BOOT & SANDAL FABRICATION TECHNIQES

CHAPTER 7

ANOTHER BOOT TECHNIQUE

This is another high Humboldt boot made for the trail and wilderness hiking of an avid birder. Comfort is the main criteria for this wearer, who has very broad forefeet of two slightly different sizes and very tender bunion joints.

This customer had acquired several pairs of shoes and a lower Humboldt boot previous to this request. This customer has been very, very satisfied with all past shoes and boots.

1 The preliminary work has been done. The cast has been prepped. The last has been finished, inserts made and attached. The levelness of stance has been set for a natural vertical or medial/lateral tilt for each last.

2 The lining leather is measured and cut.

3 The last with inserts is soaked in water one to two minutes.

4 The lining leather is latexed with about a 40 to 60 percent solids to water ratio mixture.

5 The lining leather is pushed, pulled, stretched and pressed onto last until it conforms to the shape of the last.

6 This will be a short lining (no lining over toe box area) so a small piece is added under tongue and rivet area.

7 The design cords are added.

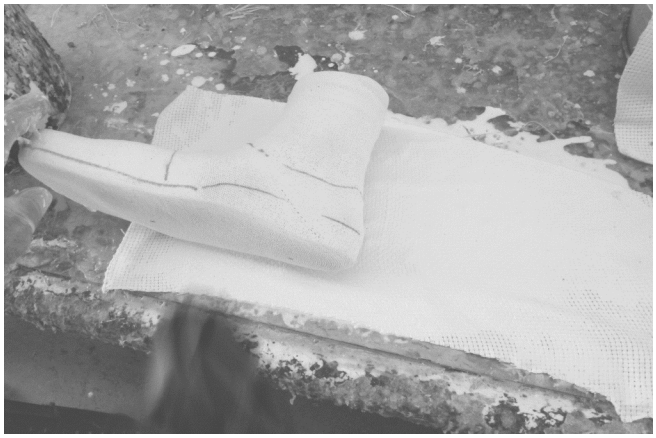
8 Ditto.

9 Ditto.

10 The design cords are matched so both right boot and left boot will look like a matched pair. Because of sensitivity of bunion joints, the bottom of lace opening is offset laterally on each boot.

11 Double knit socks are put over last and lining leather. After the socks are on, tacks are located and lifted though the socks. Markings can be put on socks to locate desired positions of Monks Cloth edges.

12 The socked boot is dipped in latex with a 40 to 60 percent solids to water ratio.



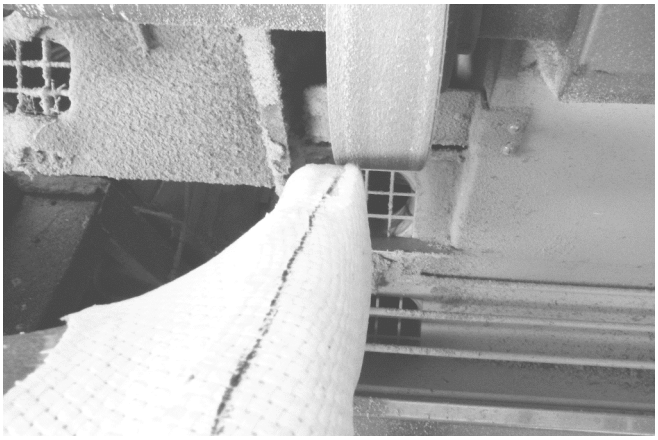
13 A heel Monks Cloth is latexed.

14 The Monks Cloth is cut to size.

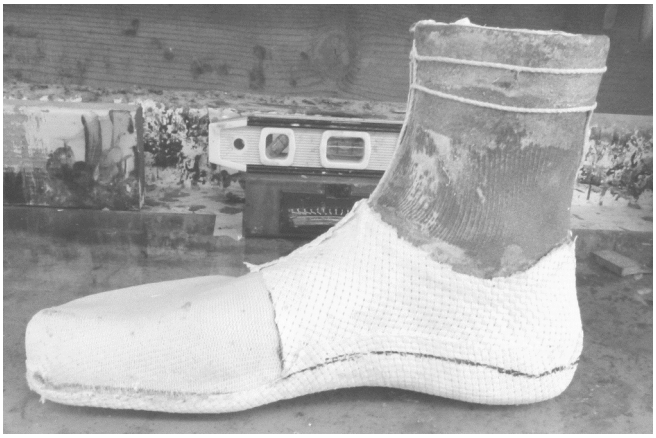
15 A bottom Monks Cloth is added.

