BOOT & SANDAL FABRICATION TECHNIQUES

CHAPTER 5

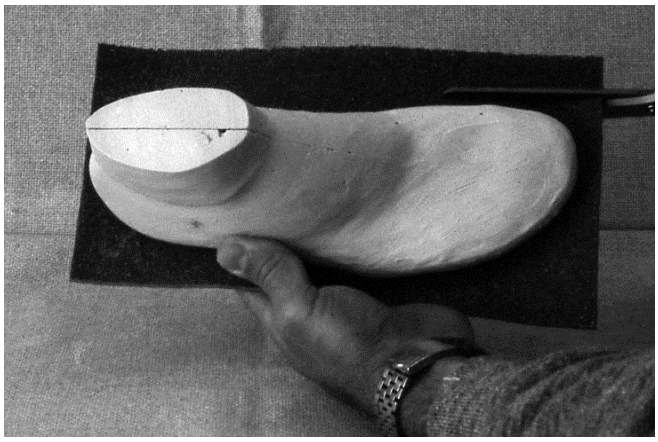
ANOTHER SHOE TECHNIQUE

This chapter is in some ways a review of book 1. And, in other ways it shows many additional alternatives of methods, techniques and procedures for shoe fabrication. However, every step is just as applicable to molded boot and sandal fabrication.

The more possibilities you see and understand, the more your abilities and opportunities will increase.

As you continue to learn how to make your own shoes, boots and sandals, you will acquire a real appreciation for the artisanship involved in making molded footwear.

This alternative process utilizes a product called Thermocork® which is heat formable. It is very durable and long lasting with many excellent attributes. It has been around for a long time and is available from medical and orthopedic suppliers.



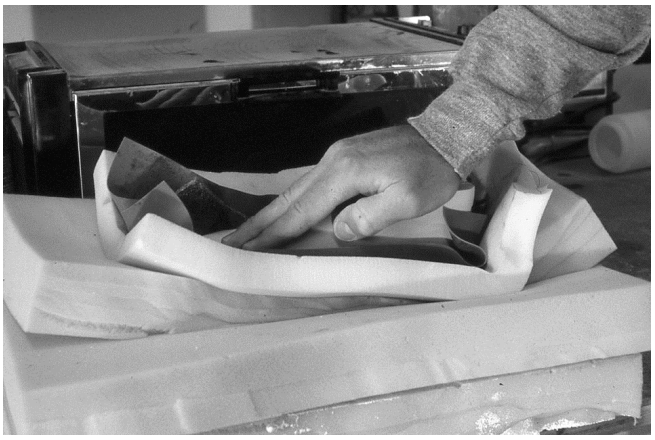
1 A Thermocork® sheet is cut to size for last. This Thermocork® sheet is about 1/8 inch thick.

2 The Thermocork® sheet is placed on a silicon sheet which is necessary because of the heat and stickiness of hot Thermocork®.

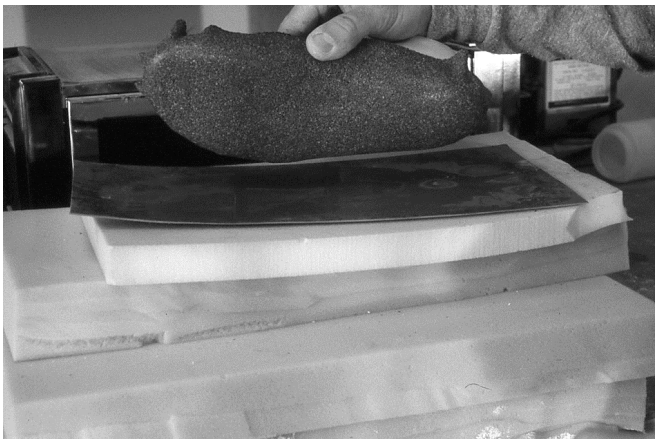
3 The Thermocork® and silicon sheet are placed in oven at about 250 to 275F.

4 The Thermocork® becomes soft and relaxes flat to the silicon sheet.

5 The "hot" silicone sheet is removed from oven and placed on foam. The cool last is placed on top of the Thermocork® (light gloves are helpful if the silicone sheet and Thermocork® are too "hot").



6 The last is pressed into the hot to very warm Thermocork® for about one minute as it cools and forms to the bottom of the last.



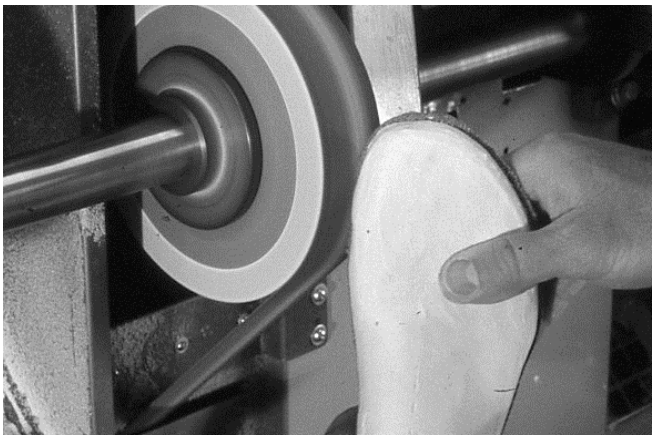
7 This view shows how perfectly the Thermocork® has been "molded" to the shape of the bottom of the last.

8 A single edge razor blade is used to trim away excess Thermocork®. Thermocork® scraps can be used again as they can be reheated and reformed.

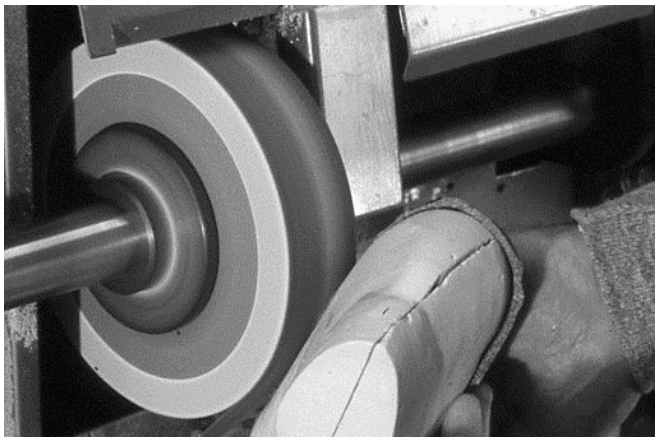
9 Ditto.

10 View of top of "molded" Thermocork®.

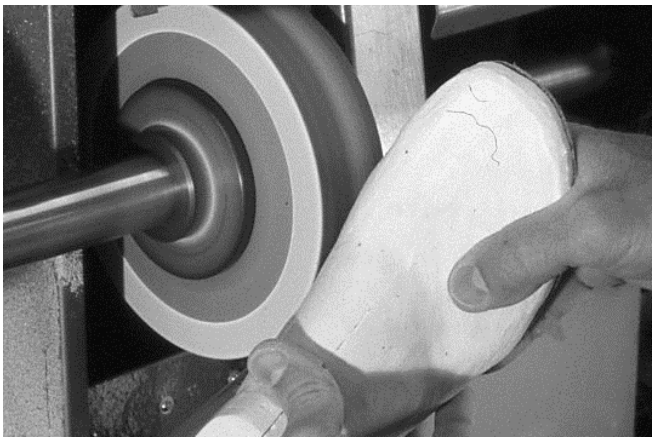
11 Thermocork® is hand tacked to last.



12 Thermocork® edge is sanded.



13 Ditto.



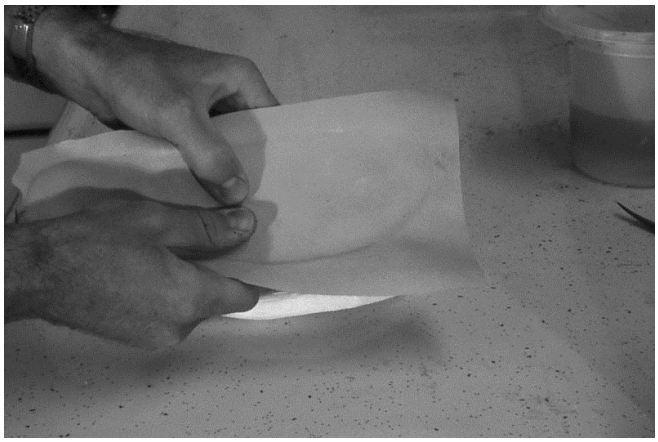
14 Ditto.

15 Hand tacks are removed.

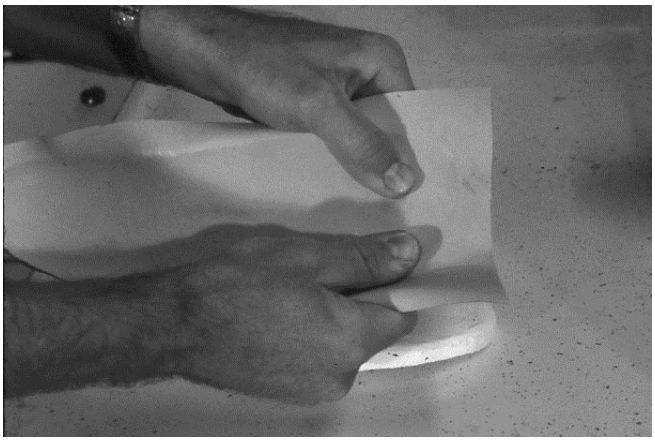
16 Thermocork® is placed on a piece of lining leather with smooth side up.

