BOOT & SANDAL FABRICATION TECHNIQUES

CHAPTER 8

SANDALS

The making of sandals as molded footwear is the same as shoes and boots with the additional steps that necessitate the cutting away or cutting out what is not wanted and adding strapping or securing mechanisms as required.

This is because we are fabricating sandals just like shoes and boots to fit the whole foot.

Sandals usually require extra labor and materials than shoes.

Sandals typically have less support than shoes and boots.

We recommend that most wearer's experience shoes first.

Because sandals have less supporting or containing materials, it is important to consider how and where the securing mechanism will best accommodate each individual foot.

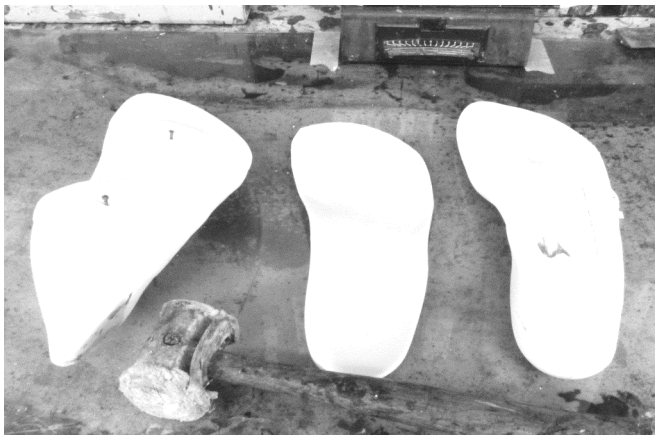
Not all sandal styles will suit or fit everyone.

The style and functionality must be balanced to properly accommodate the individual wearer.

There are so many ways to make good sandals which will fit well and provide exceptional comfort.

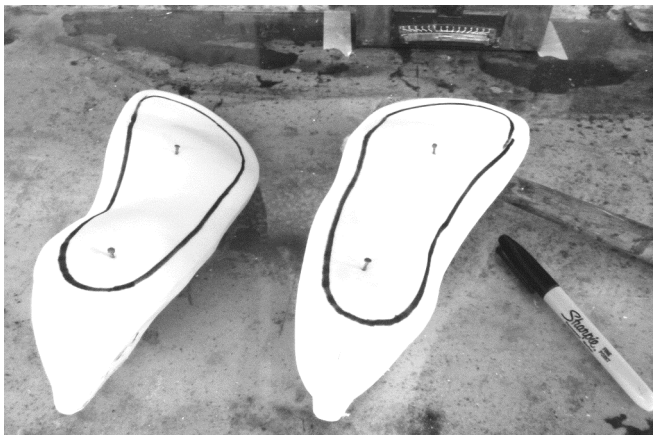
As an artisan, you can have a lot of fun designing very good looking and useful sandals.

You can be as creative as you want.



1 The preliminary work has been done. The cast has been modified as necessary and changed into a finished last. The inserts have been made and are being tacked into position.

2 An underlap design line is being marked.



3 The underlap design line is completed.

4 The lining leather is selected and cut to the desired size.

5 The lasts with inserts attached are soaked in water one to two minutes.

6 The wet last and front lining leather are ready. The lining leather is smooth side up.

7 The lining leather is latexed.

8 The lining leather is placed over the last.

9 The lining leather is stretched and pulled and pressed until it is bonded to the wet last. Sometimes a little more fresh latex is need.

10 The excess lining leather is being removed from inside of the underlap line.

11 Bottom view of underlap which may require a little more fresh latex to complete the bond.

12 The side seam edges are cut.

13 Side view.

14 The heel lining leather has been latexed.

15 The heel lining leather is stretched and pulled and pressed onto the last and insert.

16 The excess lining leather is cut off and a little more fresh latex may be applied to the underlap to make it stick.

17 A bottom lining leather is latexed.

18 The bottom lining leather is stretched and pressed onto the bottom of the insert.

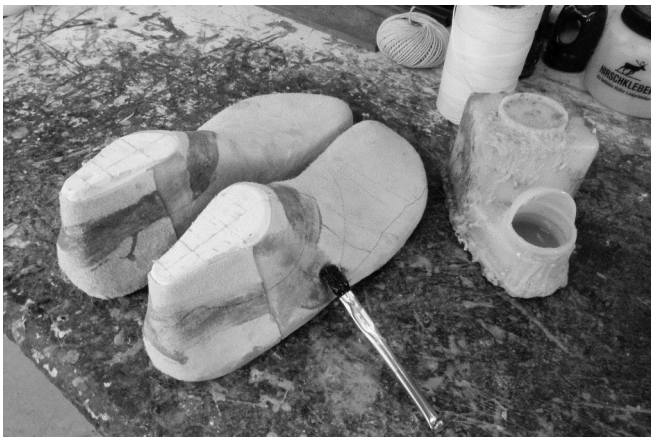
19 The bottom lining leather is cut at edge of underlap.