16 Ditto. Medial view.

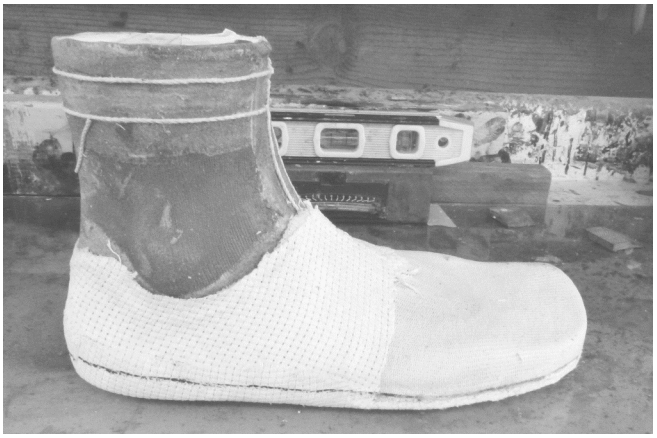
17 Ditto. Lateral view.



18 The Monks Cloth is cut with scissors or razor blade and, if needed, it can be sanded to smooth the cut edge. Markings are to aid your observation of desired location of material edges.



19 Medial view.



20 Lateral view.

21 Parchment baking paper is cut to size.

22 The "mudding" latex of about 40 to 60 percent solids to water ration is poured into "mud" mixing bowl.

23 A dry mixture of wood flour and cork is put into bowl and mixed with the latex.

24 A uniformly wet "mud" is desired. It should be soft and self standing with very little slump. That is the desired consistency for the mix. It should spread easily when applied.

25 The "mud" is applied to an upside down boot.

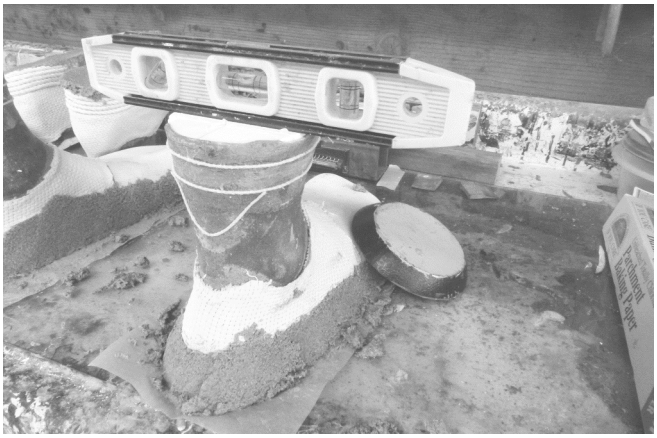
26 The boot is quickly turned right side up and placed on the parchment baking paper. Then it is pressed down onto the parchment paper with the level bubble being kept in the center position.

27 The edges of "mud' are filled and lifted and pressed upwards to make the base.

28 Ditto.

29 The edge of "mud" is smoothed again.

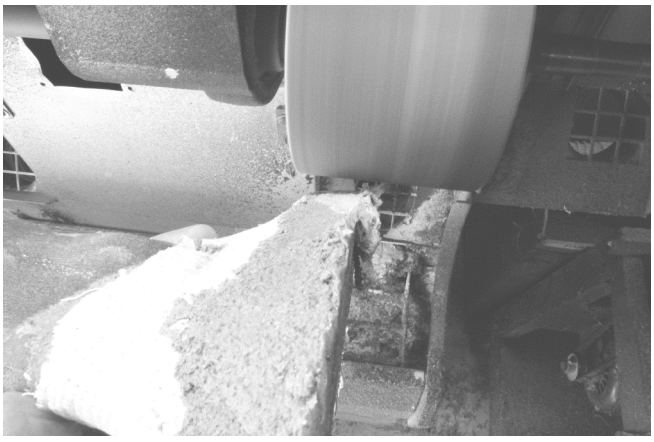
30 The level is rechecked again.