17 Lining leather is turned over and adhesive is applied to bottom of leather and top of Thermocork®.

18 Thermocork® is turned upside down and placed on lining leather.



19 Lining leather is stretched and pressed onto Thermocork®.



20 Ditto.

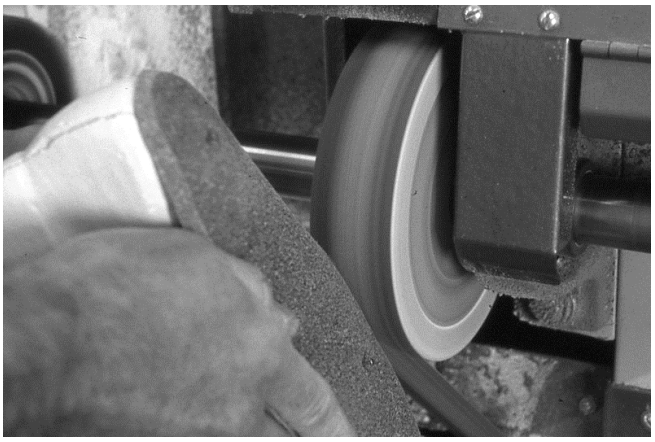
21 Lining leather is trimmed to edge of Thermocork®.

22 Ditto.

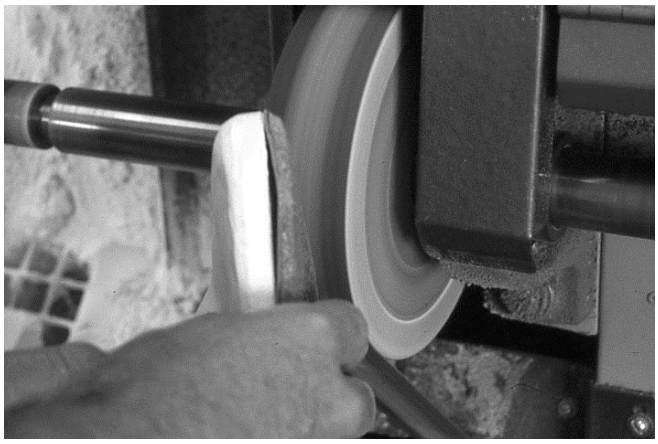
23 Leathered Thermocork® is fitted to last.

24 Hand tacks are used to secure lined Thermocork® to last.

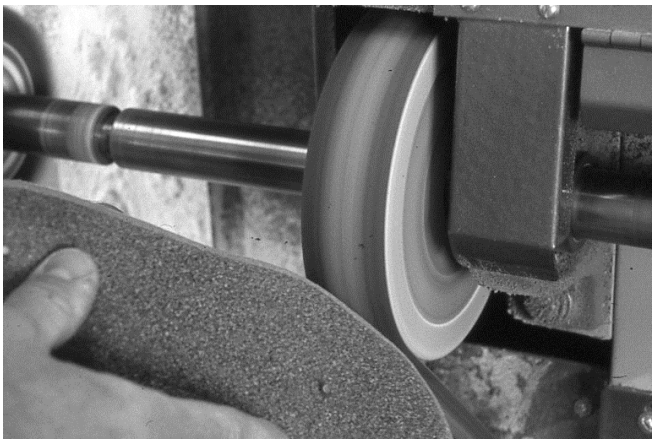
25 Ditto.



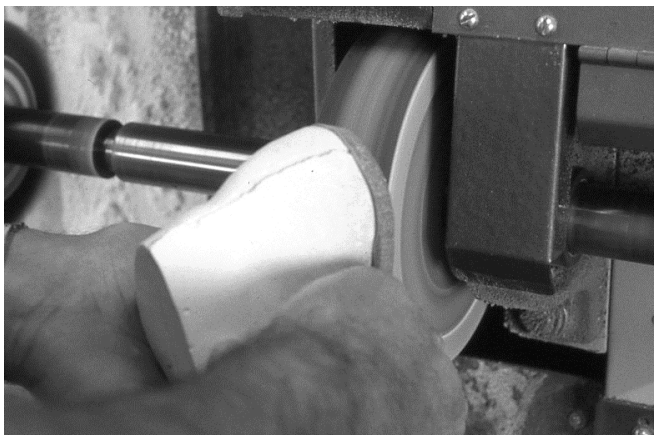
26 The Thermocork® edge is beveled smooth.



27 Ditto.



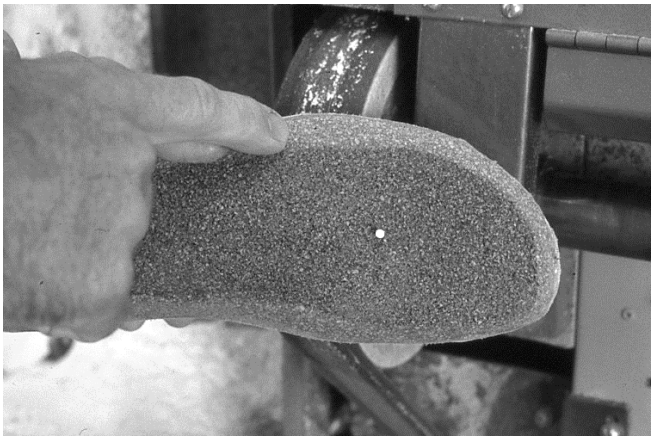
28 Ditto.



29 Ditto.

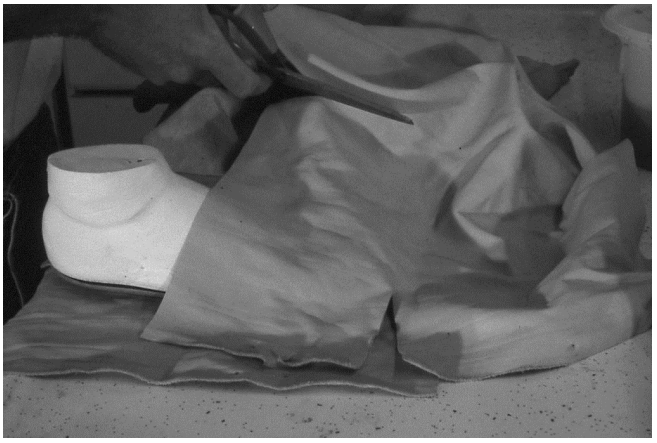
30 Ditto.

31 Ditto.

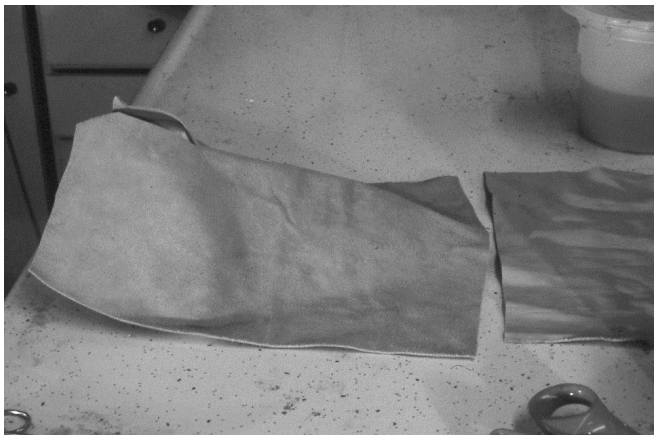


32 Ditto.

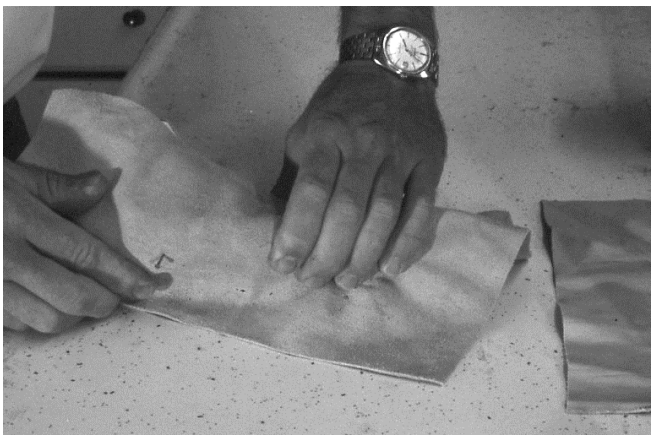
33 Lining leather is cut for front top of shoe.



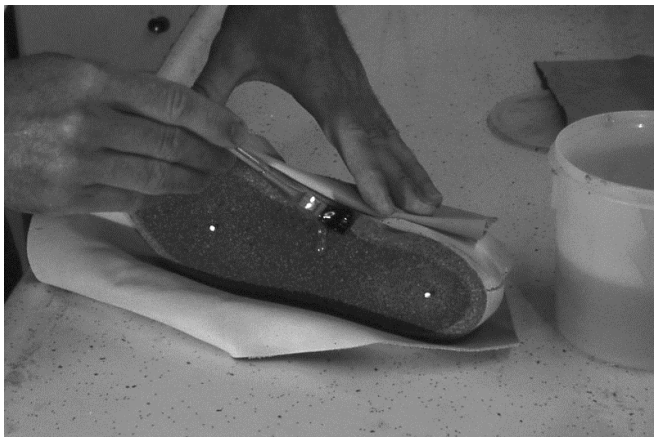
34 Ditto.



