

Part One. Introduction

How to make a child`s Windsor chair.

The child`s Windsor chairs illustrated in this book are completely new designs.

How to make a child`s Windsor chair sprang to life from the author`s latest project of creating a new design of Windsor chair for children. Once the design was finished, the book was not far behind, and found the light of day, partly, from wishing to improve on the few books available on the market on this subject.

As the prototype chair passed through the design trials, the indications were – this new design of Windsor chair could be viable, and from this, the Windsor chairs in the book eventually came into existence.

One of the many interesting things about making a fine Windsor chair is the wide range of skills involved. Not only for shaping and fixing it together, but also the extraordinary way the craftsman must switch and change from one skill to the next throughout the process.

Attributes like this, together with some artistic working and dedication, is what makes it possible to create an elegant piece of Windsor chair furniture, as shown in photo 1-1p.

Fortunately, the tradition of Windsor chair making - as passed down from generation to generation, is still practised today by crafts men and women, who keep the tradition going, devising and turning beautifully crafted mouldings to form a handsome Windsor chair – and all created from several pieces of timber cut from the plank.

Such an achievement is quite remarkable, and seems to amaze most people when viewing a completed Windsor chair.



Photo 1-1p. **Child`s Windsor side chair. The height from floor to top of the crest is 775mm. The top of the seat is 367mm from the floor.** The baluster spindles are Type A, turned with the cove and groove detail. The crest is European redwood (Scots pine), and the rest of the chair is yellow poplar (Tulip wood). The finish is three coats of Ronseal medium oak gloss.

Part One. Introduction

How to make a child's Windsor chair.

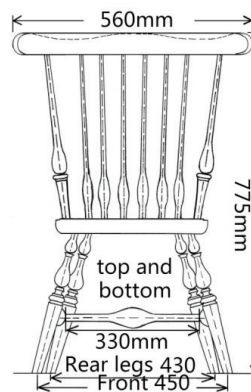


Figure 1-1. **Child's Windsor side chair.** Front elevation of the chair showing key dimensions.

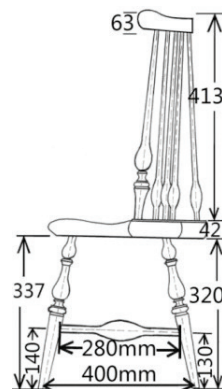


Figure 1-2. **Child's Windsor side chair.** Side elevation of the chair showing key dimensions.

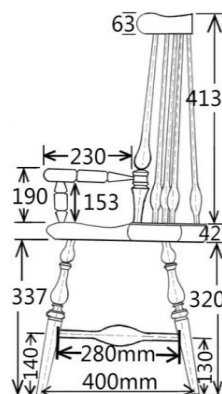


Figure 1-3. **Child's Windsor chair with arms.** Side elevation of the chair showing key dimensions, including dimensions for the arms.

Part 2. Woodturning.

Making the leg. Procedures for beginners and intermediate skills. **Chapter 2.**

(06) Continued... Stage 3B

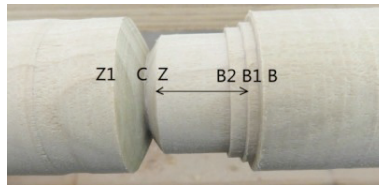


Photo 2-16p. **Stage 3B. Form the cove.** Shape the cove between B1 and Z. The cove's curvature is feather edged to the fillet at B1. On the other side, Z becomes a sharp edge as the wood is shaved away to form the cove.

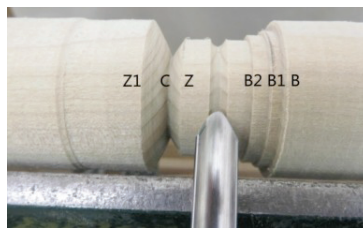


Photo 2-17p. **Stage 3B. Form the cove.** The first cut is made at the centre of the cove. The 10mm spindle gouge cuts a channel a few millimetres deep. The gouge is then withdrawn.

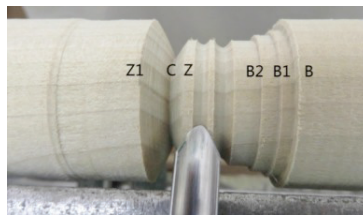


Photo 2-18p. **Stage 3B. Form the cove.** The second cut starts near Z, but not too close. Push the tip of the 10mm spindle gouge into the wood by a few millimetres. Then with a sweeping cut, move the gouge to the right and back to the centre of the cove.

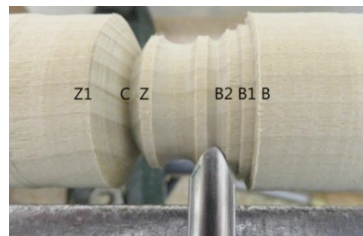


Photo 2-19p. **Stage 3B. Form the cove.** The third cut starts near B2. Push the tip of the gouge into the wood by a few millimetres. Again, with a sweeping cut, move the gouge to the left and back to the centre of the cove.

Part 2. Woodturning.

