

Child's Chair



BALUSTER PLANS & DESIGNS

CONSTRUCTION OF THE MINI-CHAIR/PLANTSTAND

Cut out the STICKY LABEL SPINDLE TEMPLATES and fix to a piece of card or hardboard so that these can be used as a simple sight guide when turning the spindles. Also cut out the BOTTOM OF SEAT, TOP OF SEAT and BACKREST TEMPLATES as indicated and stick to pieces of card.

Turn the spindles to the sizes indicated on the SIZE SHEETS but leave the final sanding until you are ready to assemble the chair. Care should be taken when sizing the spigots as these will need to be a push fit into the drilled holes later.

Every effort should be made to match the shapes of the templates but slight anomalies are not critical as it is the overall shape that is important.

All the spigots on the spindles need to fit into a drilled hole so they must not taper.

Fit the SEAT BLANK to a screw chuck, turn to 9" diameter and square off the bottom and cut a recess to accept the expanding jaws of your chuck, then reverse the wood on the lathe and turn the front flat. Mark the centre of the seat with a pencil and remove from the lathe.

Draw a centre line around the whole of the seat (preferably with the grain of the wood) and fit the LEG TEMPLATE to the centre line and mark the front and back legs using a bradawl or a drawing pin. Turn the template over and mark the other two legs. Draw the sight lines across the bottom of the seat and use these as a guide to the drill holes for the legs.

Turn the seat over and do the same thing with the BACK SPINDLE TEMPLATE (note that this template is at 90 degrees to the leg template). Also mark all the sight lines on the wood exactly as on the template. Drill the back spindle holes using the sight lines as a guide.

Refit the seat and slightly 'hollow out' the centre to remove your first chuck recess (taking care to remove the temp marks) and round over the outside.

Drill the legs for the side spreaders and the side spreaders for the centre spreader taking care to cut at the correct angle. A V-block is advisable when drilling the spindles.

Fit the backrest blank to the lathe and flatten the back and turn to 10" diameter. Turn a recess for whichever chuck system you have in the bottom and a 1/4" x 1/4" groove in the bottom at 1 1/2" in from the outside. Using the BACKREST TEMPLATE mark and drill the holes for the back spindles. (If you drill two sets of holes, you will get two backrests for one turning.) Make sure the grain direction matches the seat with the long grain running across the back.

Reverse the disc and fit to your chuck. Cut an arc in the top to meet the groove in the bottom stopping about 1/8" short of parting off. Sand the back rest.

Cover bottom with adhesive tape and part off using a thin parting off tool. The adhesive tape will support the back while you turn off the lathe but try to judge and be quick.

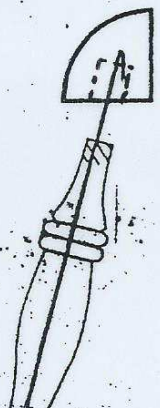
Cut the backrest in half, sand the inside curve on a drum sander and round over the ends.