20 Top view of fully leather lined lasts.

21 Ditto.

22 A pen is used to roughly mark the design of top of sandal.

23 Glue is applied to a #18 twisted cotton cord.



24 Glue is applied over design marks.

25 The design cord is attached to the lining leather. The artisan and/or craftsperson selects and refines the placement of the design cording with a lot of thought about what is desired in the attributes of the finished sandal design.

26 Ditto.

27 Ditto.

28 An outer bottom edge cord design is placed where the artisan wants the edge of the finished "mud" to be located.

29 A double knit sock is added. Sometimes a single knit sock is used. And, sometimes no sock is used.
The consideration of softness, strength and durability depends on the needs of the customer.

30 The socks are pulled snug and tied at the top.

31 The sandal is dipped into latex.

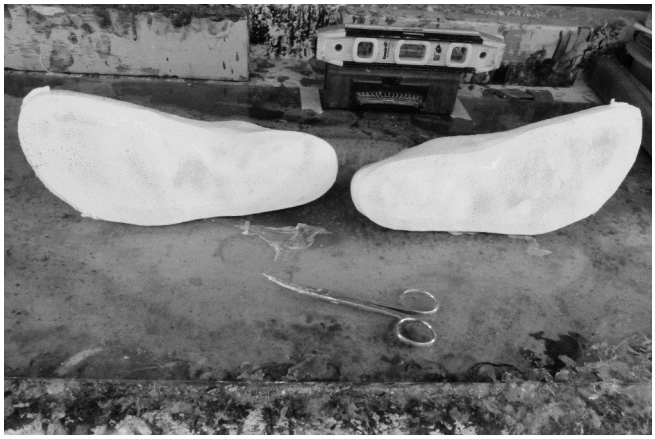
32 Ditto.

33 Ditto.

34 The latex is rubbed into the fabric and the excess is squeezed out.

35 View of latexed sock on leather lined last.

36 While still wet, the excess sock is removed above the upper design cord.

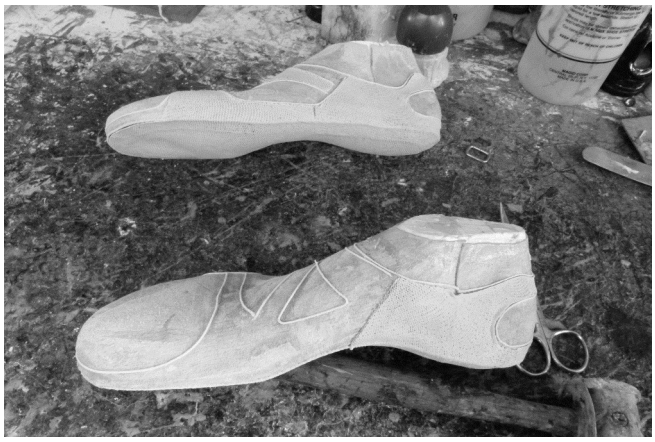


37 The wet latexed sandal is allowed to dry.

38 Usually the sock is cut out to the design cords and a Monks Cloth heel counter may be added. This pair of sandals will be soft so no heel Monks Cloth counter is added and the front of sock is being removed.

39 Ditto.

40 Ditto.



41 Ditto.

42 Ditto.

43 Ditto.

44 Ditto.

45 Ditto.

46 Parchment paper has been cut to size, masking tape has been applied above bottom "mud" design cord, and sandals have been placed in the position they will be "mudded".

47 The bottom of left sandal is latexed.

48 "Mud" is applied to bottom of sandal.

49 Sandal has been turned up right, quickly placed on the parchment paper and leveled.

50 The "mud" voids are filled and the "mud" is pressed into the last and pulled up making a uniform edge with a lot of excess because the "mud" will shrink is it dries.

51 The bottom of right sandal is latexed.

52 Ditto #48.

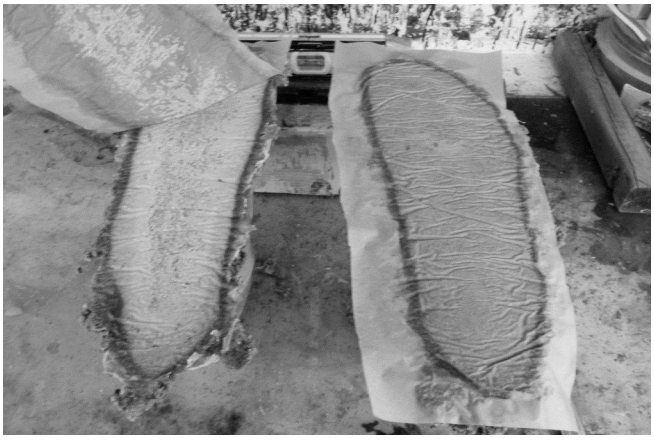
53 Ditto #49.

