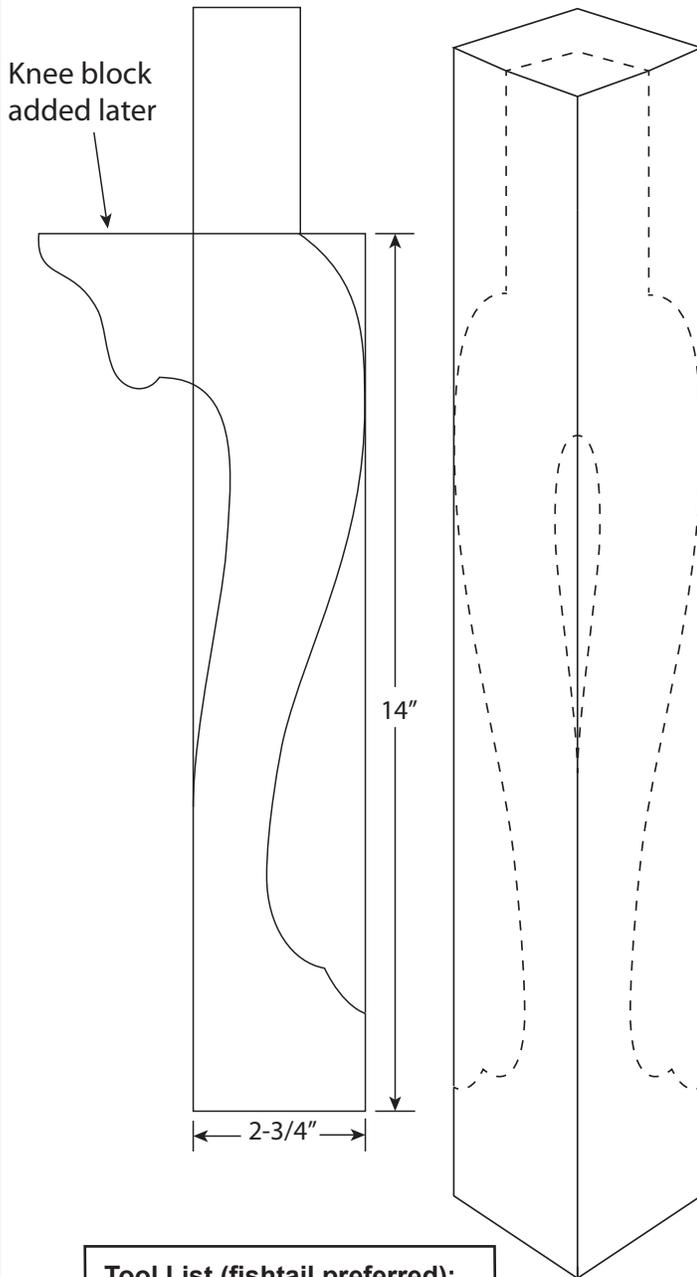


Step by Step Process of How to Carve a Philadelphia Style Ball and Claw Foot

by Mary May - www.marymaycarving.com

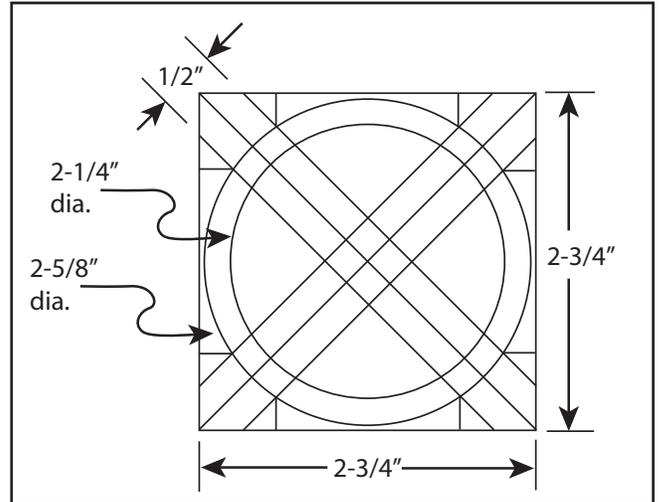
STEP 1: Saw out the main profile of leg on band saw. The knee block is added after cutting out this leg blank.