31 The boot may be weighted to help keep the level bubble centered. A fan is turned on and the "mud" is allowed to dry 12 to 24 hours.

32 The parchment paper is removed.

33 The fresh "mud" is smoothed as necessary.



34 After another 12 to 24 hours of drying, the rough sanding begins to remove any unwanted but dry "mud". Stop sanding before you enter the soft "mud" which is not dry.

35 The bottom is sanded flat on a flat belt sander.

36 The level is checked on a flat and level surface.

37 The flat sanding of the bottom is continued.

38 View of bottom of boot.

39 Re-checking with a level.

40 Continuing to sand the bottom.

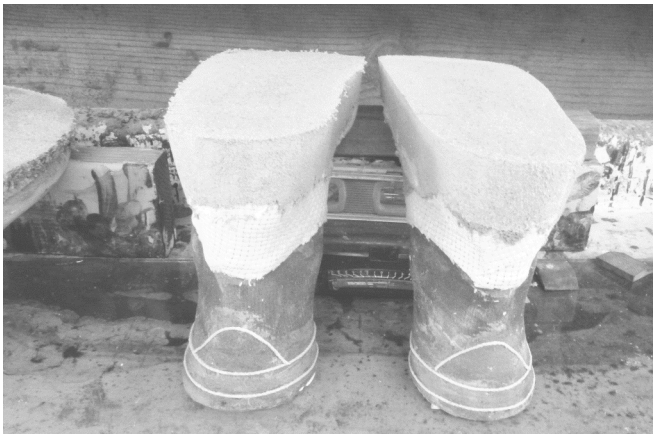
41 Re-checking with the level.

42 Letting "mud" dry.

43 Sanding the edge of "mud".

44 More flat sanding of the bottom.

45 Rechecking with the level again.

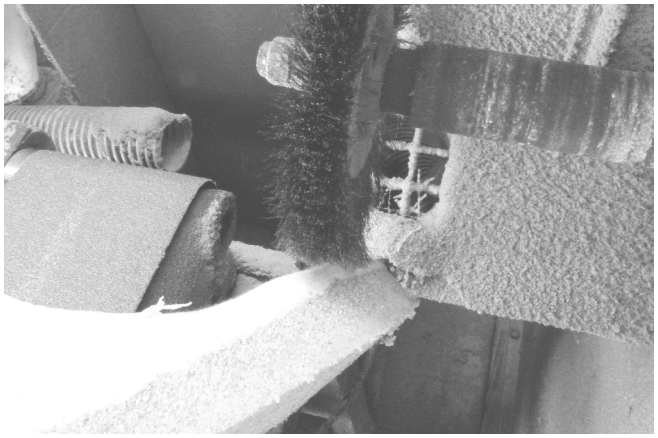


46 More drying of the "mud".

47 Rechecking with the level and then more sanding not shown.

48 More drying.

49 Sanding edges again.



50 Wire brushing the sock and/or Monks Cloth above "mud" to clean off unwanted "mud".

51 Trimming away excess Monks Cloth and sock at design cord. This pair of boots will have soft uppers above the design cord (no Monks Cloth or sock).

52 Cutting off unwanted bottom Monks Cloth with a razor blade.

53 More drying.

54 More flat belt sanding.

55 More checking with the level.

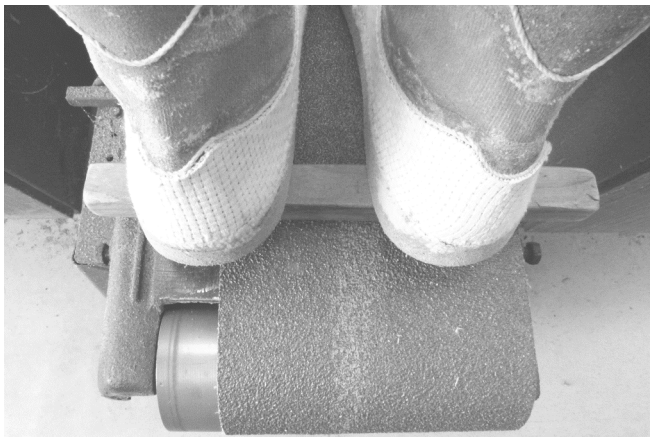
56 The bottom is flat, level and finished.