54 Both levels were checked as the "mud" was pressed down to the design cords.

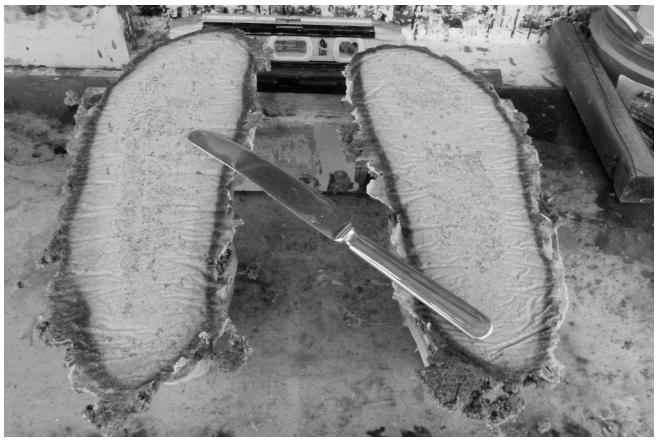
55 Ditto. The leveling is important!

56 Ditto. The leveling is really important! It is the basis of customized comfort for each and every customer.

57 The "mud" has dried 12 to 24 hours.

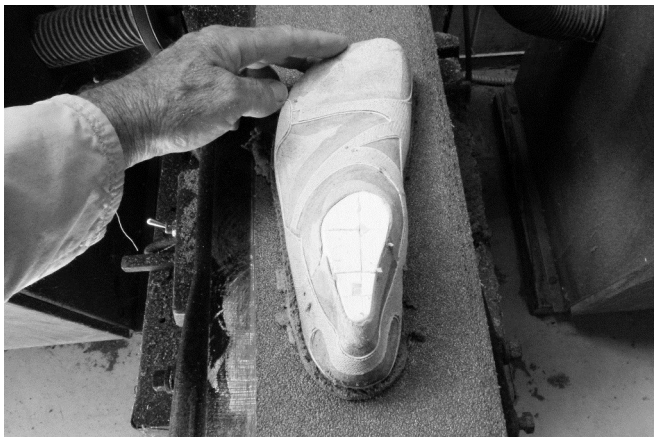


58 The parchment paper is removed.



59 The wet "mud" on the bottom is pressed with a butter knife and the "mud" is allowed to dry another 12 to 24 hours.

60 The outer edge of "mud" is rough sanded on left sandal.



61 The bottom of "mud" is flat belt sanded.

62 The level is checked.

63 The bottom is sanded again.

64 The bottom of toe area is another angle so it requires sanding too.

65 The level is rechecked.

66 The flat belt sanding continues.

67 The rechecking with level continues.

68 The rough sanding of outer edge of right sandal.

69 The flat belt sanding.

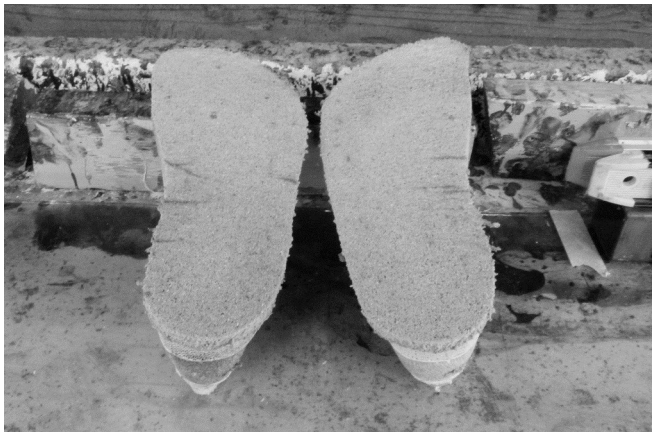
70 Ditto.

71 Ditto #62.

72 Ditto #63.

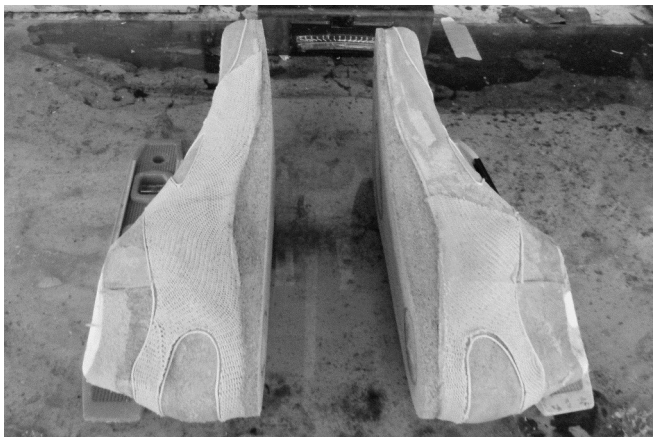
73 Ditto #64.