35 A short center cut is made to the top of front leather and stops just before top of shoe design cord.



36 Leather is folded and fitted.



37 Glue is applied to Thermocork®.

38 Glue is applied to front lining leather.

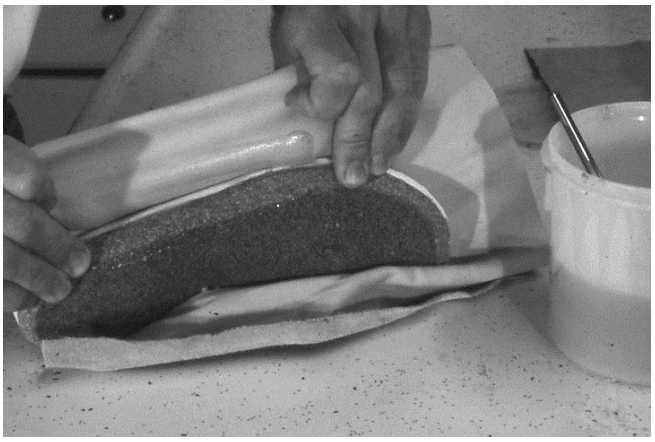
39 Lining leather is stretched into place.

40 Lining leather is pressed to bond glue.

41 Ditto other side of last.

42 Ditto.

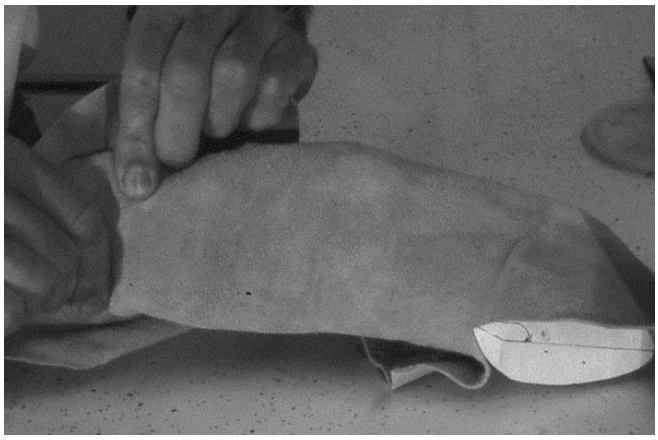
43 Ditto.



44 Ditto.

45 Ditto.

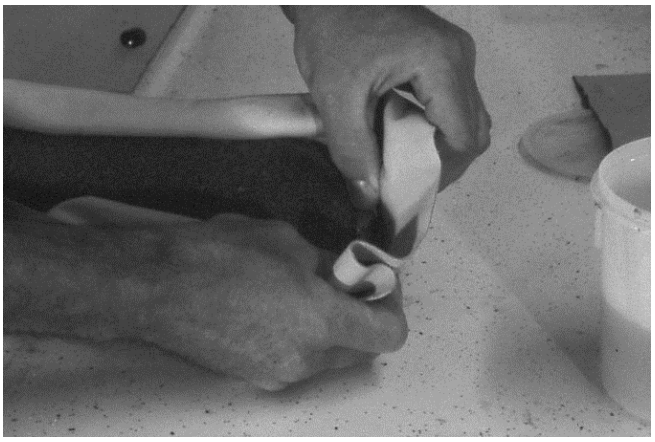
46 Ditto.



47 Notice how top of lining leather has been stretched to fit snuggly to last. A good fit of lining leather is very important.

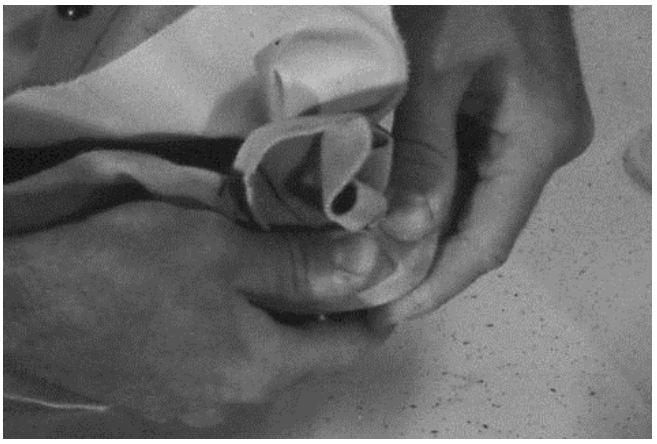
48 Leather pulled into place.

49 Glue is applied.



50 Lining leather is stretched and pressed.

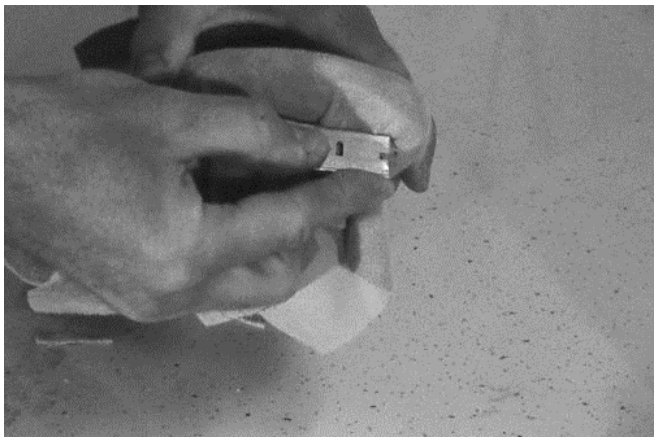
51 Ditto.



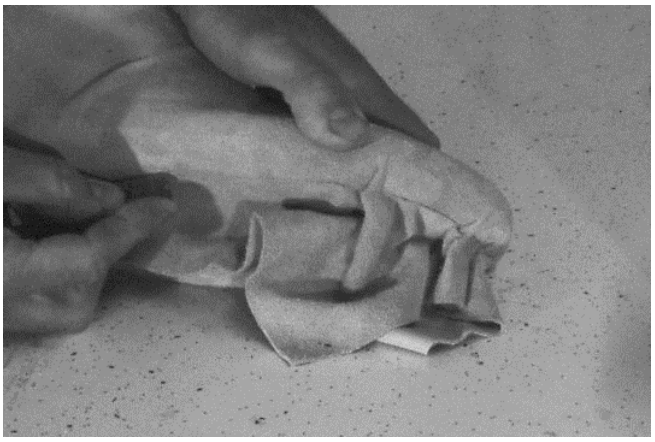
52 Ditto.

53 Ditto.

54 Ditto.

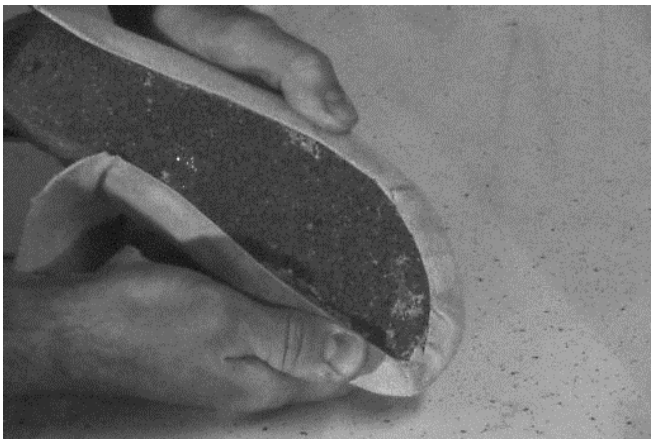


55 A single edge razor blade is used to cut off waste.

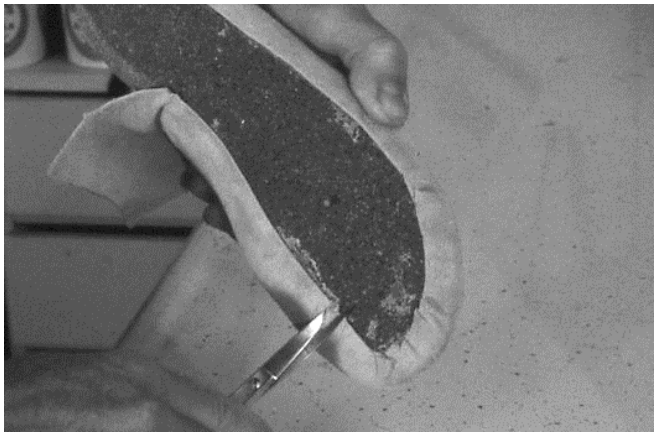


56 Ditto.

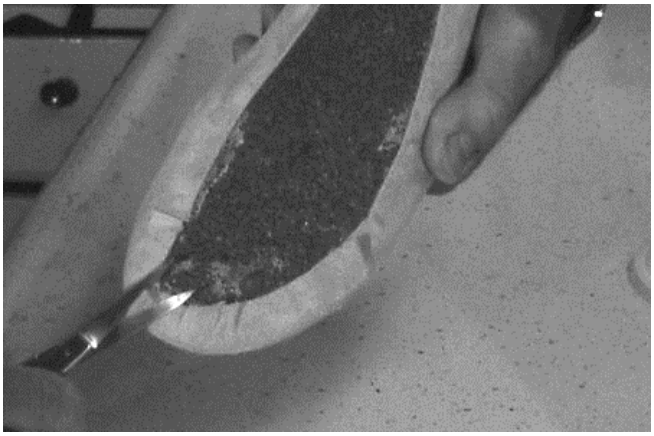
57 Ditto.