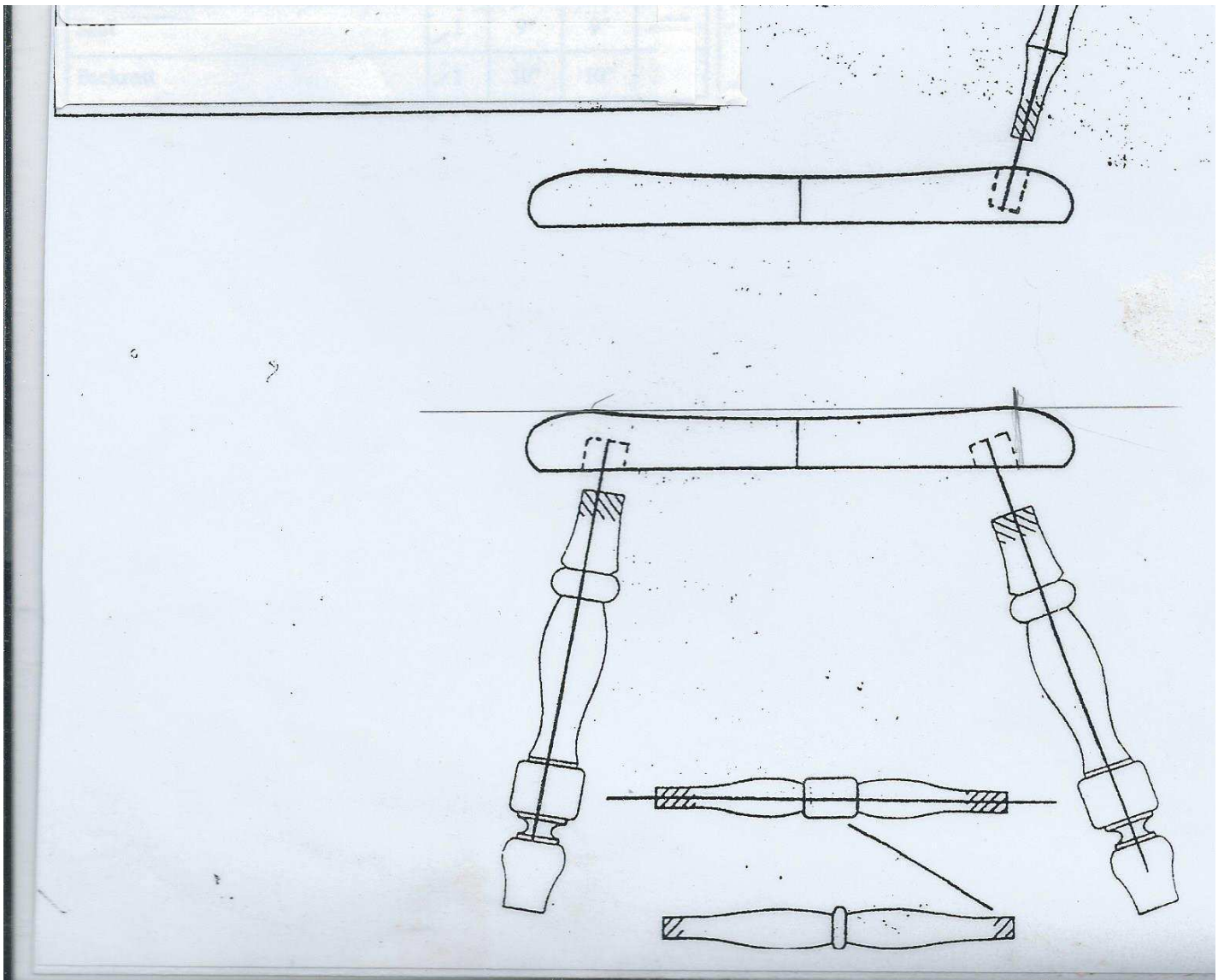
Fit the chair together and glue and cramp with tourniquets, webbing etc. Should the chair not fit perfectly, a little 'judicious' sanding of the spindles usually helps.

Finishing is up to the individual, either on or off the lathe, but should be hard wearing and care should be taken to knock off the spigots to ensure good glue joints.

Good luck.