74 Ditto #65.



75 More drying of the "mud". Not pictured is more sanding and level checking.

76 The bottoms are finished.



77 The outer edges of the "mud" have been finished.

78 Ditto.

79 Top View.

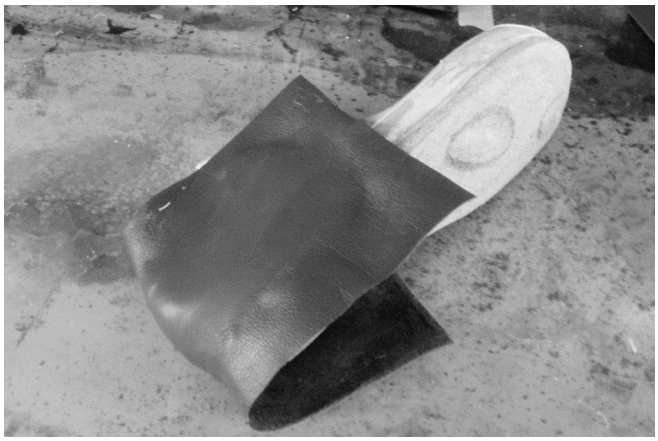
80 The levels are checked again.

81 Did you notice that two different sandals are being made? The right sandal has less sock material than the left sandal. This process started at picture #39 for illustration purposes.

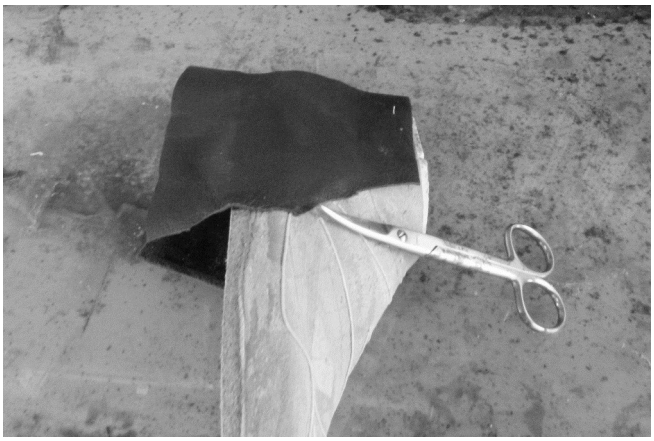
82 A view of the finished bottoms. The extra sock materials on the tops was removed before leathering. Both sandals were made to match.

83 The leathering of the right sandal begins with glue being applied twice to the leather and once to the sandal.

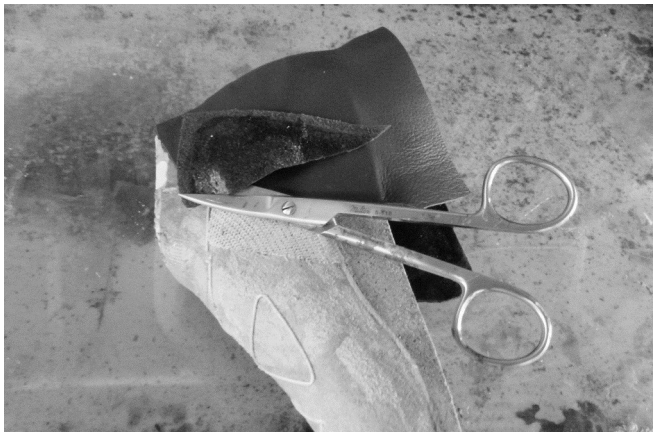
84 The sandal is placed on the heel leather.



85 The heel leather is pulled, stretched and pressed into place.



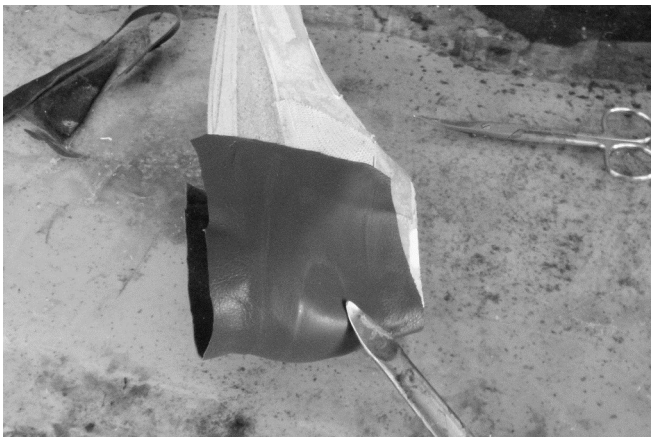
86 The side edges are cut.