NOTE: The illustration shown is a “basic” cabriole leg shape based on a Chippendale style chair. Sizes and profiles vary greatly depending on the particular piece of furniture.

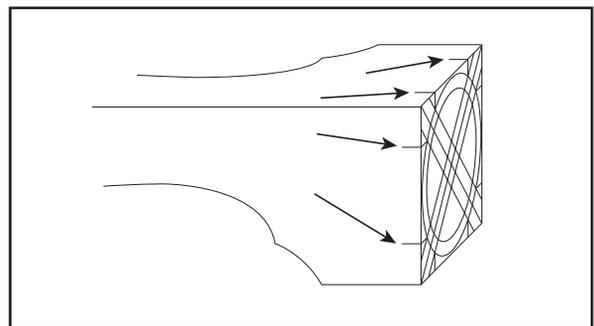


Tool List (fishtail preferred):
 6mm v-chisel (60 degree angle)
 #1, 14mm flat chisel
 #3, 6mm
 #3, 14mm
 #7, 14mm
 #8, 10mm soon bent mallet

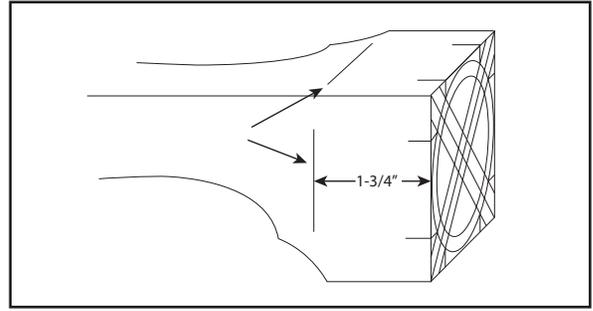
STEP 2: Draw all guidelines on the bottom of the foot. The inner (smaller) circle is where the ball will be rounded down to on the underside of the foot, and the outer (larger) circle is the widest part of the ball.



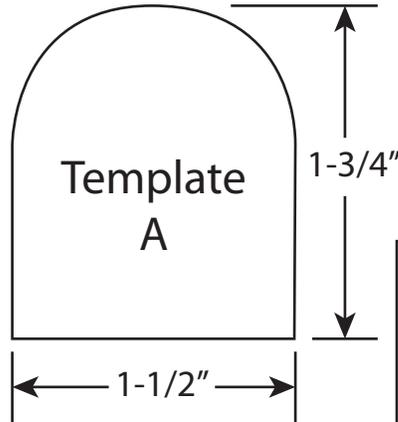
STEP 3: Extend lines up all 4 sides of the foot 1/4" . These lines are where your first v-cuts will be. This line also locates where the ball meets the edge of the talon (where template “A” will go in STEP 5).



STEP 4: Draw a line 1-3/4" up the side of foot on all 4 sides. These lines mark the height of the ball where the ball will join with the web and where the height of template "A" will reach (see next step).

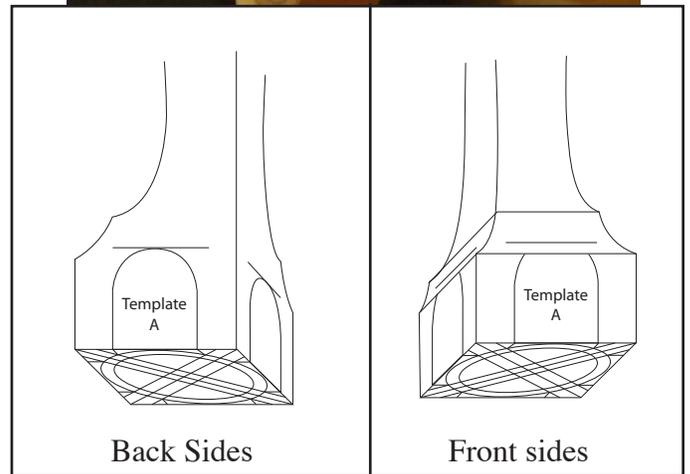


STEP 5: Cut out template "A" and place each edge on the 1/4" extension lines (made in STEP 3) to accurately position it in the center on each side of the foot. Trace around template to locate where the ball will curve around to meet the edge of the talons.