57 The bottom heel to ball flatness is checked.

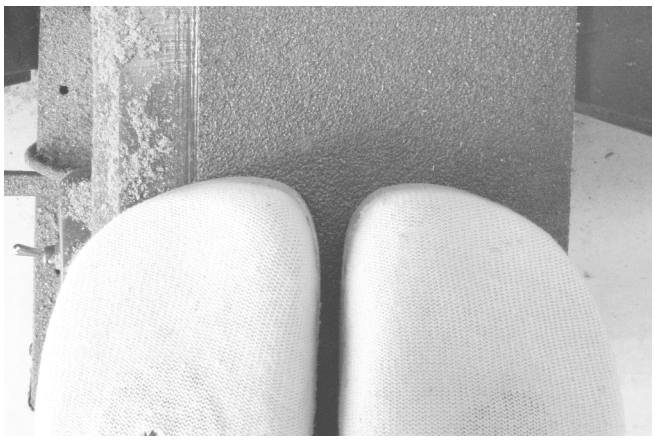
58 The heel lift (heel to ball and ball to toe angles) is checked.

59 The finished bottoms are examined.

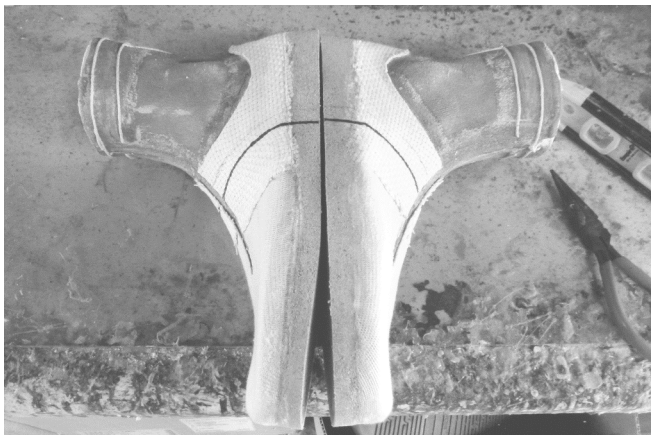
60 Some "mud" has been added to touch up the lateral edge of right boot.



61 The touch up "mud" has been sanded. The fullness and roundness of the outer edge of heel areas are compared for uniformity. They may or may not be a perfect match.



62 the fullness and roundness of the outer edges of toe box area are compared for uniformity. They may or may not be a perfect match.



63 The lateral side seams are located and marked.

64 The medial side seams are located and marked.

65 A side by side front view of side seam locations.

66 The outer leather is selected, cut, place on glass top work bench and brushed clean.

67 The glue for the leather is applied twice, the glue for the area to be leathered on boot is applied once.

68 The boot is placed on the leather.

69 The leather is pulled, stretched and pressed on to the boot.

70 Ditto.

71 The leather at side seam is rolled back to marking.

72 The leather is cut.

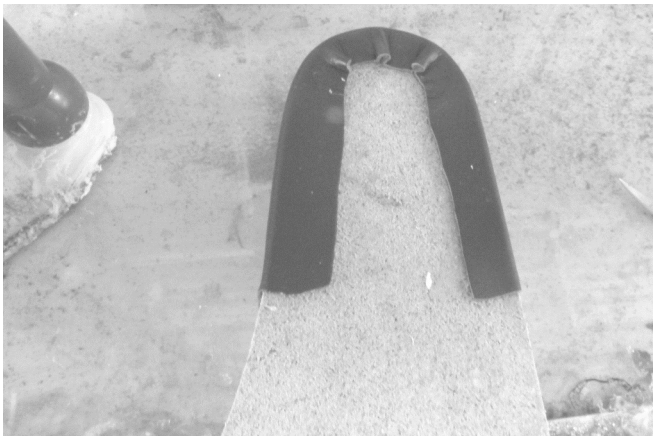
73 Ditto.