87 Ditto.

88 The underlap is cut.

89 The leather at design cords is pressed with a modified butter knife which was made blunt and rounded with a slight bend at tip.



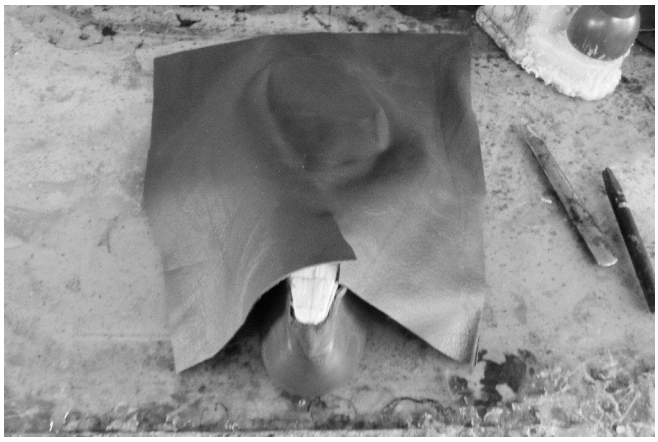
90 Ditto.

91 Glue is applied to bottom of "mud" base.

92 Glue is drying on the left and the underlap has been folded on the right.

93 The front leather is glued twice.

94 The glue has been applied to the front of the sandal once.



95 The front leather is placed over the sandal. Notice the cut in leather at top of last.

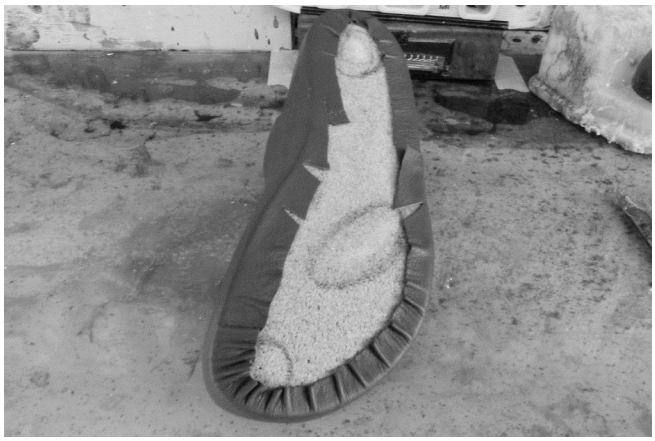
96 The leather is pulled, stretched and pressed around the toe box.

97 The side seam is cut.

98 The top excess leather is cut off.

99 The unwanted leather is cut away from underlap.

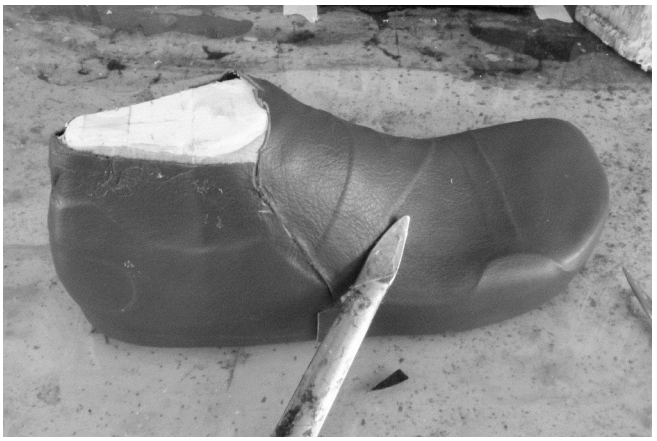
100 Glue is applied to bottom of "mud" base.



101 The underlap is folded over the base of sandal.

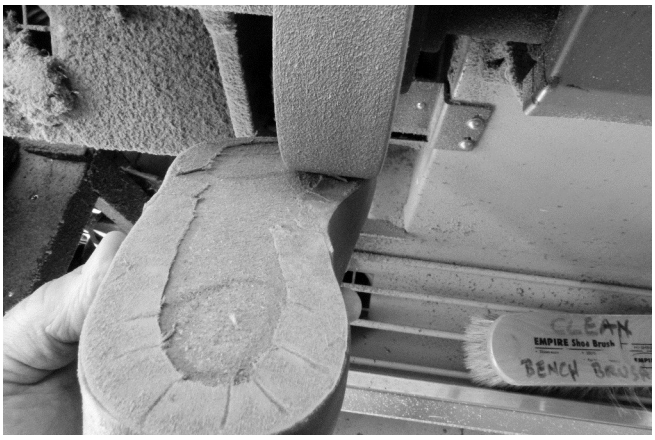
102 The side seams are glued.