58 Ditto.

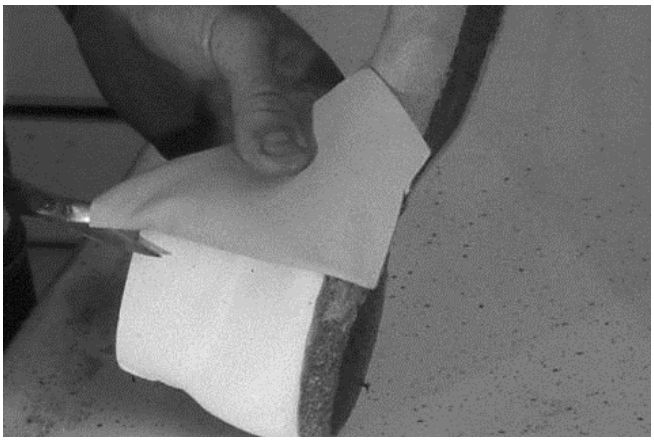


59 Folds, tucks or darts are cut off so leather is smooth.

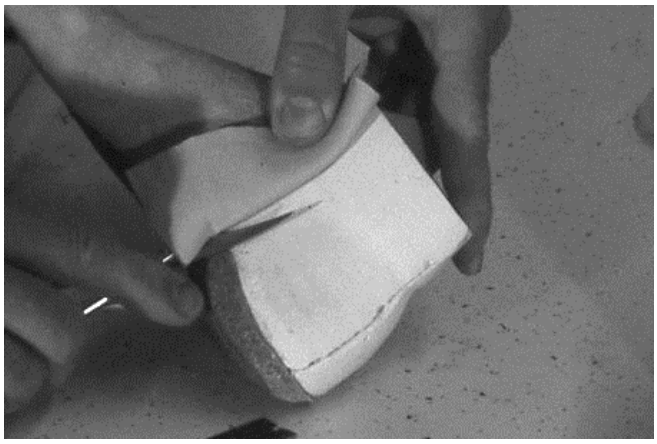


60 Ditto.

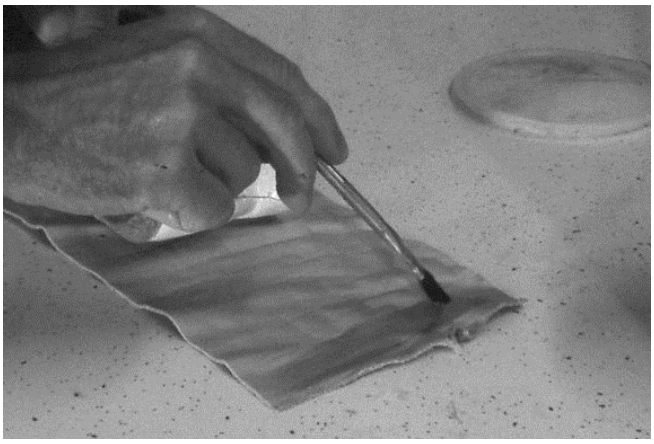
61 It should look nice.



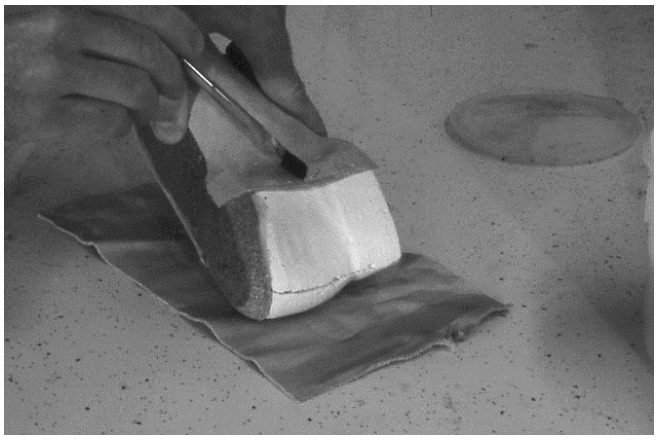
62 Excess lining leather is cut off at desired location of side seam.



63 Ditto.



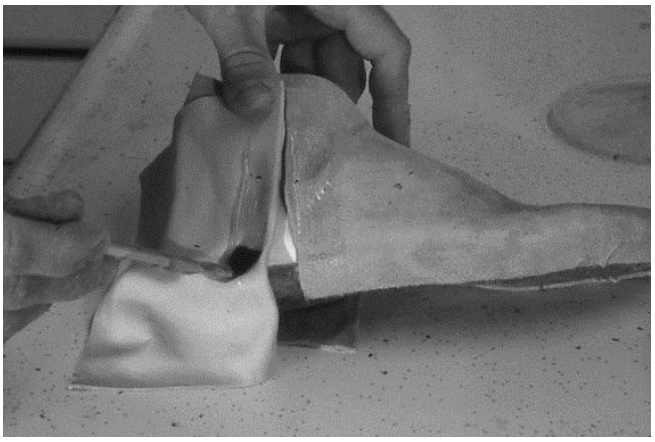
64 Heel lining leather is laid on table and glue is applied for side seam overlap.



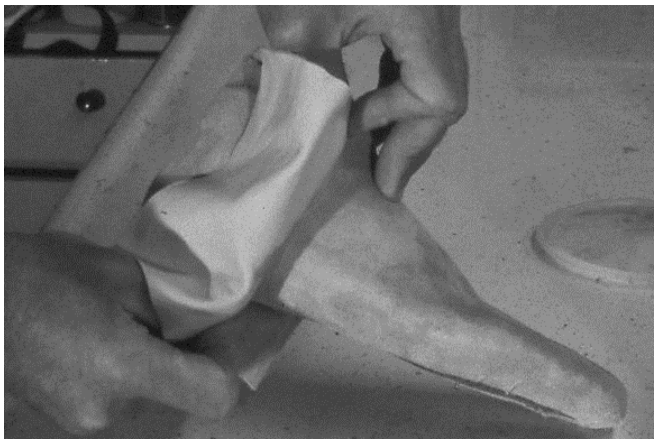
65 Ditto.

66 Heel lining leather is placed at side seam.

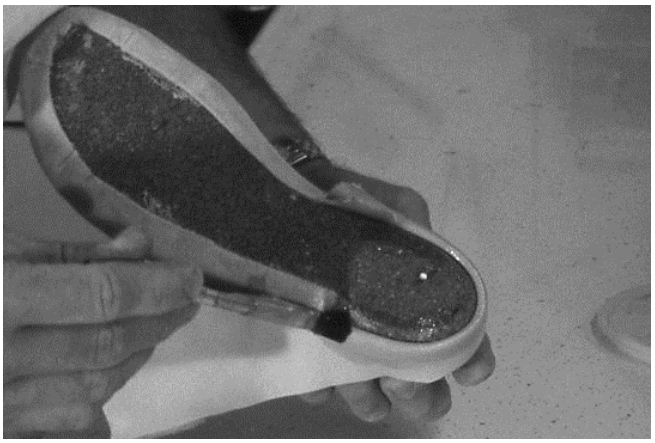
67 Heel lining leather is pressed.



68 Glue is applied to other side.



69 Heel lining leather is stretched snugly around back of last, pulled forward to side seam and then pressed.

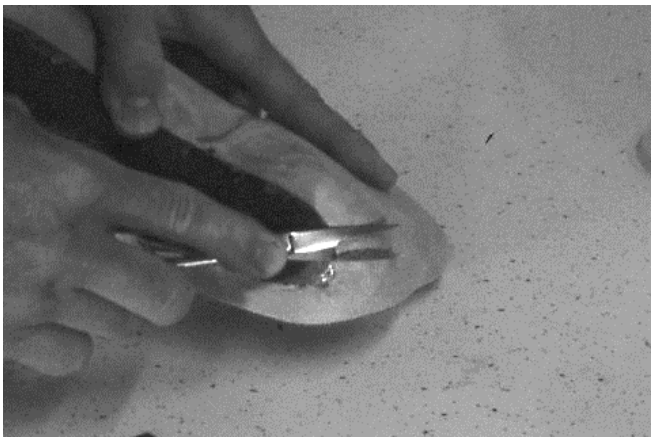


70 Glue is applied to bottom edge of lining leather and Thermocork®.

71 Heel lining leather is pulled tight and pressed.

72 Ditto.

73 A single edge razor blade is used to cut off excess.



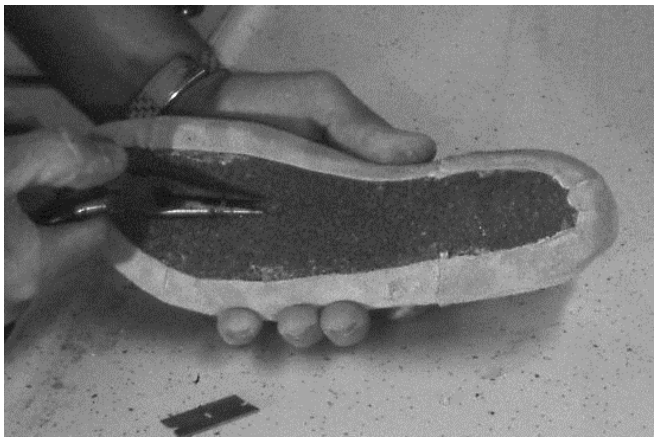
74 Darts are cut flat.

75 Excess lining leather is cut away leaving about 1/2" of side seam overlap.

76 Ditto.

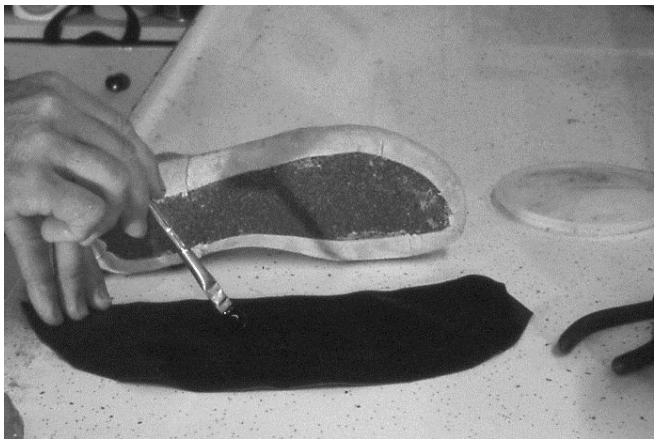
77 Excess lining leather above top of last is cut off.