MINI-CHAIR/PLANTSTAND

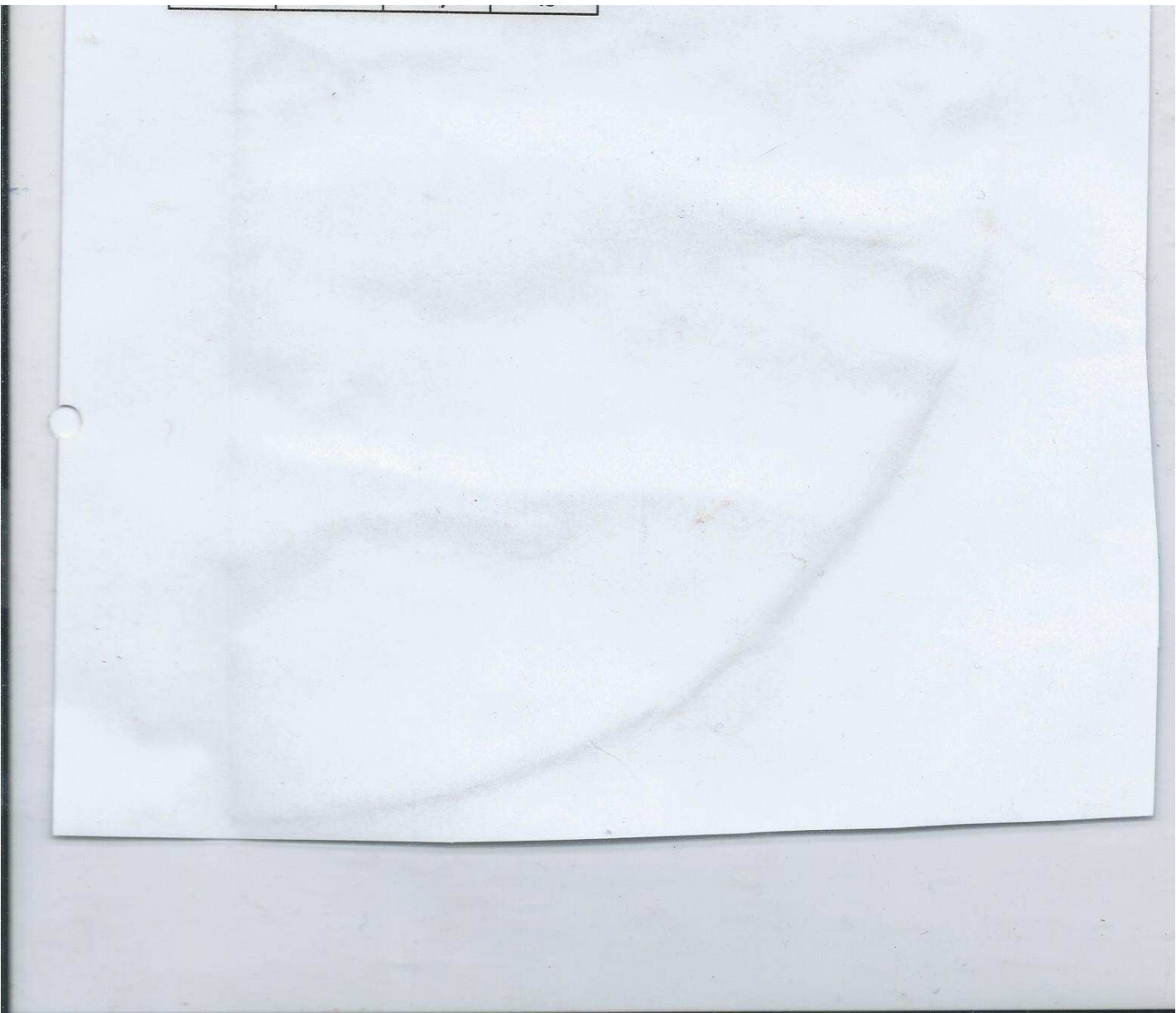




Chair Timber List

			No required	Length in Inches	Diameter in Inches
Legs		A	4	8	1 1/4
Side Spreaders		B	2	6 1/2	3/4
Centre Spreader		C	1	6 1/2	3/4
Centre Back Spindle		D	3	7	3/4
Side Back Spindles		E	2	7	1
Seat		F	1	9	1 1/8
Backrest		G	1	9	1 1/8

Totals	Length in Inches	Diameter in inches	Diameter in mm
A	36	1 3/4	45
B	15	1 1/4	33
C	7 1/2	1 1/4	33
D	24	1 1/4	33
E	15	1 3/4	45