74 The bottom underlap is cut.

75 Glue is applied to the dried "mud".

76 The leather is pressed at lace opening and design cords at top.

77 The underlap is folded.



78 The darts are pressed tight and can be cut with scissor, razor blade or just be sanded later.

79 Glue is applied to the front leather and front of boot.

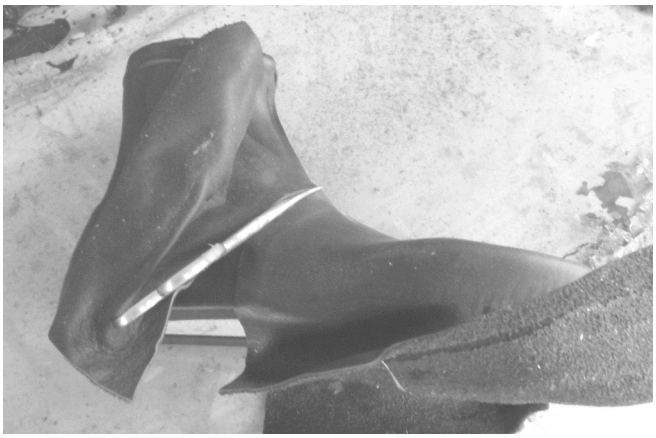
80 The front leather is put onto the boot.

81 The offset lace opening has been marked because a very small imperfection was found in the leather and it has been located exactly at the area to be punched out at the bottom of lace opening.

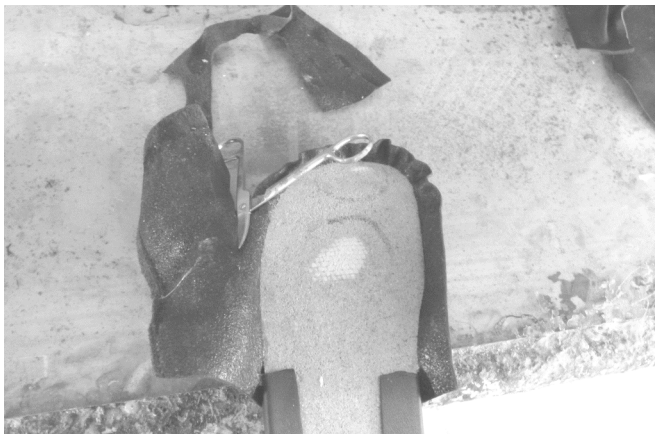
82 Ditto.

83 The front leather is pressed firmly onto the boot and especially along the bottom edge of "mud".

84 The side seam is cut.



85 Ditto.



86 The front underlap is cut.

87 Glue is applied to the front "mud".

88 The front underlap is folded.

89 The bottom edge of leather is smoothed and pressed as needed to make the corner bottom edge as perfect as possible.

90 Glue is applied to the side seam.

91 The side seam has been bonded.

92 Ditto.

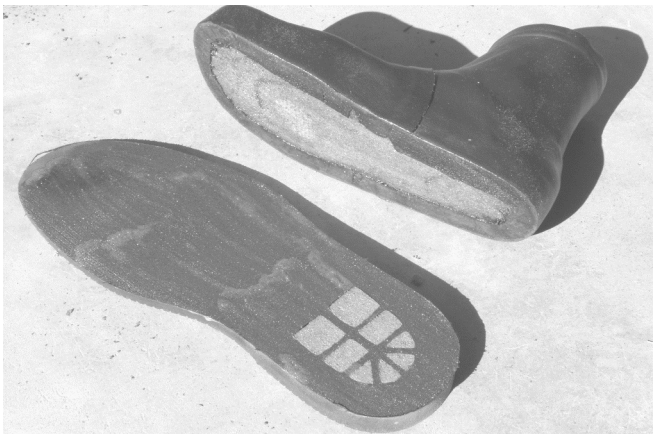
93 Ditto.