Making the leg. Procedures for beginners and intermediate skills. **Chapter 2.**

(014) Continued... Stage 3D



Photo 2-45p. **Stage 3D. Shape the scotia.** Shaping the scotia in progress.

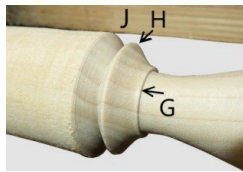


Photo 2-46p. **Stage 3D. Shape the scotia.** The scotia completed.

End of Stage 3D

Section E.

Form the bulb from J to A1, and the tenon at A to A1. See photo 2-47p and Figure 2-27.

The procedures involve five stages.

Stage 1E. Mark out the depth bands on the bulb, and form the tenon.

Stage 2E. Cut the depth bands.

Stage 3E. Trim the corners of the depth bands.

Stage 4E. Shave out the ridge.

Stage 5E. Trim the bulb to its finished diameters.

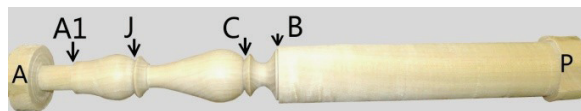


Photo 2-47p. **Form the bulb.** The workpiece after completing the bulb at J to A1.

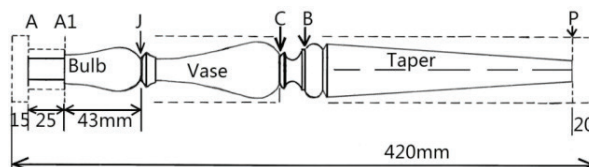


Figure 2-27. **Form the bulb.** Form the bulb at A1 to J, and the tenon at A to A1.

Part 3. Making the seat.

Child's Windsor chair. Cut trenches and form the hollow to a rough shape.

Chapter 5.

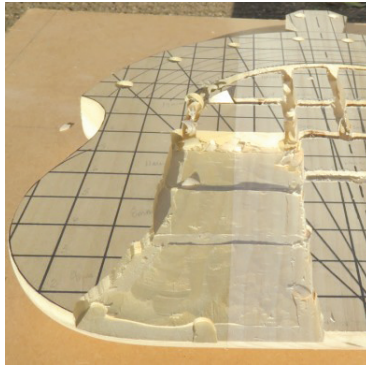


Photo 3-92p. **Stage 4N.** Removing the islands of wood on the left side in progress and are currently cut away up to GL8H. (Yellow poplar).

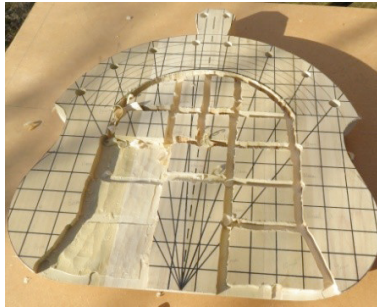


Photo 3-93p. **Stage 4N.** Another view of cutting away the islands of wood on the left side. (Yellow poplar).

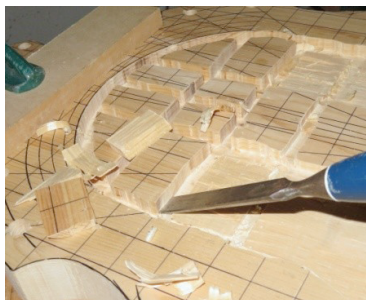


Photo 3-94p. **Stage 4N.** Cutting away the islands of wood to the middle/back area of the seat. (Yellow pine).

Part 3. Making the seat.

Shape the remaining areas of the seat. Child's Windsor chair. **Chapter 11.**



Photo 3-165p. The completed seat after final sanding. The 25mm flat top of the pommel at the front is retained for levelling the seat at the assembly stage.

Where to go from here.

1. Making the chair without arms.

In accordance with item 10 of Bar Chart A, the next step is, go to Part 5, The Assembly.

2. Making the chair with arms.

In accordance with item 11 of Bar Chart B, the next step is, go to making the arms in Part 2 Woodturning, chapter 5.

On completion of making the arms, go to Part 5, The Assembly.

Part 4. Making the crest.

Cut out the curvatures from the blank. Procedures for beginners and intermediate skills. **Chapter 2.**

(03) Continued... Stage 2B.

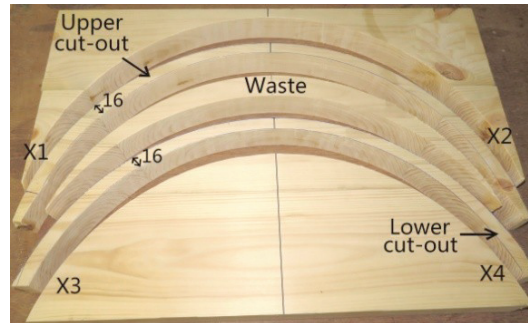


Photo 4-12p. **Stage 2B.** The cut-outs completed.



Photo 4-13p. **Stage 2B.** The Workpiece set up at the corner of the bench with the outside edge supported by a strut. Two screws secure the blank to the bench along the back edge. This arrangement allows all four cuts to be carried out without repositioning the workpiece.