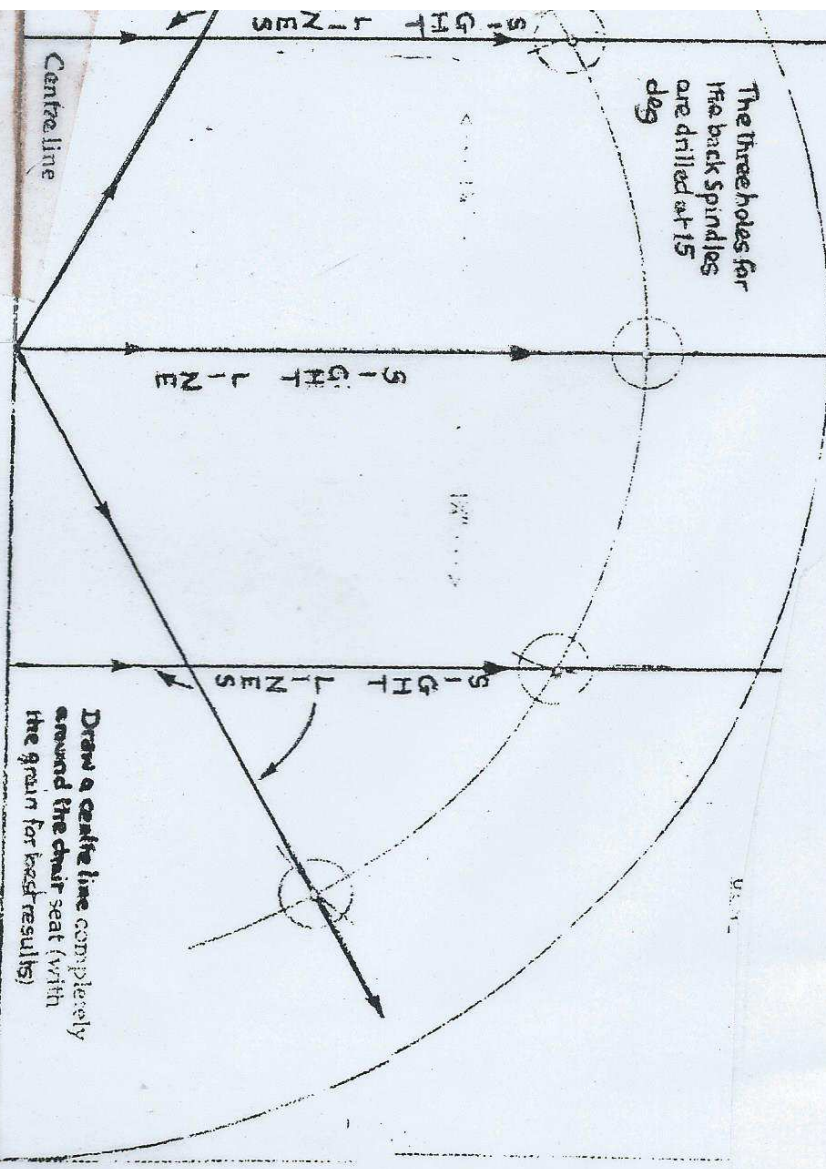
Chair Seat
The 1" back spindles are placed on the outside whilst the 1/2" are for the centre of the back
Chair Seat 2" diameter

Holes for side spindles are drilled at 10 deg
Cut round dotted line

Important - The centre line must be well spaced. Note that the sight lines for the from the actual centres.

Cut out the seat template and stick to a Using a drawing pin, centralise the ten (through the card) of the holes to be dr

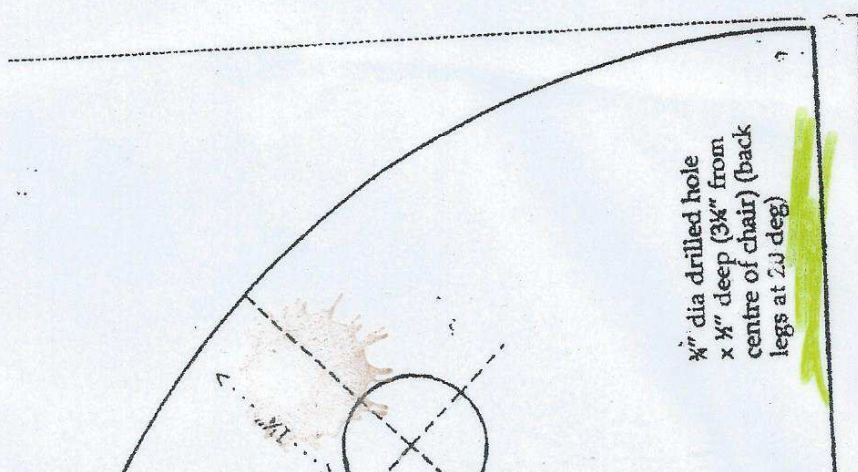
The three holes for the back spindles are drilled at 15 deg



Draw a centre line completely around the chair seat (with the grain for best results)

ap around" the whole of the chair seat so that the legs and the back spindles are correctly
e three centre spindles are at 90 deg to the centre line but the two outside ones are sighted
a piece of card.
nplate on top of the seat along the centre line, use more drawing pins to mark the positions
illed onto the seat.

