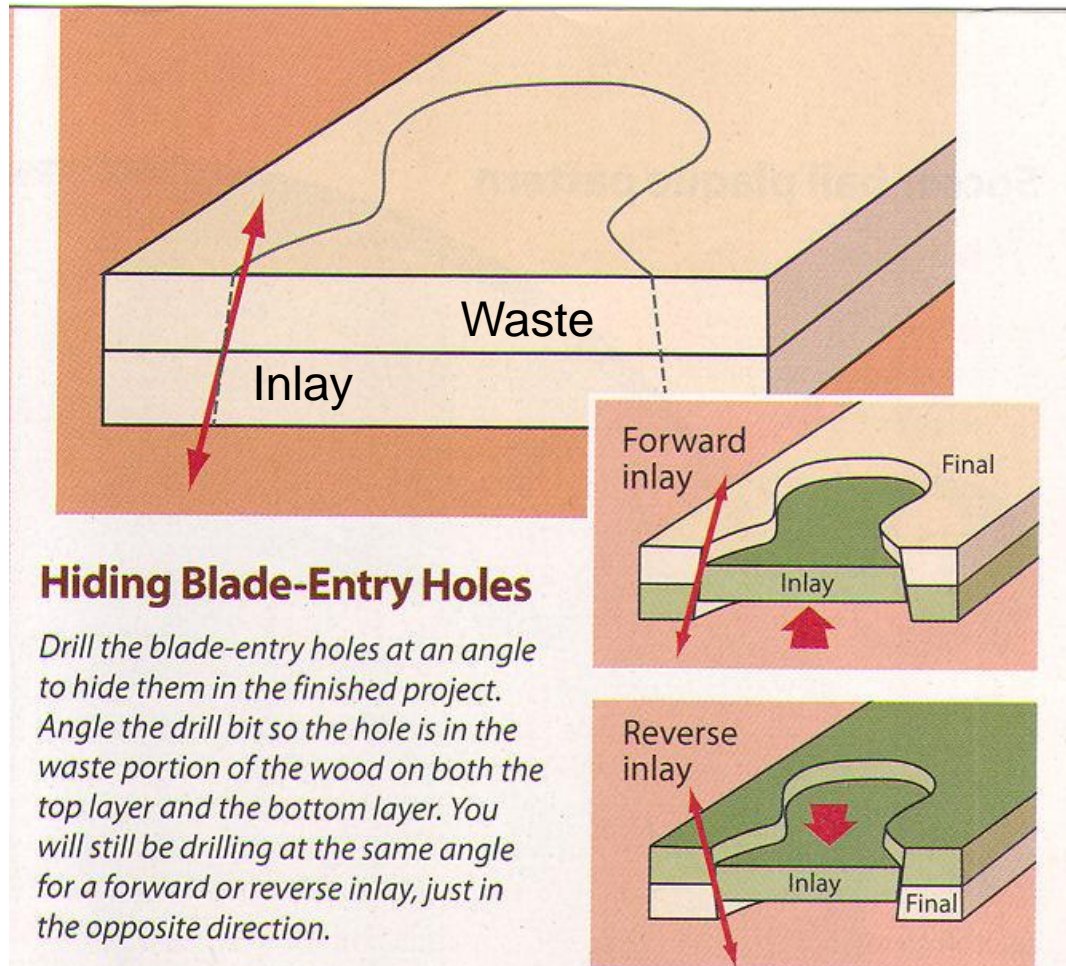
Pattern glued on





# How it works

(slide from SSWC magazine Fall 2009  
reprinted with their permission.)



Left side of  
table is down.

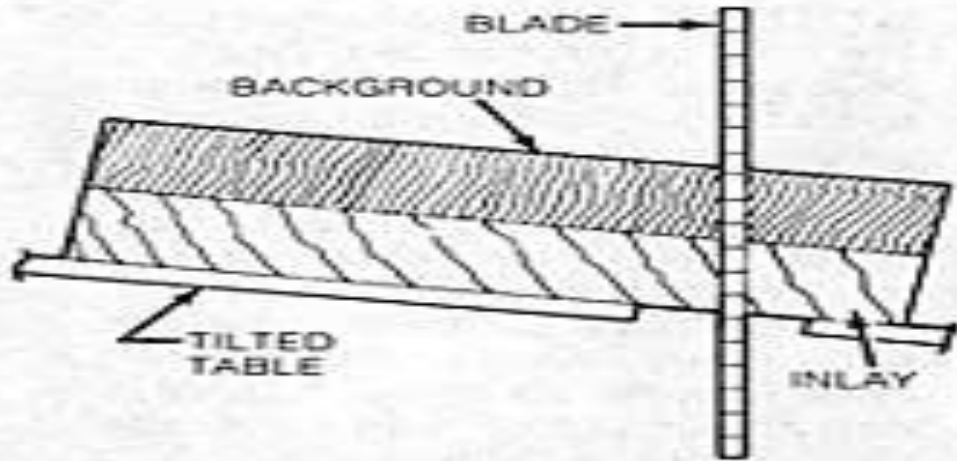
## Hiding Blade-Entry Holes

*Drill the blade-entry holes at an angle to hide them in the finished project. Angle the drill bit so the hole is in the waste portion of the wood on both the top layer and the bottom layer. You will still be drilling at the same angle for a forward or reverse inlay, just in the opposite direction.*

