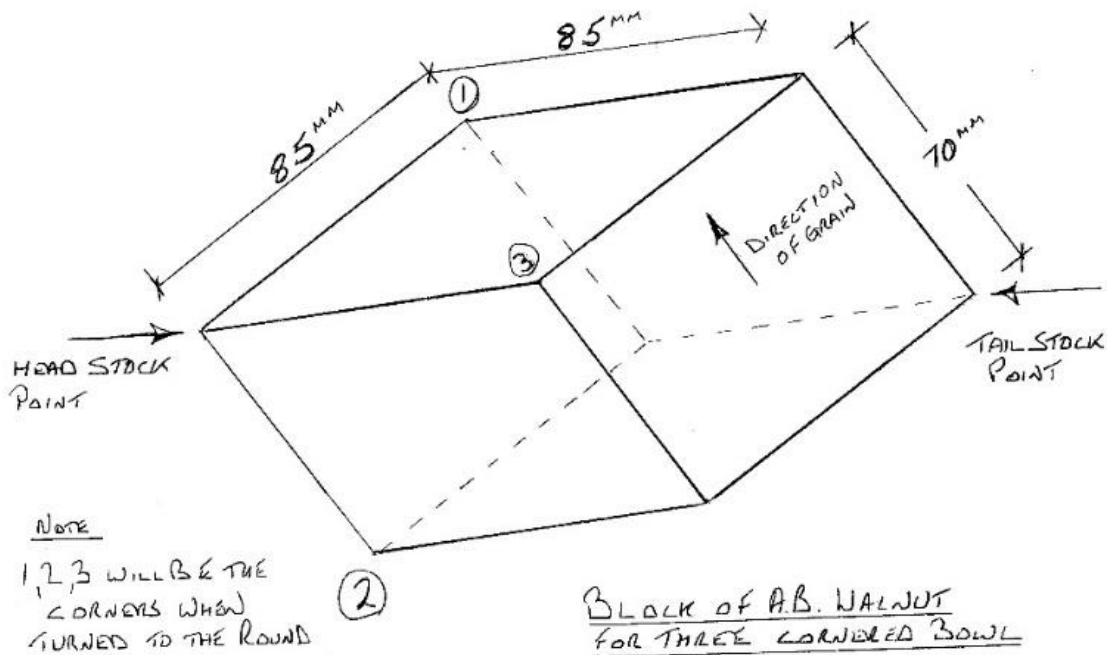


Three-Point Bowl by Ian Elliott

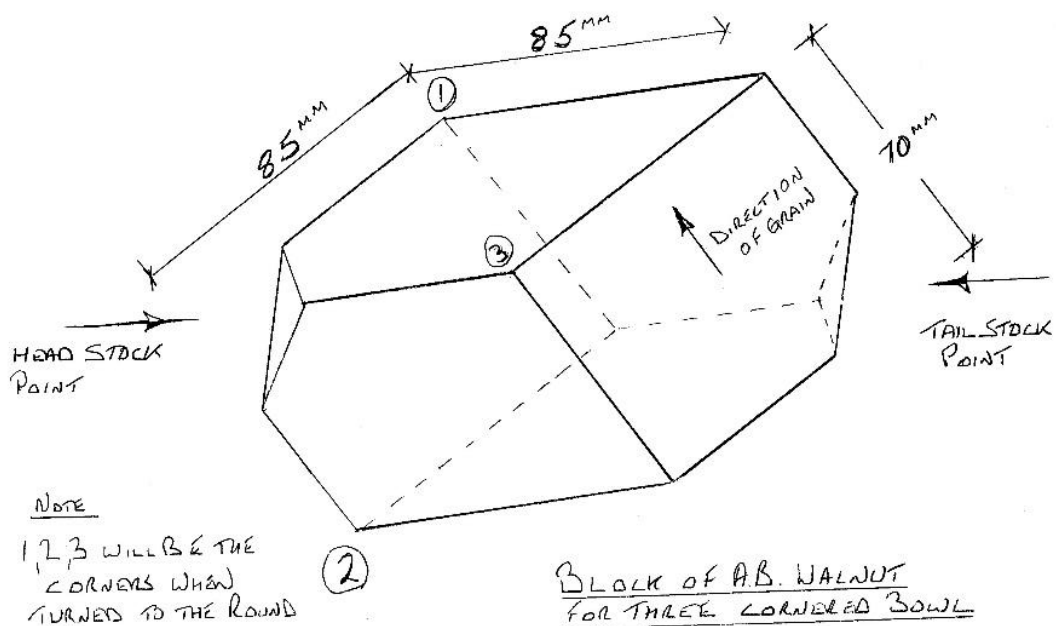
It looks like I am still in that experimental mode that I was in last week! I went into my shed yesterday with no idea what I was going to do! Picked up at random a couple of small pieces of timber and looked at what they could be. One piece was American Black Walnut 70mm long x 85mm square, first thought for a piece that size was a box; it has been a while since I have made a box. Then whilst turning it around in my hands I remembered a demonstration a few years ago of a three-point bowl, I think it was Martin Pidgen. The only thing was I could visualize what the finished item should look like but could not remember how it was done.

The first thing to work out was where it had to be held on the lathe and where the three corners of the cube should be to make the three points on the finished bowl. It was a case of holding the piece in my hands and rotating it till I worked it out then marking all five points (see sketch 1). I now needed flats rather than points at the holding points, I set the band saw table to 45° and the mitre fence/sledge also to 45° but when I started to cut the cut was not following the lines I had marked off. So, I finished of sawing by hand and finishing with the disk sander on the lathe. (see sketch 2).



Sketch 1

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Sketch 2

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I drilled and used a screw chuck in the head stock and a live Steb centre in the tail stock. Started to shape the outside of the bowl down towards the tail stock and form a chucking point to be removed upon completion. The problem was as the piece was not a true cube, what should have been a chucking point was not turning out to be fully round, about 1/3rd of one side had not formed, so I had to take more timber away. Adding to the problem my 50mm jaws were too big and pin jaws too small of a tenon, the best diameter I could achieve was 40mm. So, it had to be a mortice! pin jaws require 30mm that left only 5mm walls. Turned and finished the outside with sanding sealer, Yorkshire grit and Hampshire Sheen.

Re-chucked and started turning the inside, there is quite a bit of timber to remove before you get into the bowl, as there is a cone shape sticking above the three points. Even though I was taking it steady, as I half expected the chucking point failed and the bowl finished up on the shed floor. At this point it was destined for the bin, but I never like to give up. It failed not only because the wall was thin but because there was quite a bit of short grain in the walls due to the odd direction of the grain. I added a jubilee clip around the outside of the chucking point and retried. Finished on the shed floor again! Luckily, I had not removed a lot of timber and could still access the original screw chuck hole without damaging the three points. So, I turned it back around re-chucked

slightly reshaped the outside removing the damaged chucking point. This time I went 10mm into the bowl with the chucking point which is the maximum for the pin jaws. This meant it was no longer a sacrificial chucking point and the wall thickness got greater the deeper the mortise became (see photograph below). Re-finished the outside of the bowl as before. Turned it around and this time hollowed the bowl out without further incident, though I was very careful as I was turning a lot of air at times.



Deeper
Chucking
point



I have added a
pen to give
you an idea of
size

The finished bowl is 50mm high with an 85mm opening between points on two of the openings but an 95mm opening between points on the third. This must be because the piece was not a true cube. A challenge if you have not already done so and fancy giving it a go! but make it bigger so, you get a better chucking point.