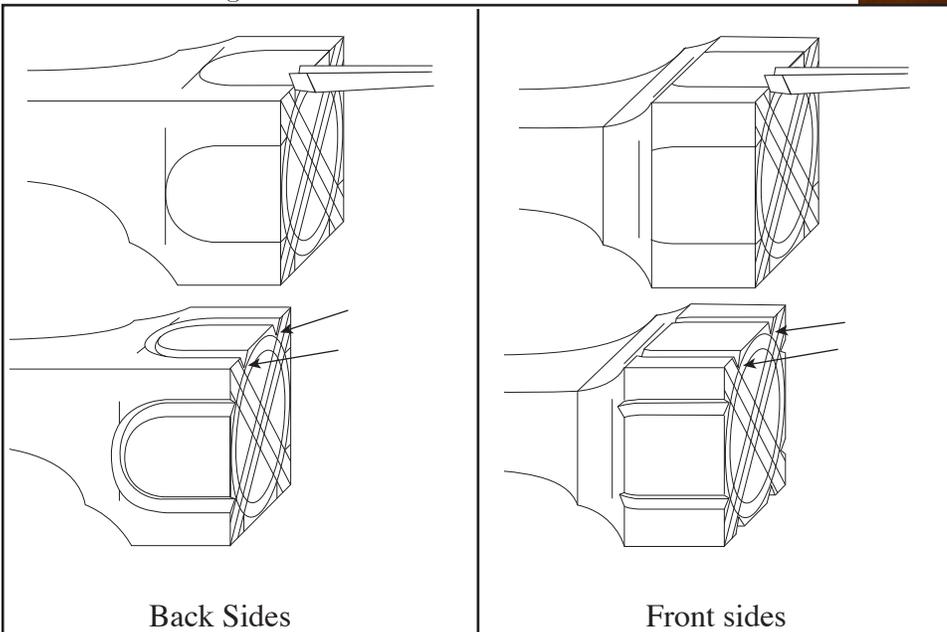
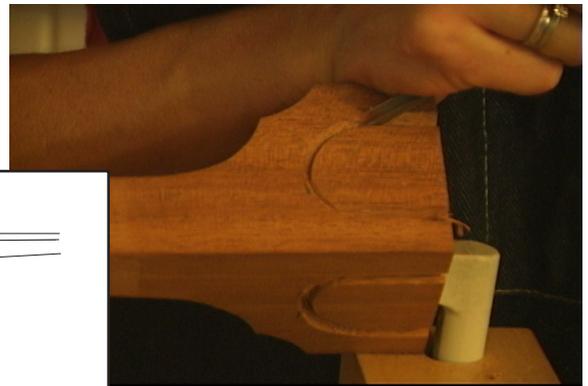


NOTE: You can free-hand this line also - just make sure the lines start at the extension lines made in STEP 3, draw straight lines up about 1 inch, and then curve to a half-circle at the top.