3/8" dia drilled hole
x 1/2" deep (3/8" x 1/2")
from centre of chair (back
legs at 27 deg)



Bottom of Seat

Draw a centre line completely around the chair seat (with the grain for best results)

CENTRE LINE

Chair seat 9" diameter

Sight diagonally along lines
To find correct splay of legs
3/4"

Sight diagonally along lines
To find correct splay of legs
3/4"

3/4" dia drilled hole
x 1/2" deep (3/4" from
centre of chair) (front
legs at 10 deg)

Cut around dotted line

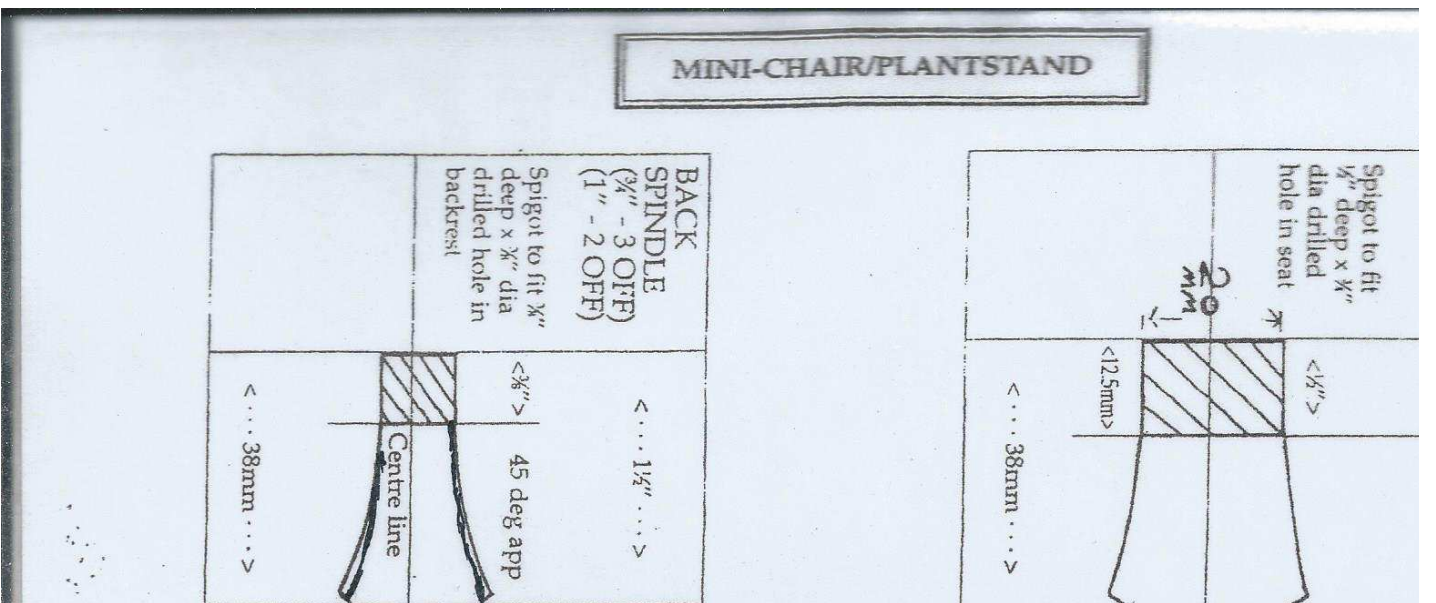
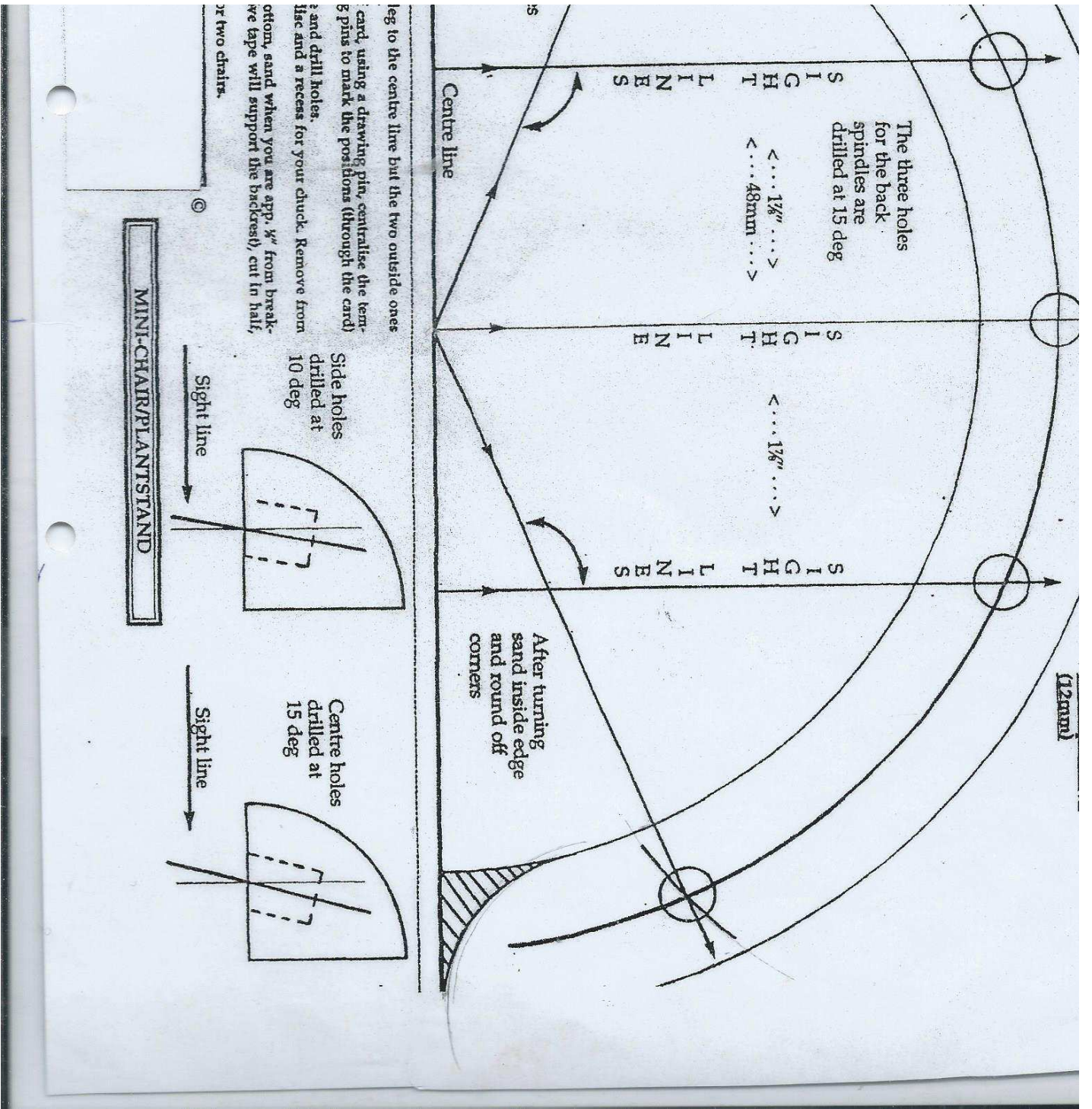
Note that the sight lines for the three centre spindles are at 90 degrees
RIGHTED from the actual centre spot.
TEMPLATE cut out the backrest template and stick to a piece of
plate along the centre line of the backrest then use more drawing
the holes to be drilled.
RECTIONS turn bottom flat and to 10" diameter use template
fit to lathe and turn a 3/8" x 3/8" groove 1/4" in from outside of
the and cover bottom with adhesive tape.
fit to lathe and turn face in an arc to meet the rebate in the b
g through. Break through with a thin parting tool (the adhesi
nd on drum sander and round over ends.
B. If you drill both halves you will have made the backrests f