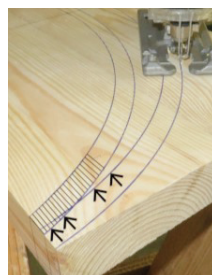


Photo 4-14p. **Stage 2B.** The jigsaw is shown cutting the outside curve of the upper cut-out. When the inside curve of the upper cut-out is cut, and the jigsaw blade reaches the clash point – as shown by the arrows and hatching – the hatched area takes precedence and is cut to the full width. The outside curvature, at the end shown by the arrows, is not cut to the full width but forms a slight taper, as shown in photo 4-16p.

Part 4. Making the crest.

Cut the wavy top to the crest. Child's Windsor chair. **Chapter 7.**



Photo 4-77p. Overhead view of the completed crest showing the slimline and splayed front face.



Photo 4-78p. Overhead view of the end of the completed crest showing the curved top and the splayed face.



Photo 4-79p. Front view of the end of the completed crest.

Part 5. The assembly.

Assembling the chair. Procedures for beginners and intermediate skills.

(d) The side chair.

- Install the 6 narrow spindles and 2 Type A baluster spindles in the seat.
- Measure the length of the bracing spindles 9 and 10 and fit these between the seat and the crest. See photo 5-114p.
- On completion of fitting the bracing spindles, go to chapter 7 of Part 4 Making the Crest and shape the wavy top of the crest.
- After completing the wavy top, glue the chair, and stain and varnish.

(e) The chair with arms.

- Install the 6 narrow spindles and 2 Type B baluster spindles in the seat.
- Measure the length of the bracing spindles 9 and 10 and fit these between the seat and the crest.
- Fit the arms and vertical supports.
- On completion of fitting the arms, go to chapter 7 of Part 4 Making the Crest and shape the wavy top of the crest.
- After completing the wavy top, glue the chair, and stain and varnish.

Section B. The procedures.

3. Cutting the legs to length.

(a) Reduce turning block P, shown hatched in Figure 5-4, to 18mm diameter on all four legs.

(b) Cut off turning block A.

(c) Fit the legs in the seat and cut these to length, 337mm long to the front legs and 320mm long to the back legs, both measurements are from the underside of the seat and are measured vertically, not along the angle of the leg. See Figure 5-1.

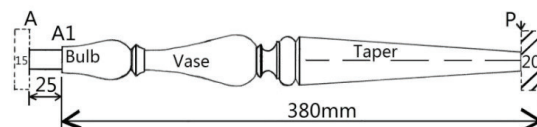


Figure 5-4. The hatched area at P is reduced to 18mm diameter.

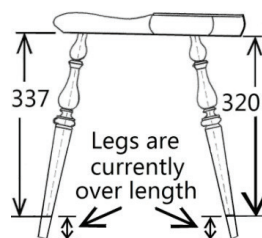


Figure 5-1. Side elevation of the seat and legs. The legs at the front are 337mm long, and 320mm to the back legs. Both measurements are vertical from the underside of the seat.

Part 5. The assembly.

Assembling the chair. Procedures for beginners and intermediate skills.

4. Fit the side stretchers.

- (a) Place the seat (with the legs fitted in the seat) on the bench. Check that the leg centres are 450mm to the front, 430mm back, and 400mm to the sides.
- (b) Mark the holes for the side stretchers in the front and back legs as shown in Figure 5-7. These are 140mm from the ground to the centre of the hole at the front legs, and 130mm to the centre of the hole at the back legs.
- (c) Drill 14mm diameter holes 20mm deep in the legs at the correct angle for the tenon of the side stretcher.
- (d) Measure the distance between the face of the front leg and the face of the opposing back leg, at the position of the drilled holes. This gives the shoulder to shoulder dimension for the side stretcher. Return the side stretcher to the lathe and cut the tenons to suit this measurement.
- (e) Fit the side stretchers to the legs.

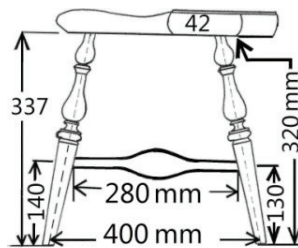


Figure 5-7. The height of the side stretcher is 140mm to the front legs from the floor to the centre of the hole and 130mm to the back legs.

5. Fit the cross stretcher.

- (a) Place the seat (with the legs fitted in the seat) on the bench. Check the leg centres and set these to 450mm front, 430mm back, and 400mm to the sides.
- (b) Mark the holes in the side stretchers for the cross stretcher, as shown in Figure 5-10 at B and O. The holes should be positioned central of the bulb on each stretcher.
- (c) Drill 14mm diameter holes 20mm deep in the side stretchers at the correct angle for the tenon of the cross stretcher.
- (d) Measure the distance between the face of the both side stretchers at the position of the holes. This gives the shoulder to shoulder length for the cross stretcher. Return the cross stretcher to the lathe and cut the tenons to suit this measurement.
- (e) Fit the cross stretcher to the side stretchers.