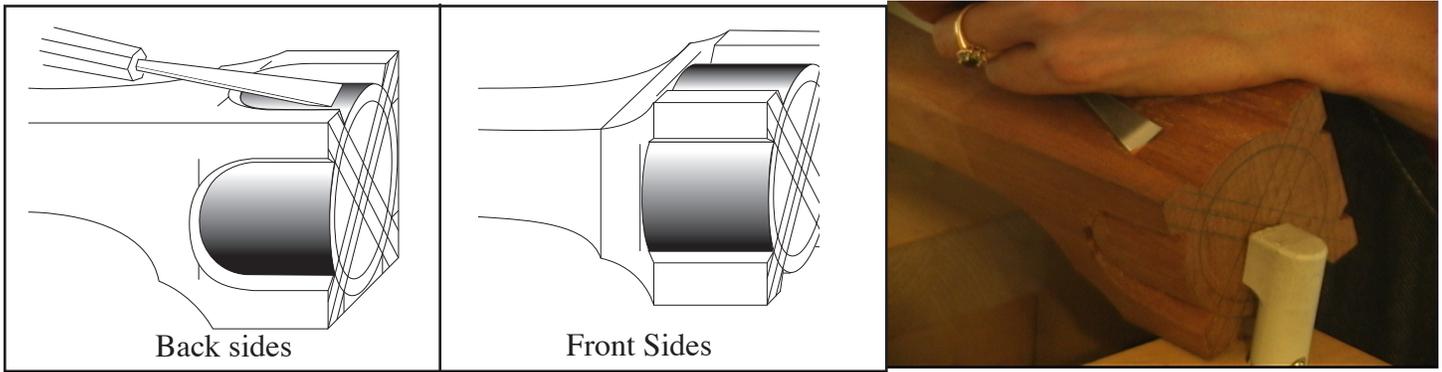
NOTE: On the front 2 sides, only draw the vertical lines up to the first saw cut. The reason for this is the template will become distorted as it folds over the sawed edge.



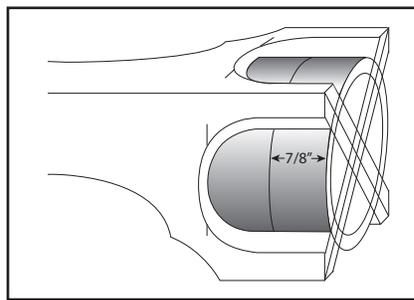
STEP 6: With a 6mm v-chisel, make a 1/4" deep cut so that the corner of the v-chisel cuts directly on the line that was drawn in step 5 (template "A"). Referring back to the drawing on the bottom of the foot, this is the intersection of the larger circle and the line that locates the edge of the talon.



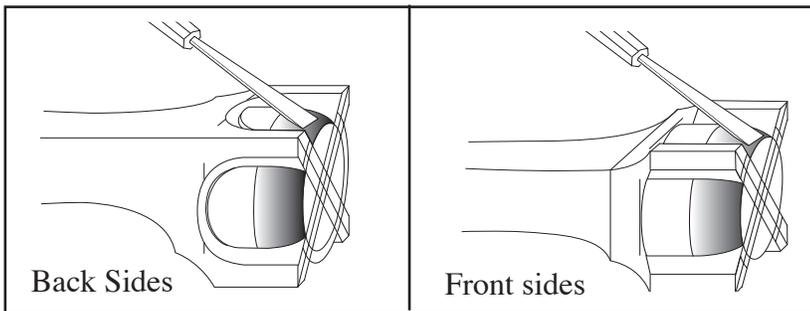
STEP 7: With a #1, 14mm flat chisel (or #3, 14mm if it does not dig in at the corners), round over edges of ball to create a cylinder shape. The size of the cylinder should match the larger circle drawn on the bottom of the foot. While you are carving this section, also carve and define the edge of the talons to make the width of the talons 1/2" (you can base this off the drawings on the bottom of the foot).



STEP 8: Draw a line 7/8" up from the bottom of the ball on all 4 sides of the newly carved cylinder. This will locate the midpoint of the ball. The rounding over of the ball will be based on this line. Everything below this line will round down towards the bottom of the foot and everything above this line will round over the top of the ball.



STEP 9: Continue using the #1, 14mm flat chisel to round over the bottom of the ball. Start 1/16" from the midpoint line drawn in STEP 8 and gently curve the ball over until it touches the smaller circle drawn on the bottom of the foot.