78 Hand tacks are removed.

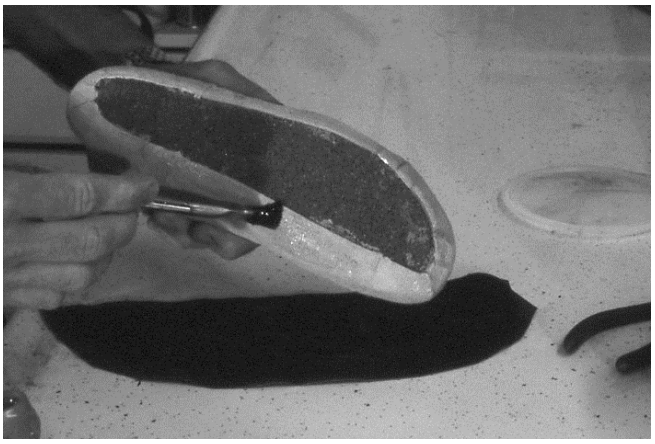


79 Ditto.

80 A bottom piece of leather is cut .

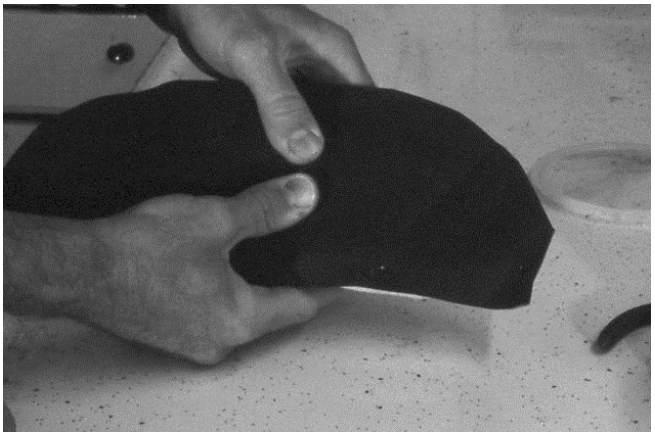


81 Glue is applied to bottom leather.

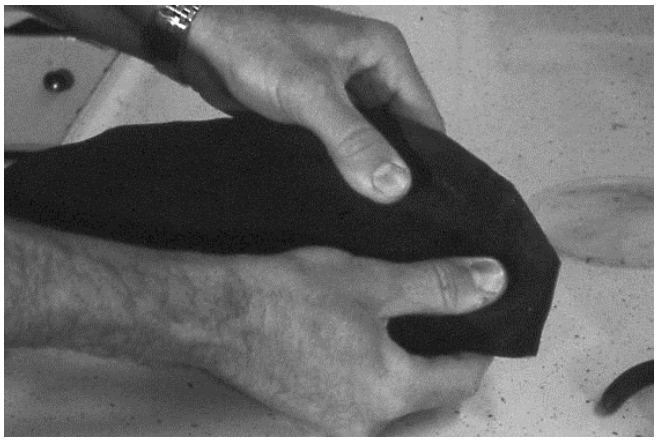


82 Glue is applied to upper lining leather.

83 Last is placed on bottom leather.

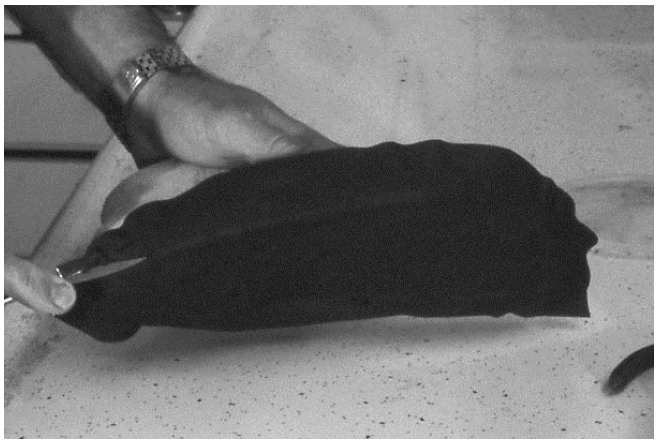


84 Bottom leather is pressed into place.

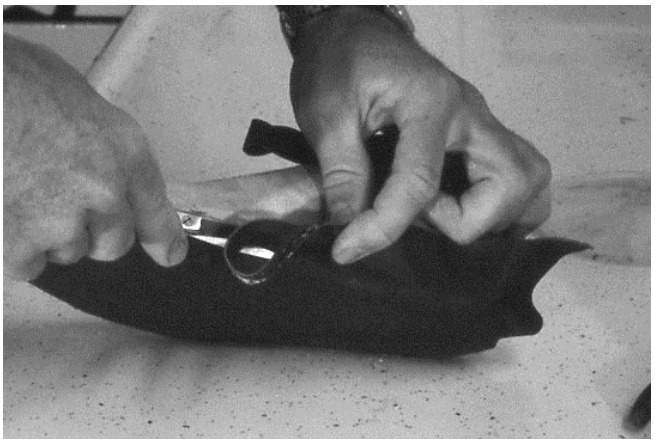


85 Ditto.

86 Ditto.

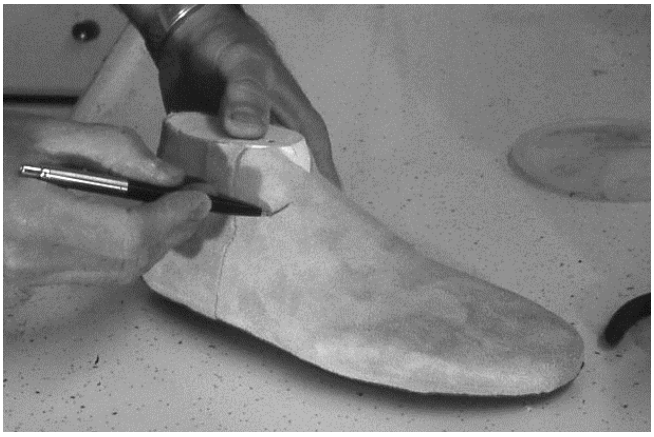


87 Excess bottom leather is trimmed away.

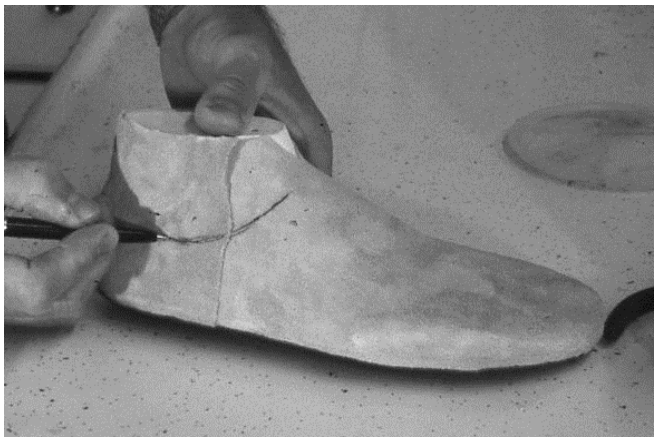


88 Ditto.

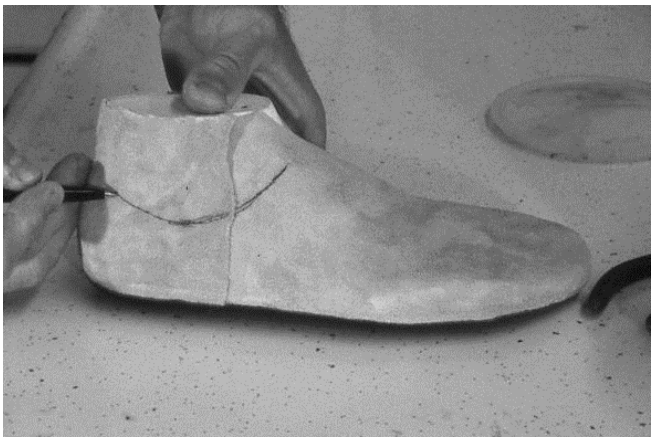
89 View of bottom leather. This bottom leather is really another lining as the leather lined Thermocork® becomes a removable insert.



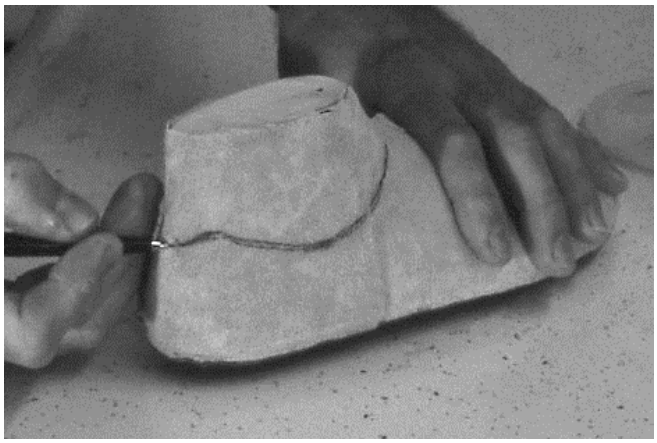
90 Top of shoe is roughly designed.



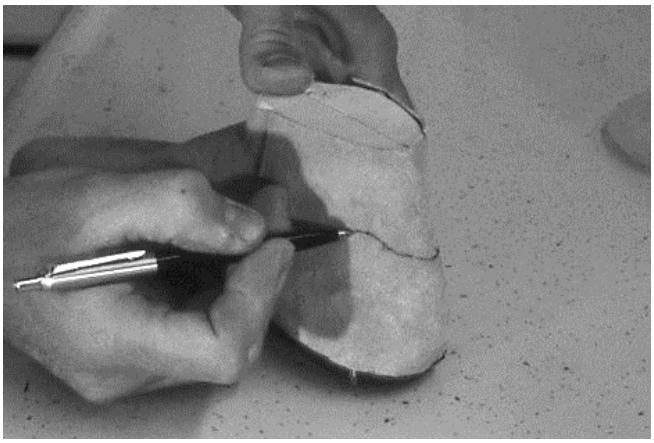
91 Ditto.