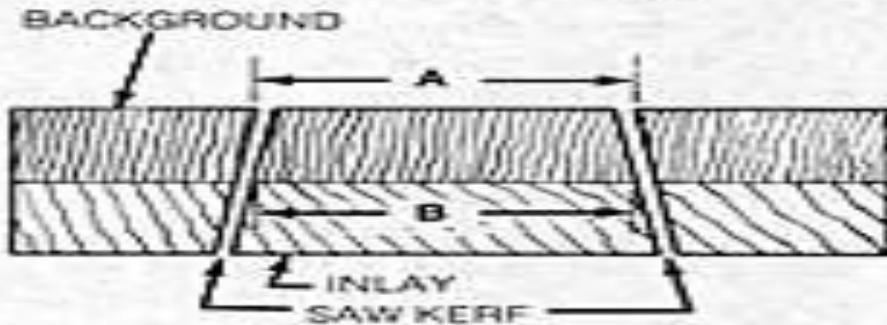
Wood CW

Wood CCW

# Another perspective.



The **wood** is rotating CC



THE BOTTOM  
INLAY INSERTED FROM

- **Consider which way the table will tilt and which direction the stock will be rotated during the cut. Either direction will work as long as you plan it that way. For example, tilting the table left side down and rotating the stock clockwise will make the lower piece fit into the upper one. Tilting left and rotating the stock counterclockwise will make the upper piece fit into the lower one.**