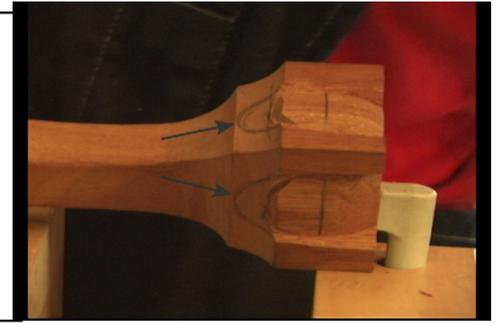
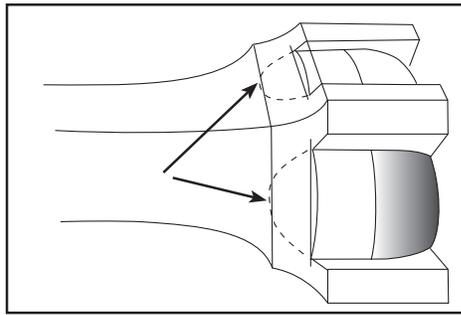


STEP 10: With your #1, 14mm flat chisel, round over the top of the ball in the back 2 sections only. Make sure that the corner where the top edge of the ball meets the edge of the web is at the 1-3/4" line you drew in STEP 4. Use a #7, 14mm gouge to make a cut that defines the top edge of this curve.

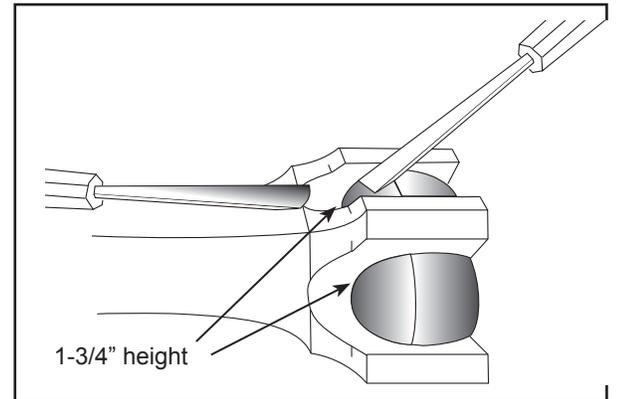
NOTE: View the foot from all angles to make sure each section of the ball looks like it joins with the next section of the ball on the other side of the talon.



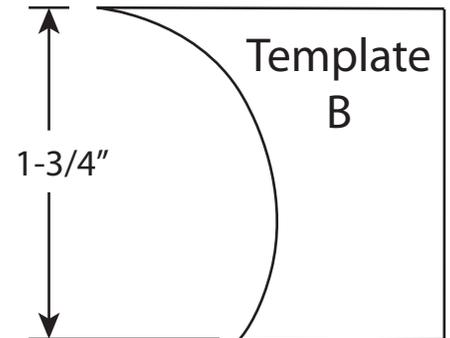
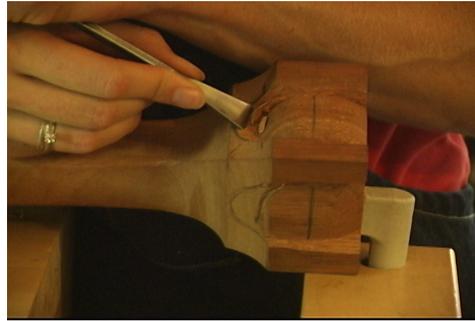
STEP 11: On the front 2 sections, draw a line that extends from where the v-cuts ended in STEP 6 (at the first corner band saw cut) and curves around to the corner of the second band saw cut. This will be the location of the edge of the web for the front 2 sections.



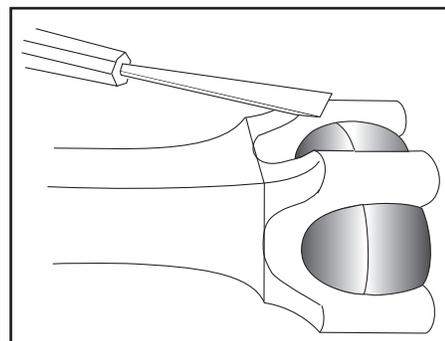
STEP 12: This next step is probably the most difficult. You will be using your #1, 14mm flat chisel, a #7, 14mm gouge, and a #3, 6mm gouge. Start rounding over the upper side of the ball with a #1, 14mm. Next, with the #7, 14mm and #3, 6mm make a straight down cut (this is defining the edge of the web) until it meets with the cut you made with the flat chisel. You will need to take small amounts away each time until there is a nice clean corner where the ball rounds over and meets the web. Make sure this corner is at the 1-3/4" height.