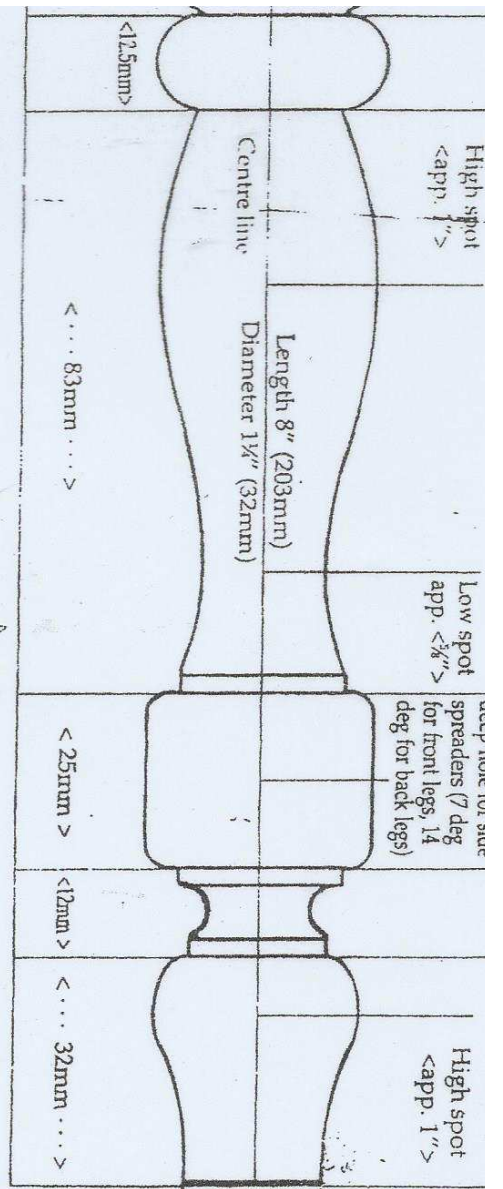
Cut around dotted line

Holes for side spindle
are drilled at 10 deg
3/8" (81mm) from
'outside centre' holes

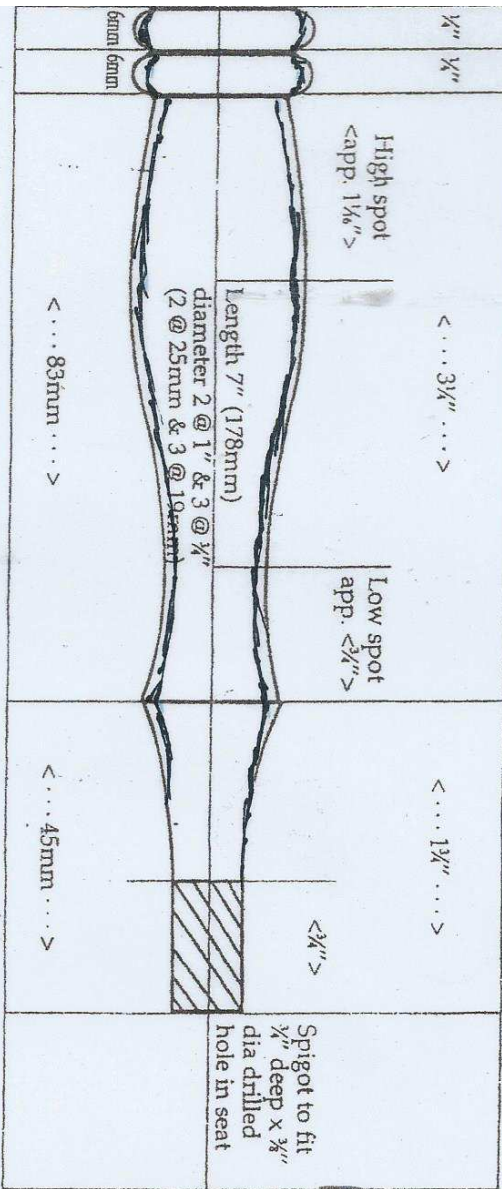
Backrest 10"
diameter x
1 1/2" thick
(254 x 29mm)