103 Ditto.



104 The leather is pressed along design cords.

105 Front view of the finished leathering.



106 The bottom of the underlap is sanded very carefully.

107 Glue is applied to underlap and "mud" base twice.

108 Ditto and to mid sole once.

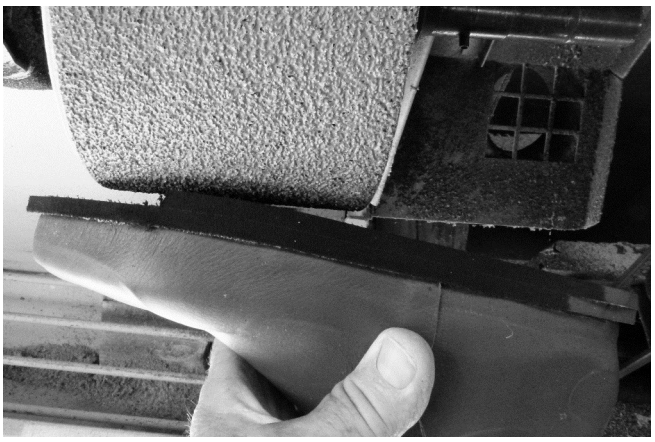
109 The mid sole and sandal glue are drying in the sun.

110 The sandal has been placed on mid sole and pressed.

111 Glue is applied to mid sole from ball to heel and to 18 iron (3/8") heel wedge. Normal heel wedges can be 30,24,28 or 12 irons, sometimes 36.

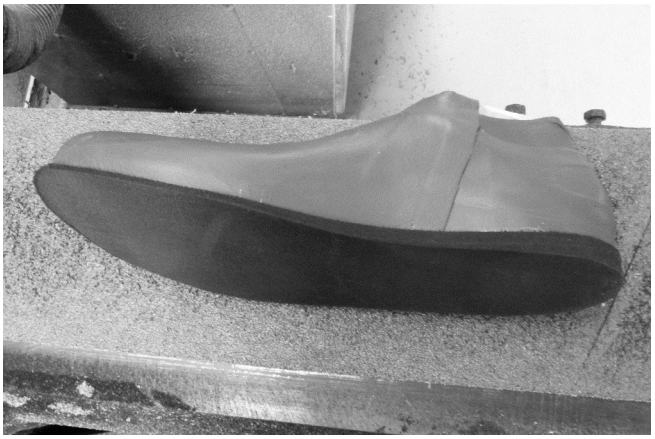
112 The sandal and heel wedge have been pressed together.

113 The mid sole and heel wedge are rough sanded around outer edge.



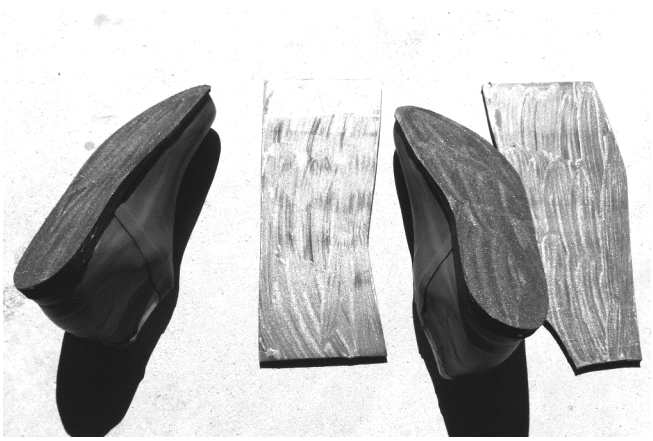
114 The front of heel wedge is cut and then a taper is made to back of heel.

115 The taper is sanded flat from heel to ball and the levelness from medial to lateral is checked many, many times during the sanding process.



116 The ball to toe angle is sanded carefully on the flat belt sander to make sure it conforms to an even thickness. The transition area from toe to ball and ball to heel must be level and uniform so that it will be beneficial to the wearers gait.

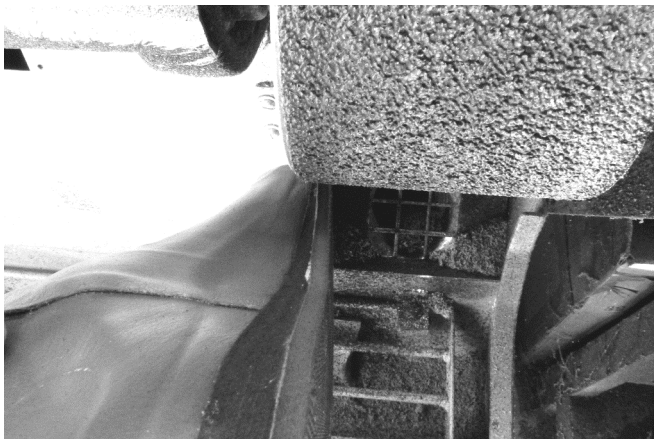
117 The finished mid sole, heel wedge and outer sole are glued.