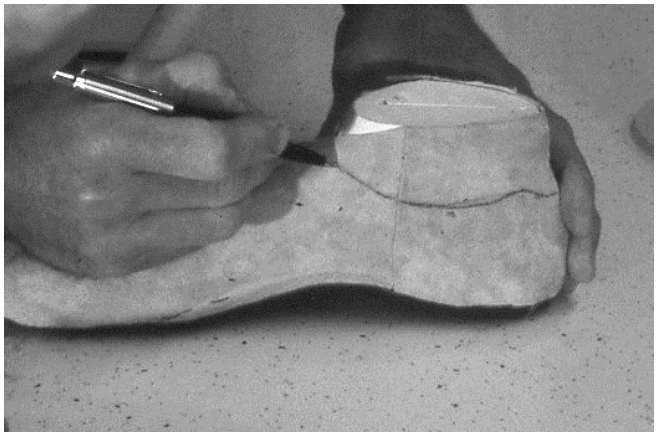
92 Ditto.



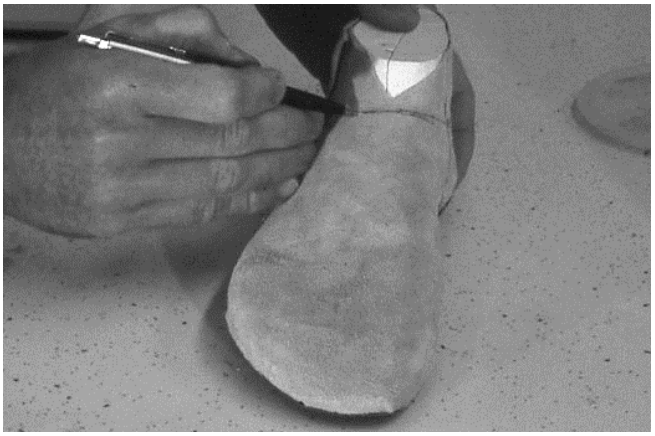
93 Ditto.



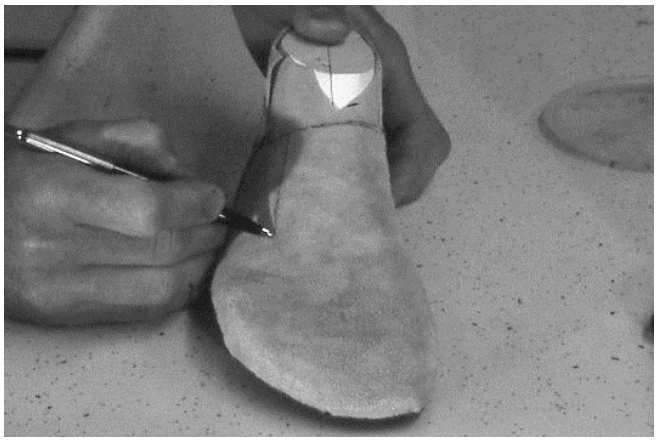
94 Ditto.



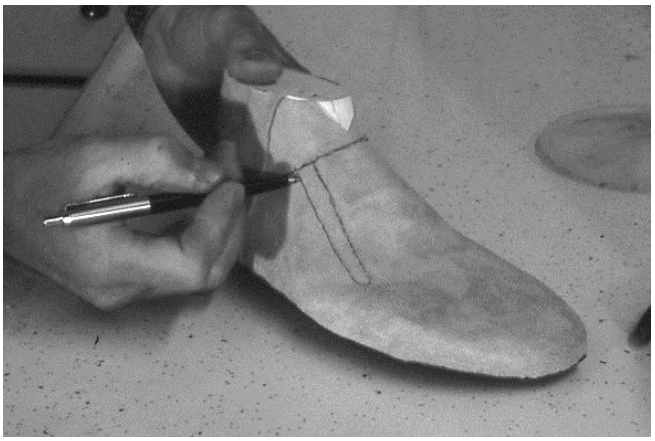
95 Ditto.



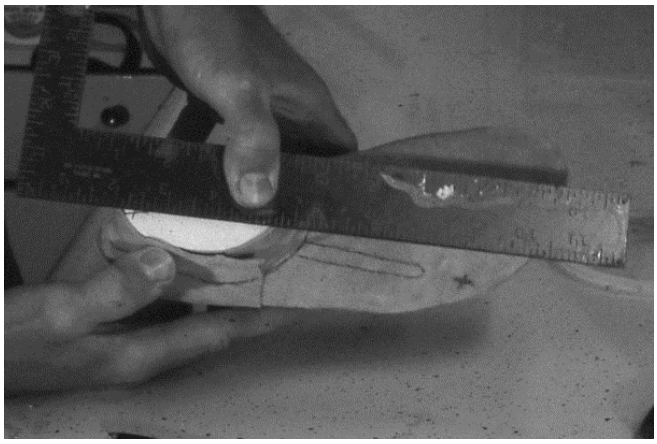
96 Ditto.



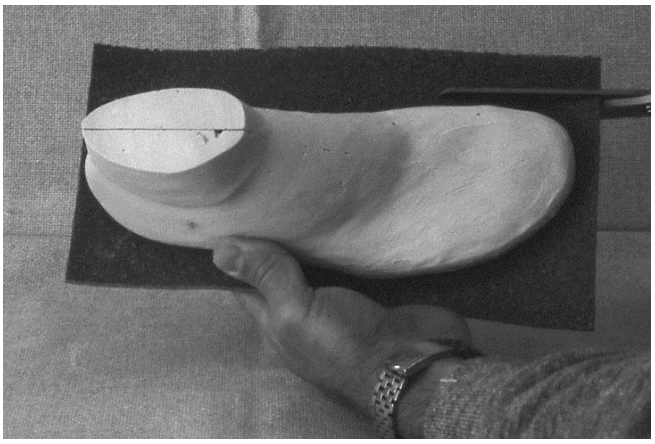
97 Ditto.



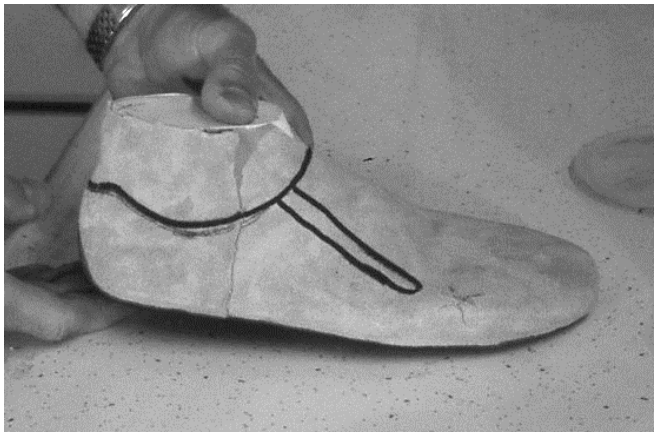
98 Ditto.



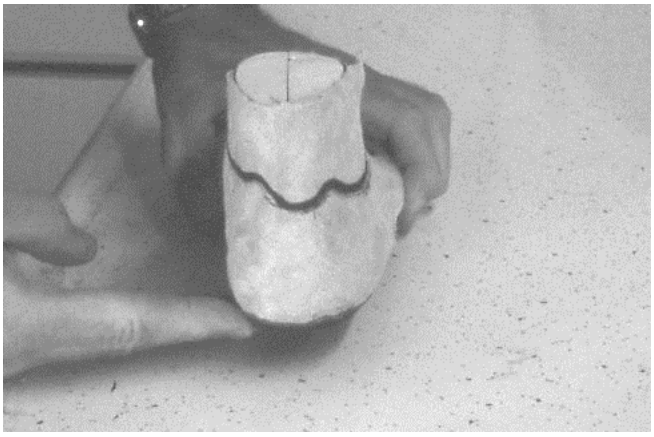
99 Lace opening is designed.



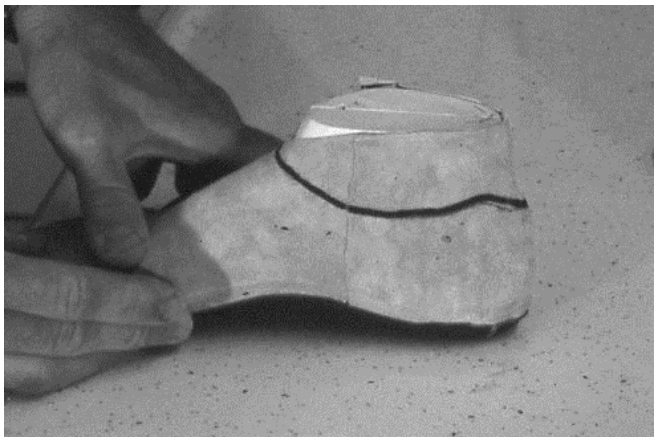
100 Ditto.



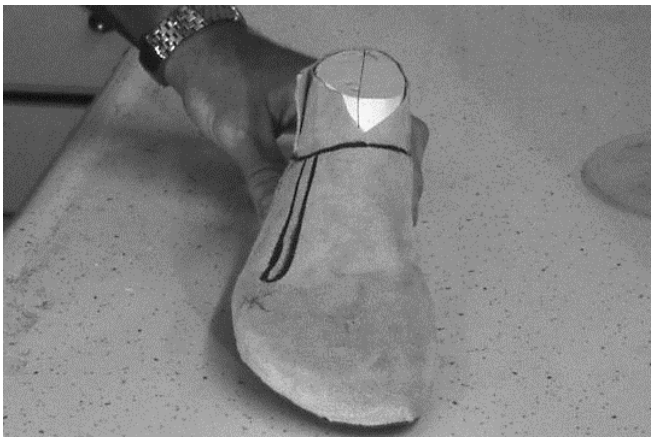
101 Improved design is marked.