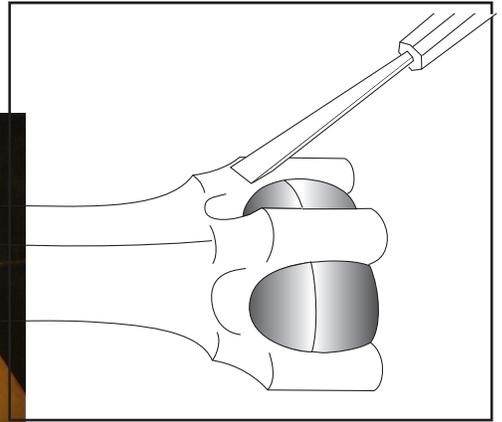
NOTE: As a guide to help make sure the curvature of the front sections of the ball is correct, cut out template "B" on a piece of thin cardboard. Position template "B" along the edge of the ball. Line the bottom corner of the template up with the bottom of the ball, and the top corner should meet at the web.



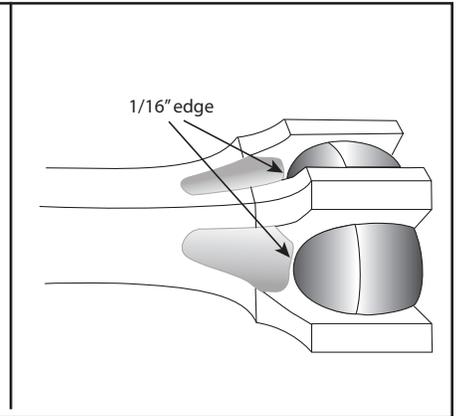
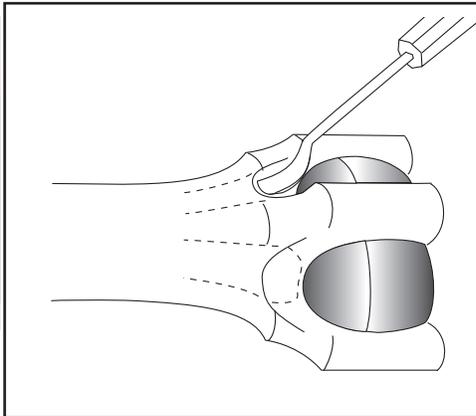
STEP 13: With the #1, 14mm flat chisel or #3, 14mm, round over each lower section of the talon into a tube shape. Make sure they are all the same size (1/2" thick)



STEP 14: With the #1, 14mm flat chisel or #3, 14mm, round over the upper 2 sections of the talons. These will have a gentle curve that follows the saw cut curve.



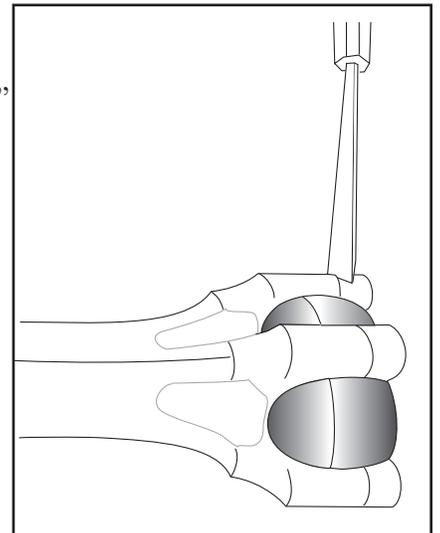
STEP 15: With a #8, 10mm spoon bent gouge, hollow out the front web section between the dotted lines shown. Let this cut gently blend and flow into the ankle area. Be careful not to go too deep and create a hole. Leave a 1/16" edge where the web meets the ball.