118 The glued materials are warmed in the sun before being pressed together.

119 The outer sole has been bonded.

120 The outer sole is trimmed.



121 The outer edge of sole is rough sanded.

122 The outer edge of sole is fine sanded.

123 The feathers along the outer edge are very lightly sanded away.

124 The lower sides of sandal are lightly brushed to remove unwanted dirt and glue on the leather above the attachment seam.

125 The leathering process has been finished.

126 Ditto.

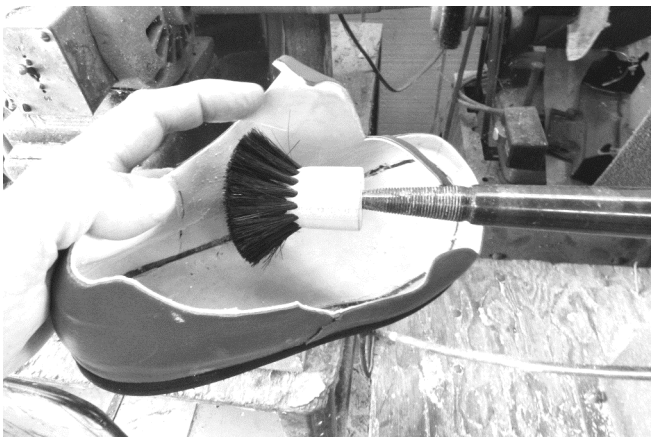
127 A razor blade is used to cut an opening.

128 The excess leather at top of last is cut away. The last is lifted out in one piece. All the extra leather beyond the design cords is cut away.

129 View of completely trimmed sandal.

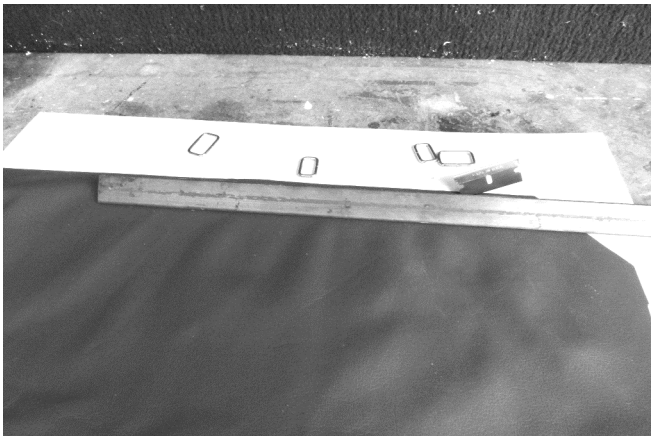
130 The insert is being carefully lifted out with a short butter knife.

131 The inserts are being removed.

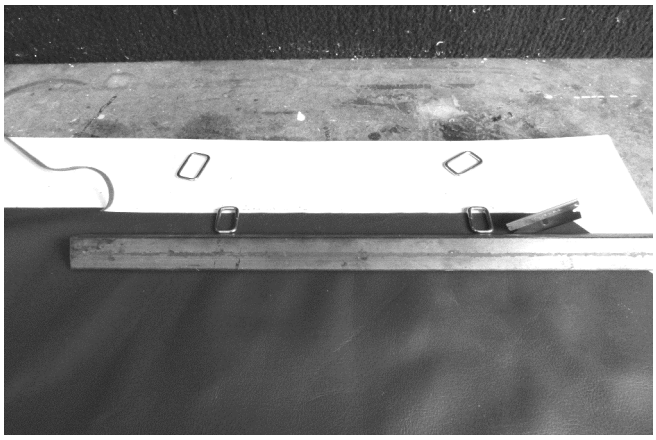


132 The inside of sandal is cleaned.

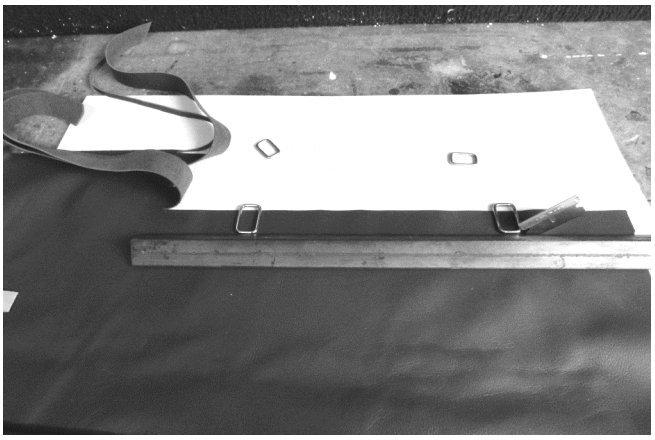
133 The insides of sandals are clean and ready for the strappings.