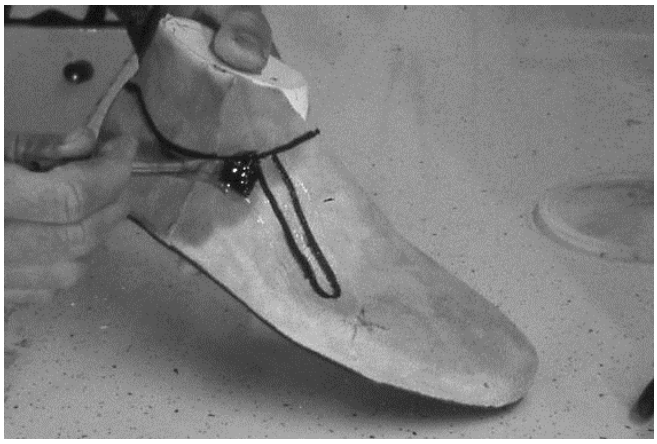
102 Ditto.



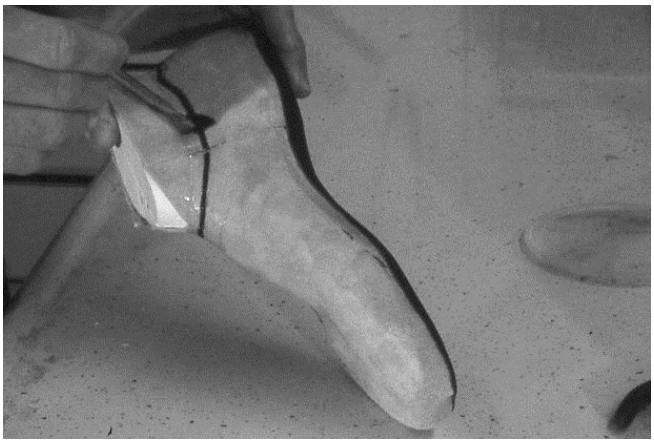
103 Ditto.



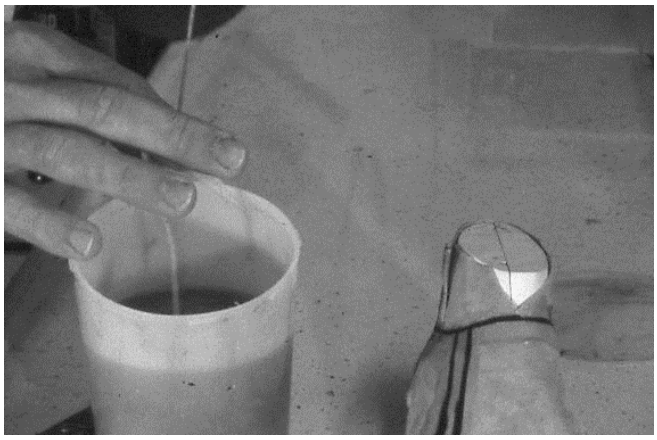
104 Ditto.



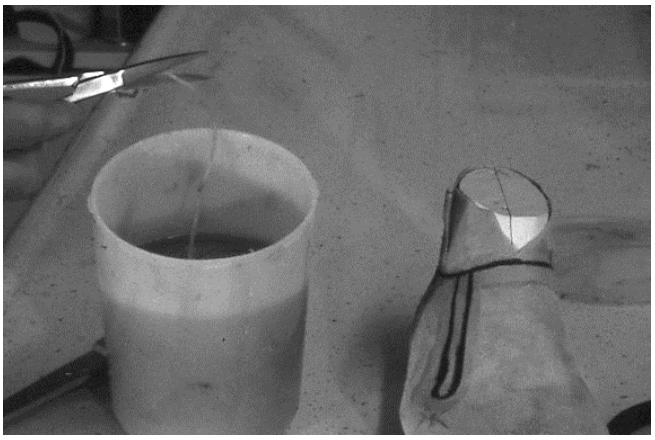
105 Glue is applied to design marking.



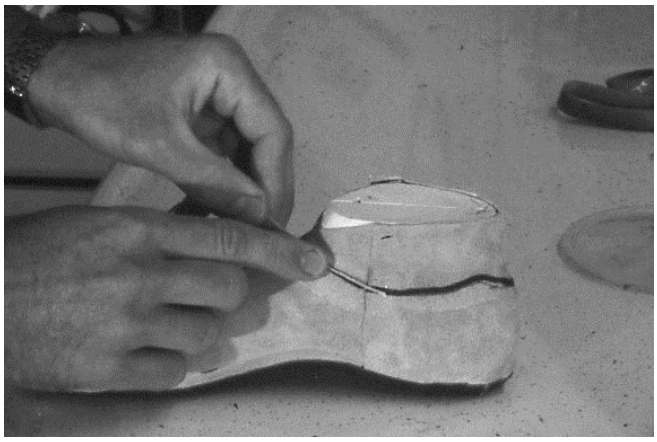
106 Ditto.



107 Glue is applied to design string.



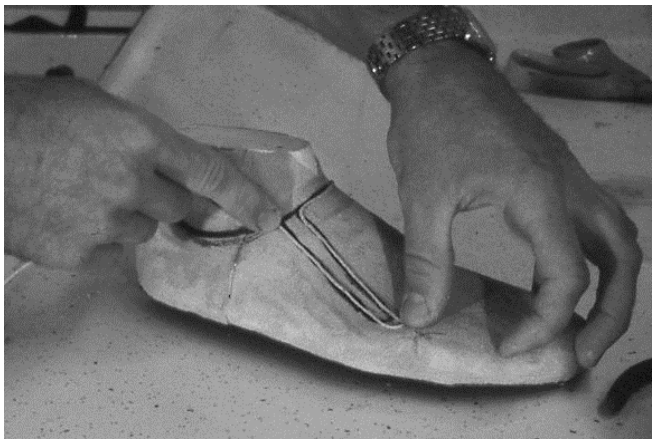
108 Ditto.



109 Design string is applied to last.

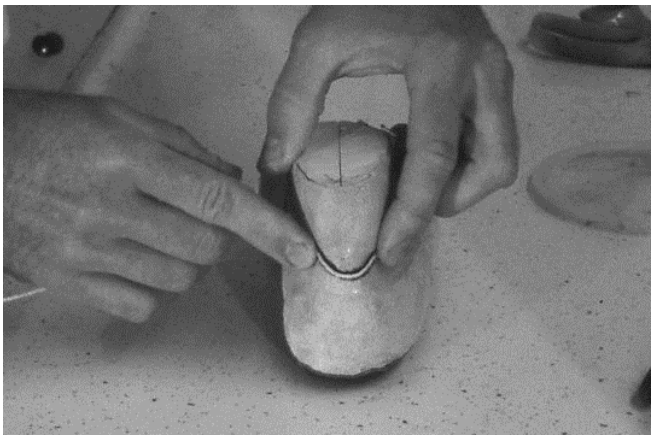
110 Ditto.

111 Ditto.

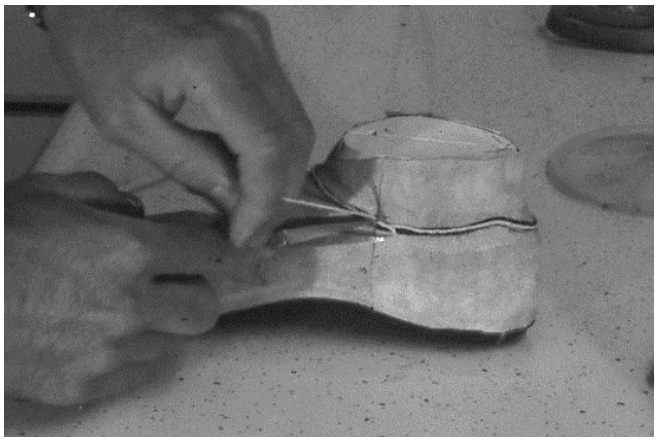


112 Ditto.

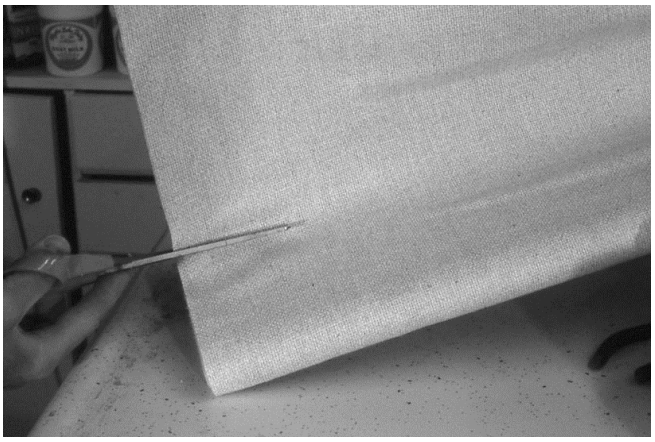
113 Ditto.



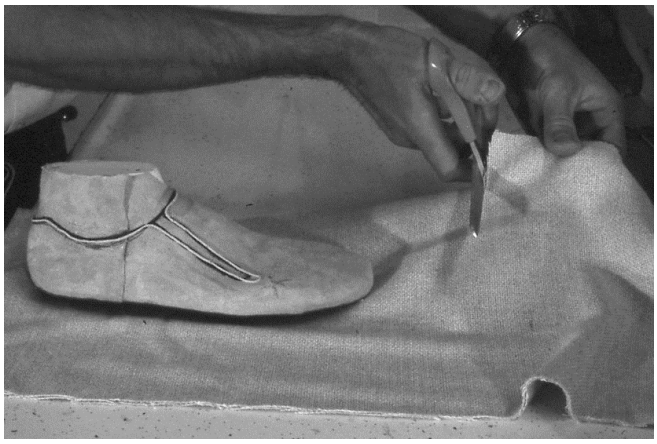
114 Ditto.