are placed on
the outside
whilst the
three 3/8" are
for the centre
of the back





A

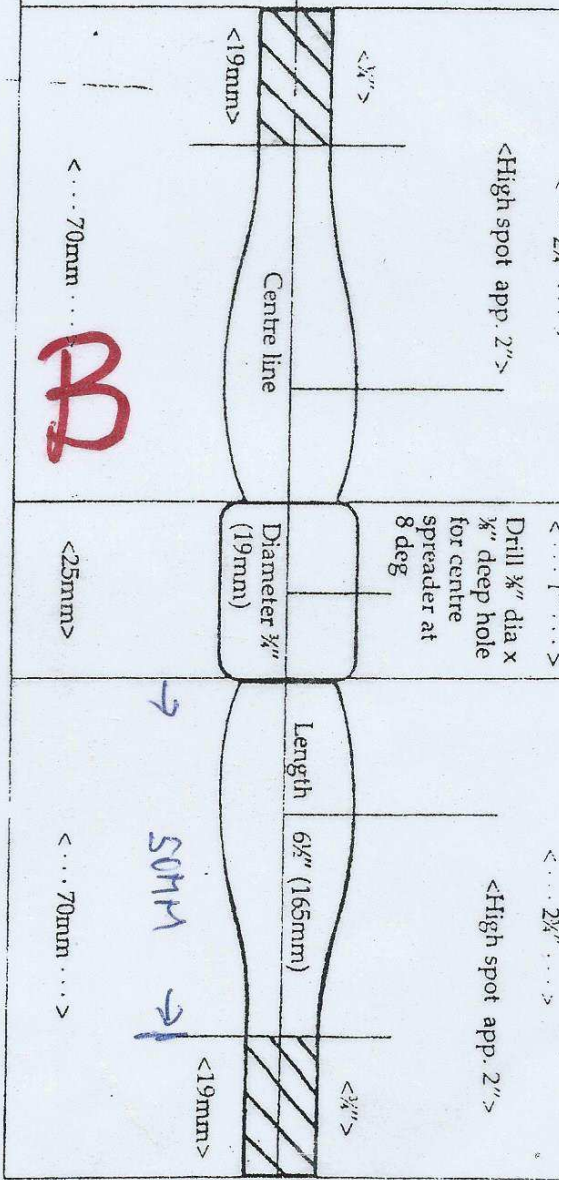


DA
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MINI-CHAIR/PLANTSTAND

SPREADER
2 OFF)

pigot either
nd to fit $\frac{1}{8}$ "
eep x $\frac{1}{8}$ " dia
rilled hole in
gs



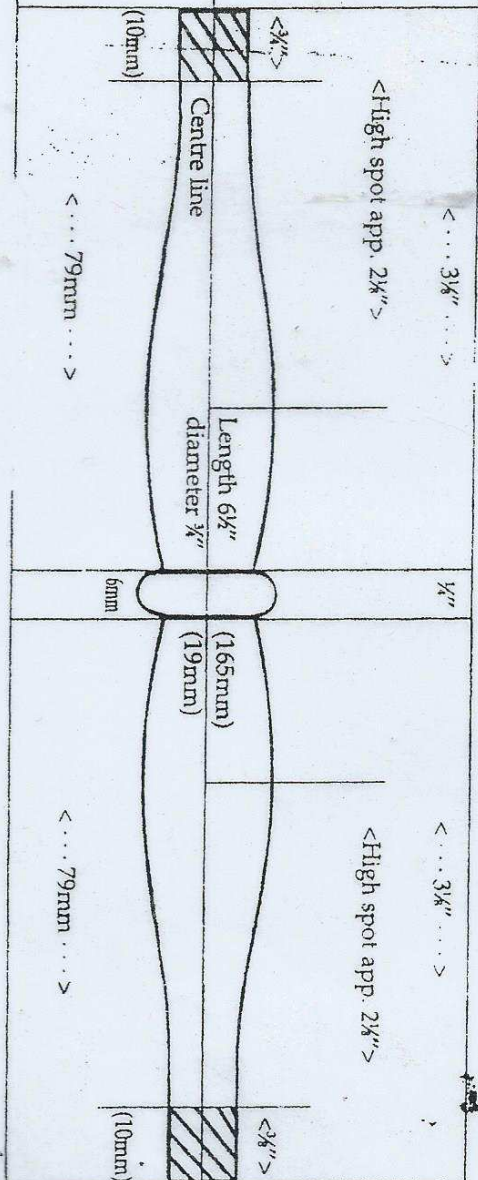
Handwritten calculations:

$$\begin{array}{r} 140 \\ 23 \\ \hline 127 \end{array}$$



CENTRE
SPREADER
1 OFF)

pigot either
nd to fit $\frac{1}{8}$ "
eep x $\frac{1}{8}$ " dia
rilled hole in
gs



JB. Centre
ead is
ptional