

A Turned Gavel

by Gary Landry

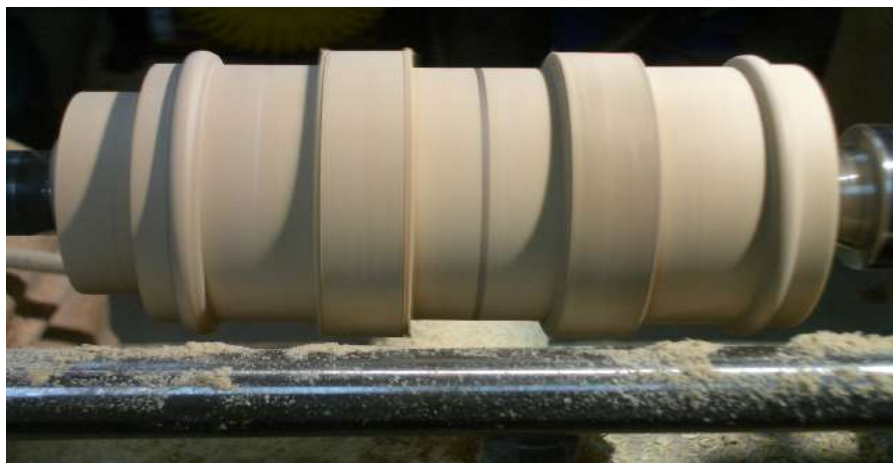
Title: "Holes in the Law"

Okay, here is my effort in making a gavel. Head is spalted white birch with worm holes and the handle is wenge and birds eye maple, although when turned I can only see two or three birds eyes. Title is a reference to the wormholes and the fact judges use gavels in court. Finish is sprayed on gloss lacquer.

I started out with a 2.25 by 2.25 by 6 inch billet that had been in my shop for several years. Note the spalting and worm holes. I opted to turn it between centres instead of using a chuck.



I turned it round, marked out the transitions, turned the rough shape and marked centre for the handle hole. I then selected where I wanted to place the handle and, using an awl marked a point on the line that would survive sanding efforts.



I then turned the beads and coves and refined the shape. I also started to turn the face ends with a slightly crowned profile. Sanding was done up to 400 grit. The end tenons were reduced as much as possible and then cut free with a saw. Worm holes are more easily seen in this photo as well as the awl mark indicating the location for

the handle hole.



I then started on the handle. I cut a 1 by 1 by 10 inch piece of wenge, mounted it between centres and eventually turned it round over most of its' length. Wenge is not a fun wood to turn but its' colour is quite spectacular, bordering on ebony in likeness.



When turned, it seemed to me that the handle was feeling a bit narrow in my hand. So I decided to add some thickness on one end by adding a piece of birds eye maple. I thought the contrasting wood would make an interesting feature. To do this I made sure the end to receive the maple was exactly 3/4 inch in diameter for about 4 inches of length. Then, on a drill press, I drilled a 3/4 inch hole through the birds eye maple and subsequently epoxied it onto the wenge shaft.



After curing the assembly was mounted between centres and the square end turned to exactly 1/2 inch. This assembly was then mounted into a 1/2 inch collet chuck and turned to final shape. Sanding to 400 grit was carried out and the handle set aside until it was to be epoxied into the head.

It was now time to bore the hole in the head to receive the handle. I knew that it was imperative to drill a hole that would be 90 degrees to the head but doing that on a round surface would require extra effort and care. First step was to install a centre bit into my drill press and the second step was to position the head in some sort of a jig to place the awl mark directly under the centre bit. I opted to use my pen drilling vise to act as the jig and used some paper towel to cushion the surface from the sharp edges. I aligned the head until the point of the centre bit touched the awl mark at 'top dead centre', taped the head to the jig and secured the jig to the drill press table. The centre bit was changed for a 1/2 inch Forstner bit and a hole drilled just over 1 inch deep.



When the hole was done, the head was completed by manually removing the leftovers of the tenons from both faces (crowned ends). A carving knife was used for the majority of the rough work. Then a sanding pad in a Jacob chuck was installed in the Morse taper of the headstock. This made the process much easier because I

could use both my hands to control the piece. The faces were sanded through the grits to 400.

The tenon on the handle was split by sawing a kerf most of the way down it and a small wedge was made to fit inside the kerf. Epoxy was mixed and smeared in the hole, on the handle tenon, in the kerf and over the wedge. The handle was then inserted all the way into the hole forcing the wedge to push into the kerf and expand the diameter of the tenon to fully contact the walls of the hole. This was to ensure maximum holding power and to keep the handle inside the hole, even after many 'raps' of the gavel.

Finishing was done by applying multiple coats of a gloss spray lacquer with hand sanding using 400 grit between each coat.

Final results are shown below.

