



International Association of Penturners

Segmenting Pen Blanks

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Segmenting Pen Blanks - My Journey So Far.

Some folks have expressed interest in how I go about making the patterns on my blanks and segmenting them into a pen blank.

Firstly, I will explain where my segmenting patterns come from, what influences them, and different helps that I found along the way.

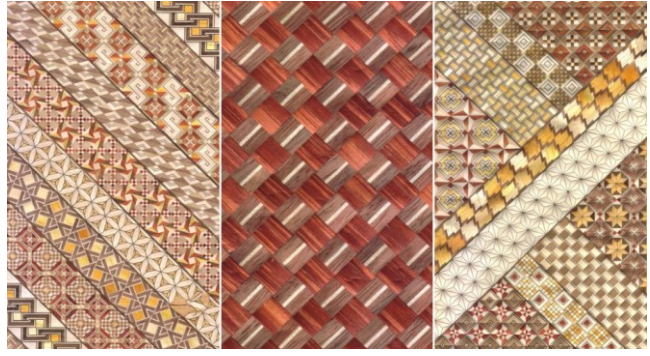
Included in those helps was reading the different articles on segmenting found in the IAP library, especially those written by Mark. [@mark_james](#)



Here are some examples commonly found on the Internet. These are Patterns that I find interesting and try to emulate the following.

- Inlay Banding
- Wooden Floor Borders
- Yosegi Zaiku
- Tunbridge Ware
- Guitar purfling
- 3D Tile Patterns





Here are some beautiful inlaid boxes for inspiration.



In the early days I cut the components larger to practice cutting accurately and uniformly, then reducing the sizes to fit a pen. **Care is needed when working with such tiny pieces.**

Picture below shows my early attempts.



When I was able to reduce the component parts to fit on a pen, the problem was then that the 'underside' was not very attractive in most cases.



Front Side Examples 1



Back Side Examples 1



Front Side Examples 2



Back Side Examples 2

Notice, a pen blank can be made to look attractive from all angles in a number of ways. Firstly, reduce the size of the pattern to fit. **Again, with small pieces, safety first at all times.**



Incorporate a pattern within a 'window'.

Here's an example of a glue up of one segmented pen blank.



Shapes can be cut on the table saw. Once it is set up it will cut these triangles without further adjustment.

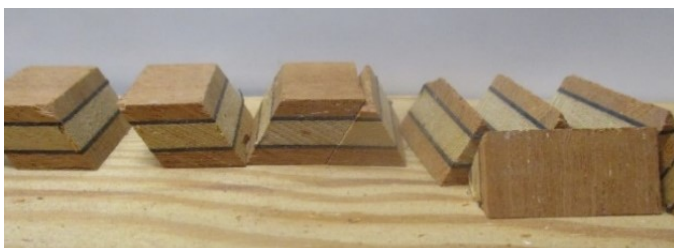
Below, I display the setup of cutting segmented blanks with mostly equilateral triangles and trapezoids.

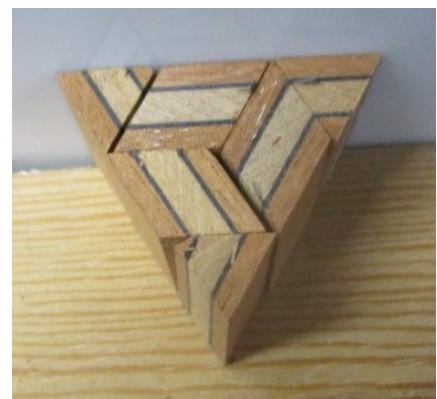
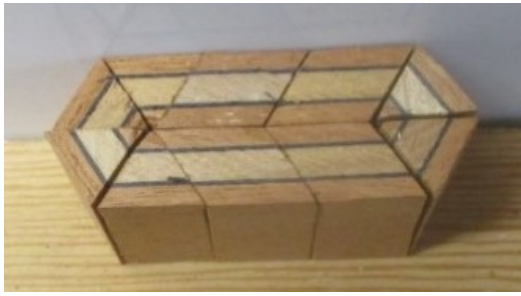
Using a miter gauge or sled these 2 photos show my set up that I use to cut the equilateral triangles.



Again, with small pieces, safety first at all times

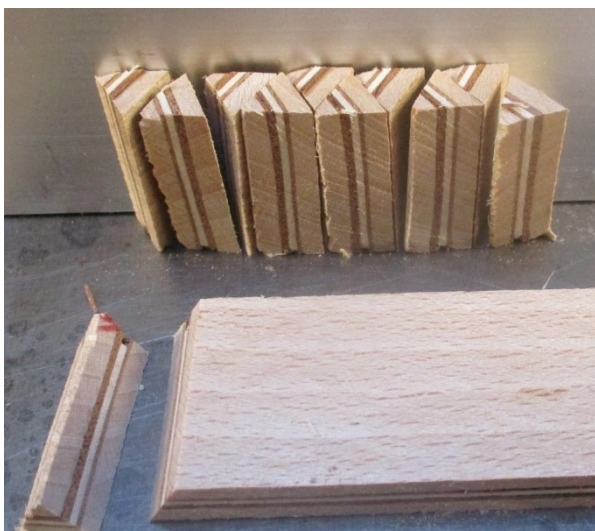
Here are some patterns which can be achieved with mostly simple equilateral triangles.





As you can see above, there are many patterns which can be made by just using equilateral triangles.

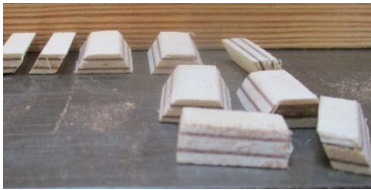
The following 3 photographs show these simple equilateral triangles, the blank and the completed pen.



Completed blanks composed mostly of triangles.



Here are 3 construction process photographs along with the finished pen.



Here are some additional completed pens.