# Home made Tapered block to set drill angle



It helps eliminate the drill hole in the final piece

4

# Drilling hole

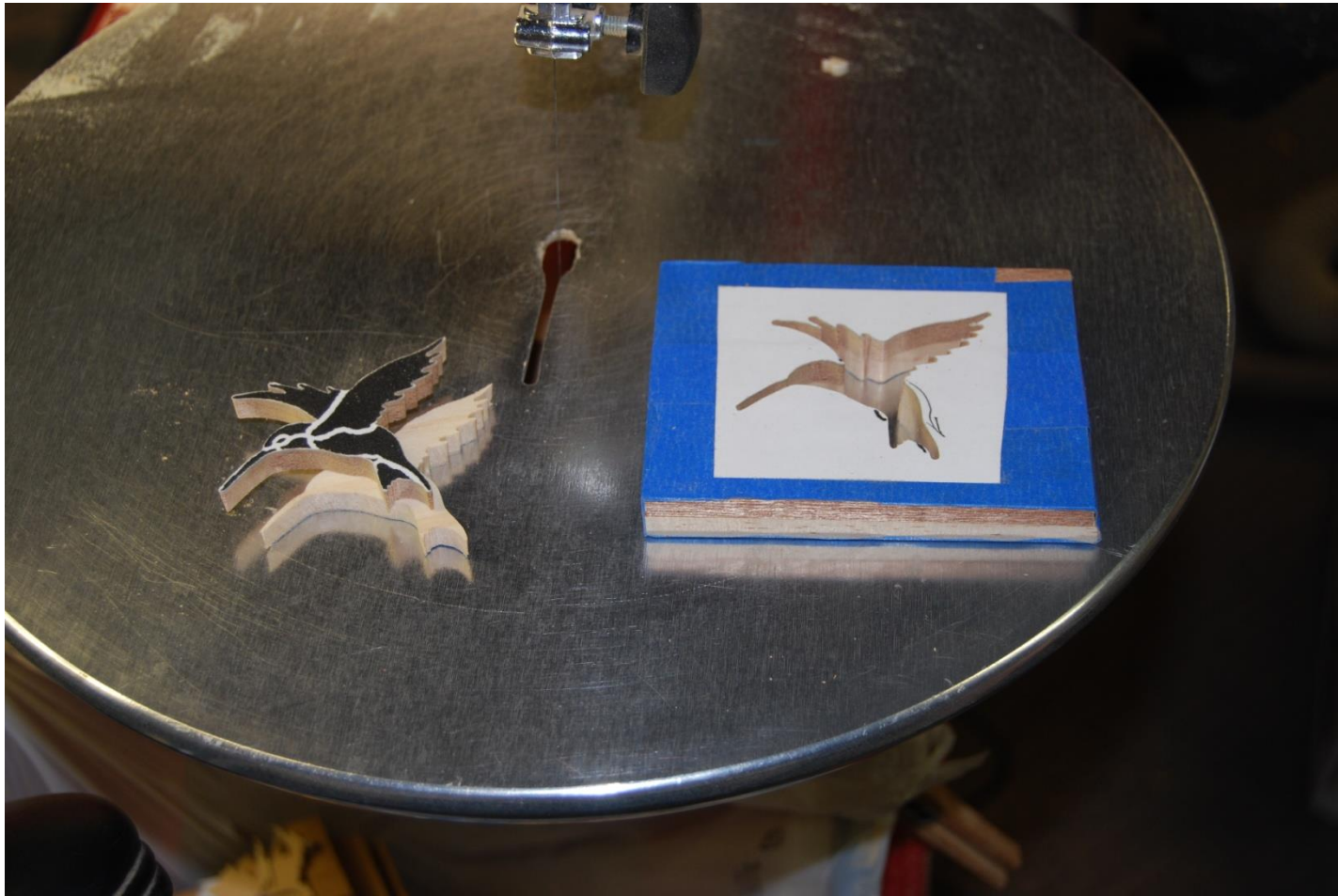


# Cutting with left side down.



I cut CW in this case so the top piece drops into the bottom.  
(The wood is turned Counter Clockwise)

# Pieces after cutting

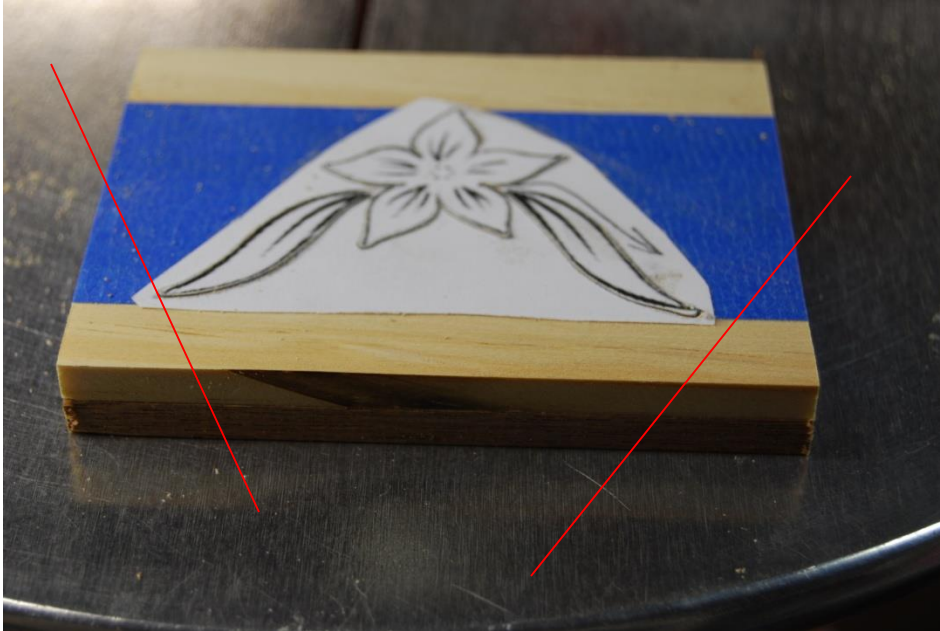


Top falls into bottom





# A different pattern



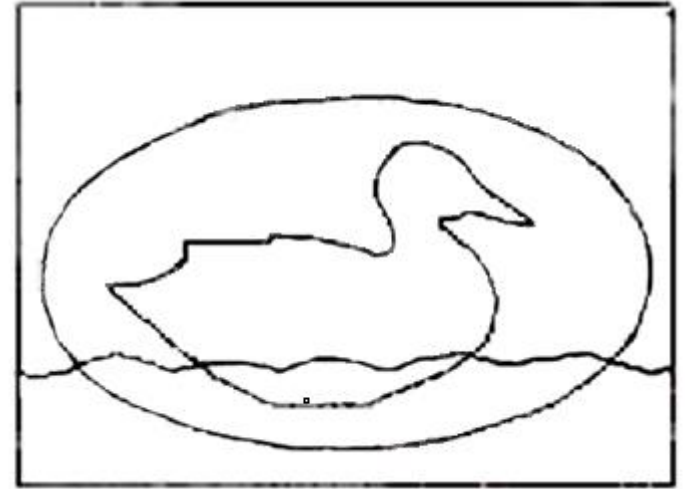
Note: here I have the light wood on top still cutting in a CC direction so the end result will be a light inlay in a dark background.

# The end result of the last slide



- I enhanced this a bit with some wood burning.
- The contrast here is minimal. I would normally have used wood with more contrast i.e. flower yellow heart, leaves poplar, background maple.

# Another design



# Some samples



- Just a short plug for the
  - Long Island Woodworking Club
    - and the
    - Li Scrollsaw Association (L.I.S.A.)
- I have been scrolling for about 9 years and without the expertise and guidance from our club members I would not be able to do what I do in such a short time.
- An of course I need to ***thank my wife*** for supporting me and all of my hobbies.

# In Summary

- Take and cut perfectly good wood to size
- Tape together
- Drill holes
- Cut
  - Break blades, make sawdust, Break blades
  - Swear a lot because you cut in the wrong direction
- Decorator firewood
- Do it again till you get it right
- In reality, once you have done it you realize it is pretty easy.

END