94 The underlap is sanded with emphasis on flatness and a true perpendicular outer edge to bottom angle unless otherwise desired.

95 Ditto.

96 Glue is applied to bottom twice.

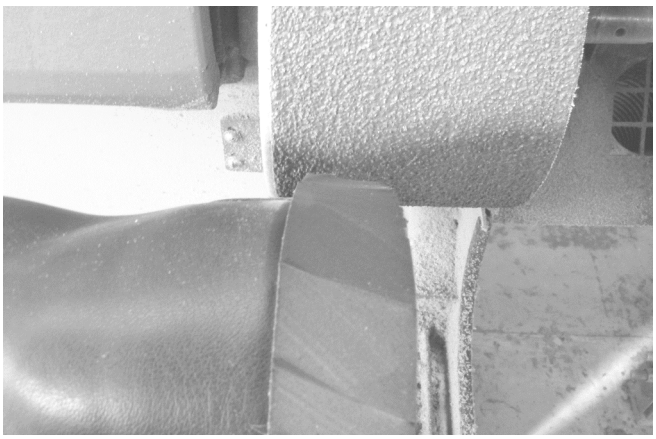
97 The mid soling and heel wedge material are glued (2040 Vibram®). Notice the heel void has been filled with "mud" and sanded flat.



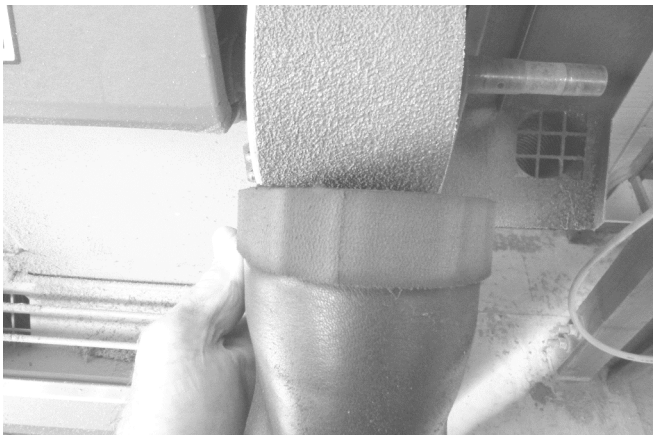
98 After the glue is semi dry and tack free, the sole and boot can be placed in the sun or near a heat lamp for 1–4 minutes. The heat will reactivate the glue and evaporate any remaining solvents. This will strengthen the glue bond.

99 The boot is placed on the sole and pressed.

100 Excess soling is cut off with knife.



101 The edge of soling is rough sanded.



102 The bottom of soling is rough sanded to make the desired thickness and taper from ball to heel and ball to toe.

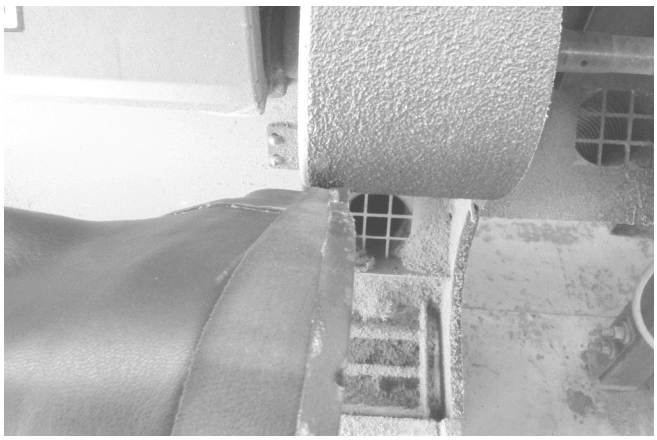
103 The flat belt sander is used to finish the sanding process.

104 Ditto.

105 The level is checked.

106 The outer soles have been glued and attached to the boots. Notice the oversize sole was cut in the middle to make it match the length of the boot. This is sometimes necessary when making footwear for wide and/or short feet.

