

## BASKET ILLUSIONS WORKSHOP

Larry Linford and Michael Alguire  
New Mexico Woodturners  
September 3, 2016.

### I. Introduction:

The basket illusion process replicates coiled baskets, not woven baskets.

Completed examples

Cautions: (Eyesight, steadiness of hands, time.)

This presentation based on the teachings of Harvey Meyer (harveymeyer.com & YouTube)

### II. First Step: Selecting the design to be inked after turning

This will determine the number of rings or beads and the number of burns in each bead. Create your own, or consult books, Internet, pottery, etc. Historical, cultural (i.e., Native American), contemporary designs

### III. Work up the design on graph paper

For **platter** style baskets, circular graph paper can be obtained free online at (<http://incompetech.com/graphpaper/polar/>). You can select how many concentric rings (beads) and how many spokes (divisions) you want, then print it out. You can even save each sample you create to your computer to print out any time you want.

Flat grid graph paper for vessels and hollow forms

### IV. Turn the basket & cut the beads

Mount the blank (with a screw chuck or mount between centers) and bring up the tail stock and true the blank bottom and edge (make it flat and circular).

Shape the bottom into a shallow bowl – keep it simple (no ogee curves). Decide on a recess or a tenon for reverse mounting. Create one or the other as soon as the profile is defined. Leave some excess thickness to the blank near the rim, as you are likely to have to remove material from the opposite face when you eventually true it up

*Note: A tenon will reduce the outside depth of your basket by the depth of the tenon (up to ¼"). This can be important on platter-style baskets depending on the thickness of your blank. On the other hand, once you cut a recess for mounting, you cannot add additional rings or beads, so your exterior design may appear incomplete.*

Cut the bottom (external) beads

Select the bead size as dictated by your design. (Make sure you will have enough rings or beads to accommodate your design.)

Start at the outside rim and work toward center. (Rim bead can be of a different width.)

Best to lightly score all beads first, then go back and cut them, using score marks as guide

Burn the valleys between the beads. Use old sandpaper with stiff backing. Pieces of Formica or other stiff but flexible materials will also work. "Renew" the edges of the sandpaper frequently. Use the fastest lathe speed possible

*Note: If you used a tenon, you can now reduce its diameter and add more beads in the center if necessary to allow the full design to fit.*

Cut the top (internal) beads

Reverse mount, and bring up the tail stock. True the top of the blank

Begin thinning the top (interior), following the contour established by the exterior surface. **Important:** keep thickness about  $\frac{1}{4}$ ". Measure frequently with calipers.

Starting with the rim, thin 1"-2" toward the center, then stop and cut the beads in that section and burn the valleys. Proceed another inch or two, and cut the beads, etc. Leave as much mass as possible in center.

*NOTE: Best to bead the entire basket at once without any lengthy time-outs. Cutting clean beads can be difficult if the wood has a chance to warp even slightly due to drying.*

## V. Mark the "spokes"

Note: The spokes divide each ring into segments called "cells." The number of spokes will be determined by the design you've chosen. Most designs incorporate repeating elements. 144 divisions is the most versatile number of spokes, because it is divisible by 2, 4, 6, 8, 9, 12, etc. repeats.

Use platform, indexing jig and marking jig. Align the top edge of the indexing jig and the pencil tip with your live center peg in your tail stock. Use a dark but hard pencil.

*Note: You can skip marking spokes with the jig (do every 2<sup>nd</sup> or 4<sup>th</sup> or 5<sup>th</sup> spoke, and eyeball in the rest in between them once the basket is off the lathe.*

Mark both sides of basket at the same time (front-back, front-back, front-back) as this keeps front & back designs aligned. Sharpen pencil as needed, but if you do, always re-align it with the live center in the tail stock.

*Note: Don't mark the rim or the centermost 6 to 8 beads. Marking the rim bead will limit your decoration options later. And most designs look fine without burning the center rings. But if you want them burned, use fewer spokes (freehand) or they will blend together in a blackened mass. Just eyeball these when you burn them.*

If you used a tenon for reverse mounting, re-reverse the basket and remove it or reduce it's depth upon completion of the beading.

## **VI. Burn the cells**

Note: Only two brands of pens make the "fish scale" or beading pens: Razertip & Optima. Both are available on line.

Remove the basket from the lathe. Make sure your hands are clean and dry. Handle the marked surfaces as little as possible to avoid smearing or smudging your spokes.

If you can, try the burner on a piece of scrap wood to establish optimum heat setting. This will vary quite a bit from one wood to another. This will also allow you to decide how long to hold the burner to the wood.

Burn each spoke on each ring (bead). (Note: a basket with 40 beads and 150 spokes will require 6000 burns on each face for a total of 12,000.)

If you are right handed, move to the left as you progress. It's better to have your hand rest on the burned portion of the surface than rubbing on the pencil spokes. Likewise, if you're left handed, progress to the right.

Don't hurry! Take lots of breaks. Long breaks. Do not do this stage if you are fatigued.

Burn the rim last. This will give you a place to hold on while you burn the rest.

## **VII. Inking the design**

A. Ink pens:

**Faber Castell India PITT Artist Pens** are best. Three colors come in multiple sizes: Black, sanguine and sepia for Indian designs. Use brush (B), medium (M) and extra super fine (XF). Black even comes in SX (super extra fine).

**Pigma Micron Pens** are also very good and come in multiple tip sizes (generally 01 to 05 work best) and colors.

Limited quantities and varieties of the PITT and Micron pens are available locally at Artisan (3017 Monte Vista Blvd) and the UNM Bookstore. A far better supply is online at Dick Blick.com

**Sharpies:** Harvey Meyer says don't use Sharpies these because they will run when you apply the finish. However, if you use spray on polyurethane and apply it in very light coats, Sharpies will work **on some woods**. This is great, because Sharpies are relatively cheap and more readily available. The best local selection is at UNM Bookstore, though a better source may be Dick Blick online.

B. Applying the ink

Follow the design you laid out on the graph paper. Each cell on the graph paper should match a cell on your bowl.

First place a small dot on each cell to be colored. If you are using a dark ink, this can be done with a pencil or even the ink you will be using. If you are using a light color, use only the ink you will be coloring the cell with (or the dot may show through the ink).

Use the thicker tip pens to color the top surface of each cell. Use the finest tip you can for the sides of the cells, getting down in the between cells.

Be careful not to let any color get onto adjacent cells.

**VII. The Rim**

You can decide ahead of time how you want the rim to look, or decide at the last minute. Options include continuing design onto rim, spiraling, herringbone,

**VII. Correcting errors.**

You WILL occasionally ink a wrong segment. You can scrape or shave that cell with an Exacto knife to get rid of the ink. Better to do this to small dot than to fully inked cell. But if the cell has been inked, the sooner you scrape, the better. Scrape gently, gradually removing the ink. (This can also work, though generally not as successfully, to "erase" errant burn marks.)

**VIII. Finishing: SPRAY ONLY**

Real baskets are not shiny; use a satin or matt finish

Minwax spray satin polyurethane works great, even with Magic Markers. *Note: Ink can vary from color to color, so you should test your finish on any new color you decide to use.*

First few coats should be **very** light, with sufficient drying time in between. Subsequent coats can be heavier – but never enough to run.

Be sure to coat top (interior), bottom (exterior) and rim.