134 The straps are cut with a "fresh" razor blade and straight edge on a piece of mid soling material.



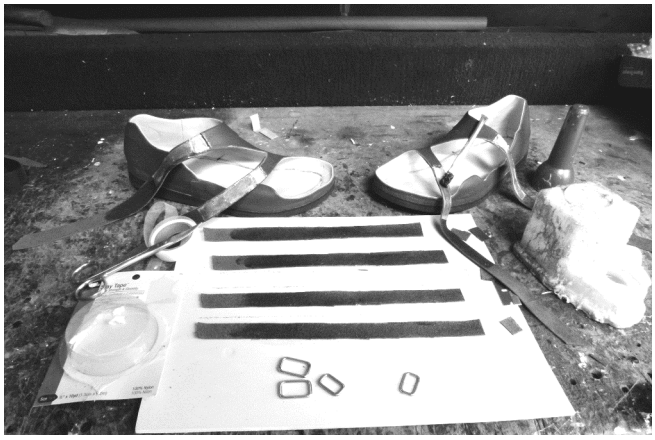
135 The square "D" rings are used to gauge the width of the straps.



136 Ditto.

137 The internal designs are cut out with a #12 surgical knife.

138 Glue is being applied to strap attachment area of lining leather and end of strap. When the glue has dried, the straps are attached and pressed.



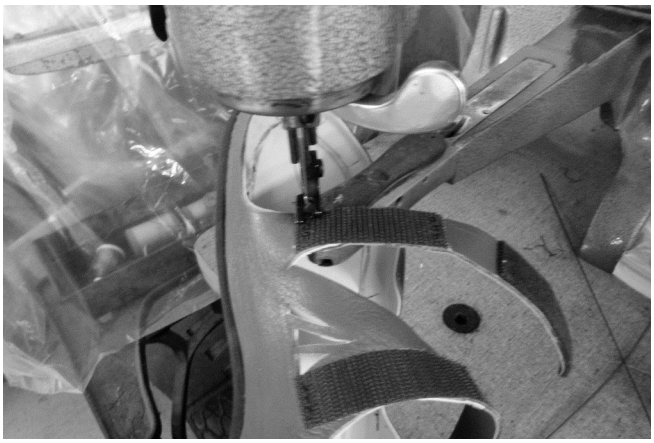
139 Glue is being applied to the inside of the straps after being applied to the under side of Velcro®. When the glue is dry, the looped Velcro® will be pressed on to the straps.

140 Glue has been applied to the underside of the hooked Velcro® and area of attachment of outer leather. When the glue is dry, the hooked Velcro® will be pressed into place and any excess glue will be immediately rubbed away.

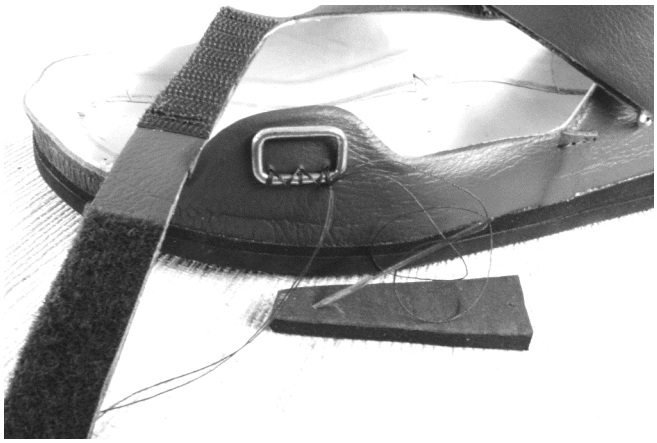
141 The Velcro® has been trimmed to fit the leather of the straps and the square "D" rings.

142 Usually a short piece of leather is used for attachment of the rectangular rings and a rivet is used to secure the leathers. But, for softness, the top ring is being hand sewn into place.

143 Stitching of Velrco®.



144 Ditto.



145 Hand sewing of front strap rectangular ring.

146 The inserts have been added and the sandals are finished.

By studying the chapters 1, 2, 3 in book 1 and chapter 5 in book 2 (all on shoe technique); chapter 6, 7 in book 2 (on boot technique), and this chapter 8 (on sandal technique) you have gained a lot of knowledge.

The following pictures are of sandal styles which will give you an opportunity to test your creative understanding of materials, methods and procedures for making many variations of sandals.

It is important to keep in mind for whom each pictured style might be applicable. Remembering that each individual wearer may require a different set of materials, methods and procedures regardless of style or even for the same style.

Have a little fun as you think and envision how you could make or modify each style of sandal pictured to suit someone you know. Use your imaginative abilities as you practice artisanship.