107 The soles have been pressed and trimmed with a knife.



108 The outer edge of sole is rough sanded.

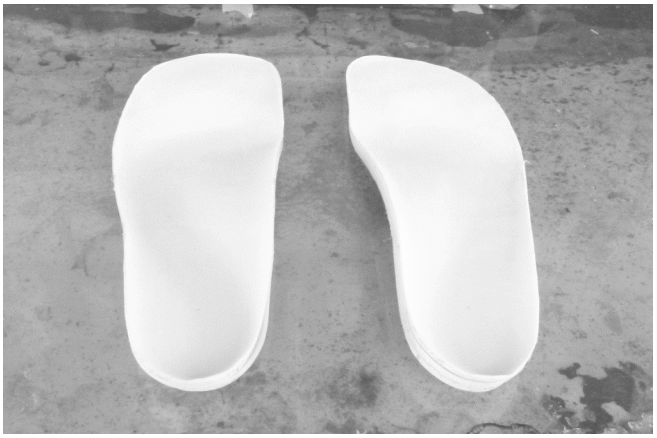
109 The bottom of lace opening is punched.

110 The lace opening is cut with a razor blade.

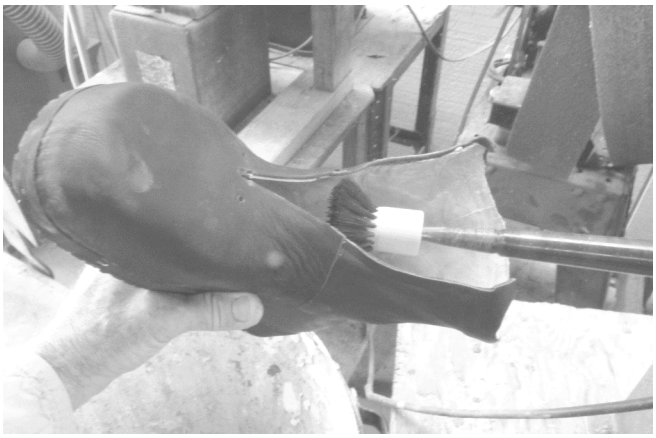
111 The last is knocked apart and pried out of the boot.

112 The back of the boot is taped against a sheep skin to get the toe part of last to fall out of toe box area.

113 The inserts are lifted out with a butter knife.

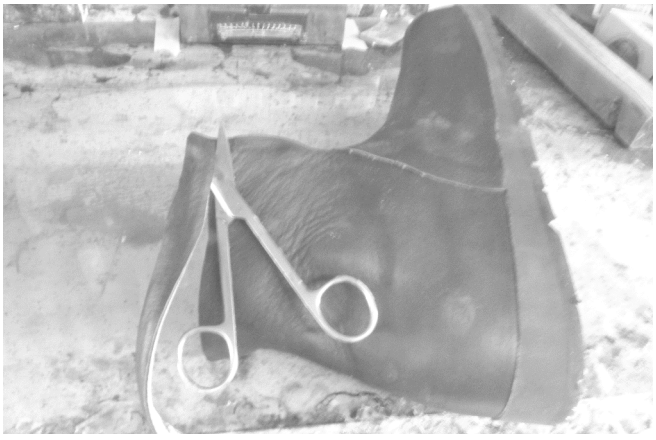


114 The inserts are cleaned as necessary.



115 The inside of boot is cleaned with a toe brush.

116 Ditto.



117 The top of the leather is trimmed.

118 The lace opening is trimmed.

119 The eyelet holes are marked and punched.

120 The tongue is applied, stitched and speed lace rings and rivets are put into place.

121 The rivets are set with a steel and hammer.

122 McNett Freesole® has been applied to the leather and sole seams. McNett waterproofing gel is being applied to the leather.

123 The finished boots are a beautiful and functional custom made work of art!

124 It will take some practice to make boots this beautiful.

125 But, you can make your own molded boots.

126 And, you can be proud of your accomplishments too!

The ability to do custom work should be equal with the desire to do quality work.

The artisan is the person who always tries to do their best.

The artisan survives because of desire, ability and reputation.

The artisan considers every personal creation to be a masterpiece.