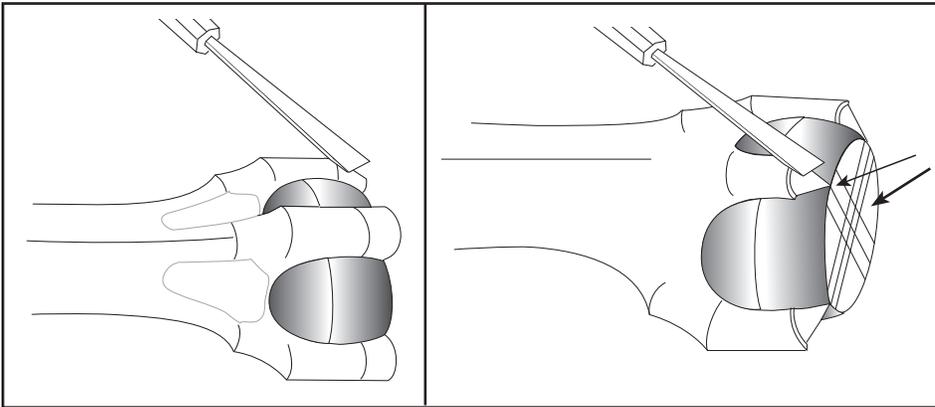
STEP 16: With a #1, 14mm, round the upper sections of the talons in the web area. This should have the appearance of skin flowing tightly over tendons. The upper part of the center talon area should feel very much like your achilles tendon.



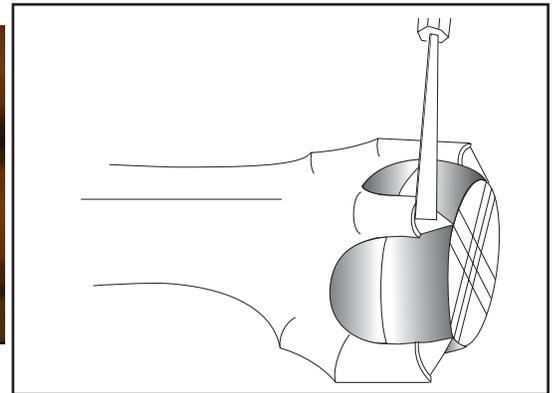
STEP 17: With the #1, 14mm, make a cut 1/2" up from the bottom of the tube shaped talon. This is the end of the talon and the beginning of the claw. Make this cut about 1/16" deep around the whole talon. There will be a 1/16" step here that divides the talon and the claw (see STEP # 19).



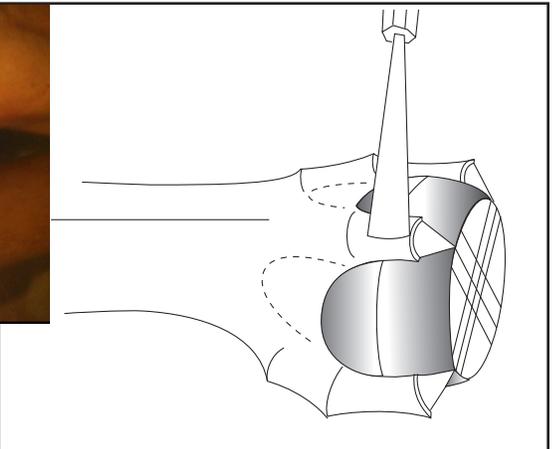
STEP 18: With the #1, 14mm, carve the claws down to a point. Make sure these are carved so the point joins with the smaller circle drawn on the bottom of the foot.



STEP 19: To define the step that separates the talon and the claw, you will need to carve sideways across the grain.



STEP 20: With a #7, 14mm, carve the lower sections of the talons so there is a gentle curve between the knuckles. This is cutting directly across the grain, so the gouge needs to be very sharp.



STEP 21: With a #7, 14mm, round the underside of the web on the back 2 sections. This should gently flow into the back of the leg.

Last step: Soften any sharp points - such as knuckles, lower edges of talons, etc. and sand lightly to remove chisel marks.