115 Ditto.

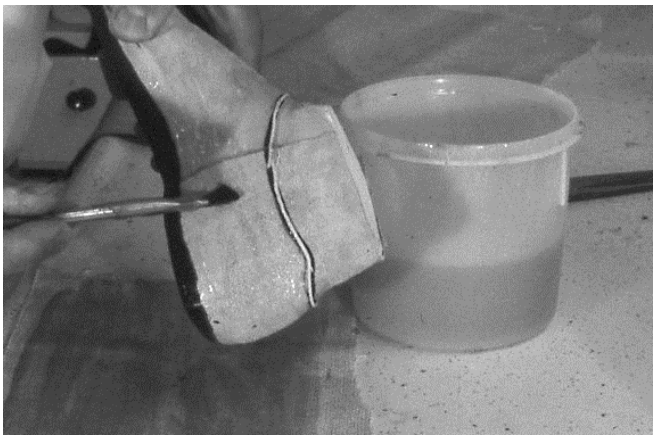


116 Monks Cloth is cut to fit front and back of shoe.

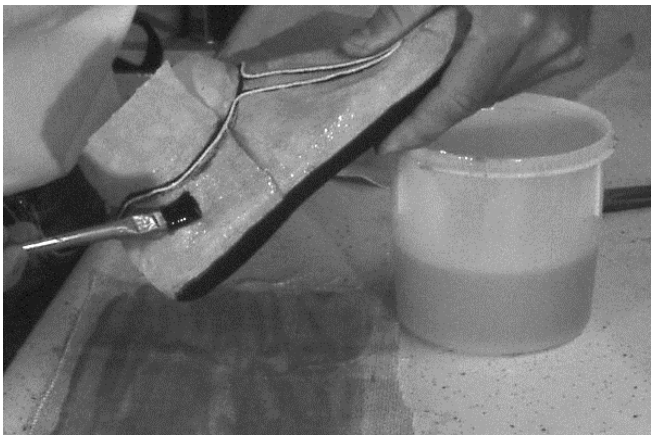


117 Ditto.

118 Glue is applied to heel Monks Cloth (no sock is necessary for this shoe process).

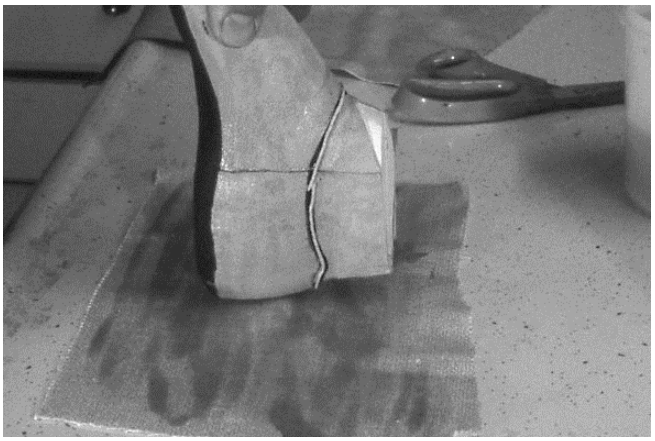


119 Glue is applied to lining leather.

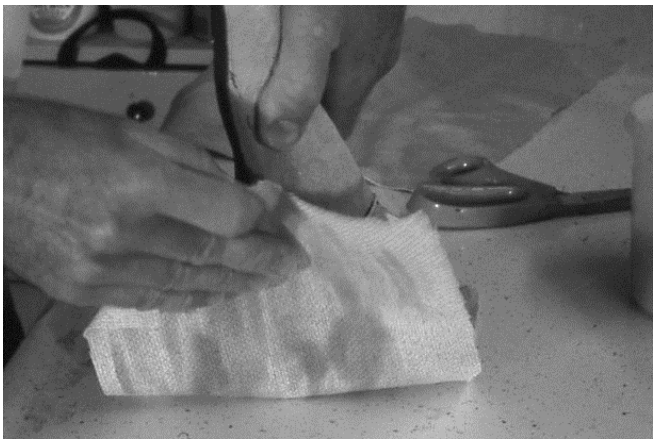


120 Ditto.

121 Glue is applied around edge of bottom leather.



122 Shoe is placed on Monks Cloth.



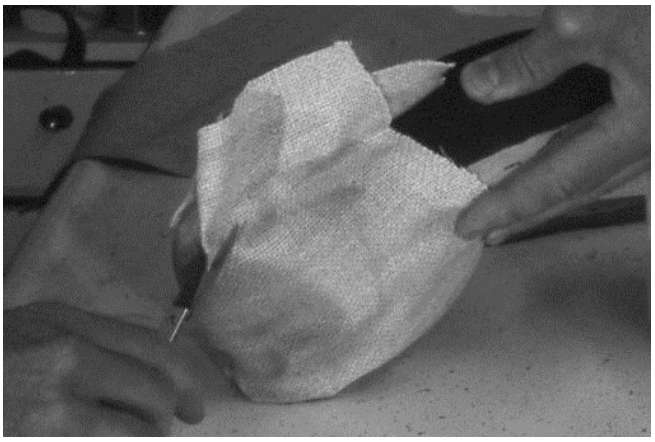
123 Monks Cloth is pulled and stretched and pressed.

124 Ditto.

125 Ditto.

126 Darts or folds are made.

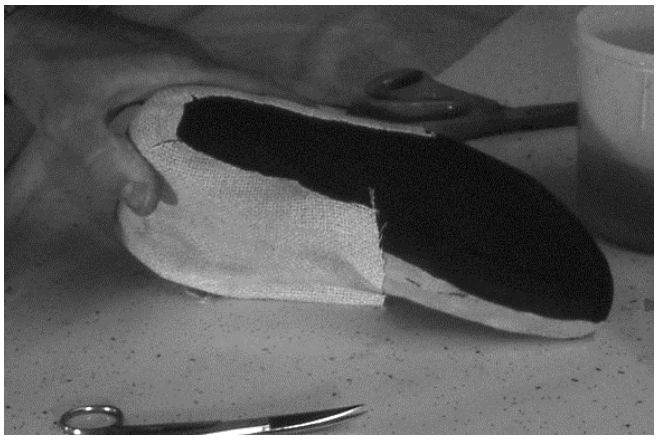
127 Darts are cut.



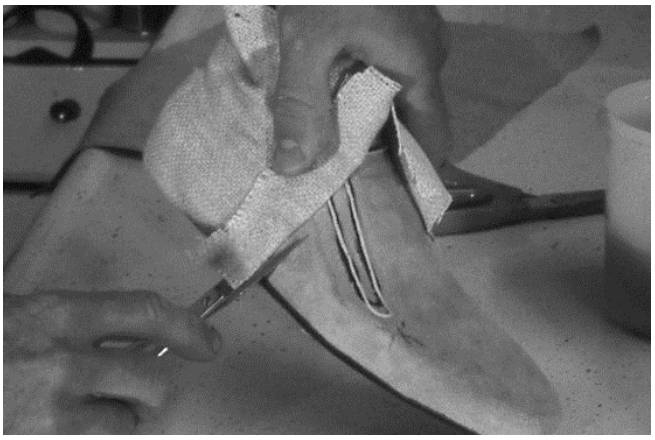
128 Ditto.

129 Excess Monks Cloth is cut off leaving about 1/2" of overlap on bottom leather.

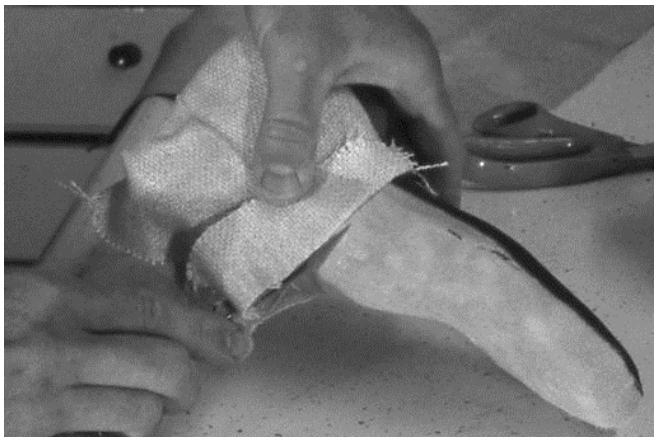
130 Ditto.



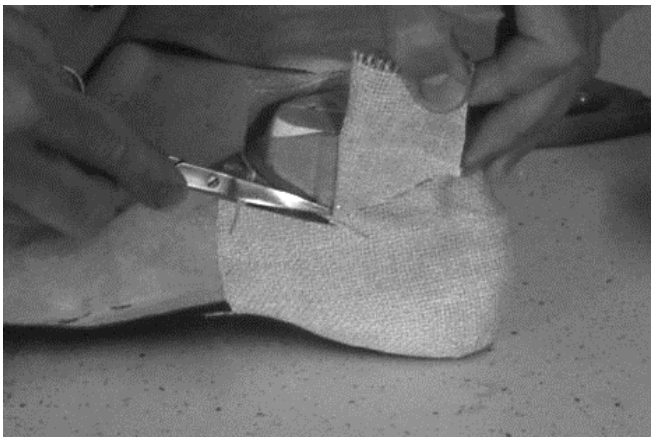
131 Bottom view.



132 Forward excess is cut off sides.

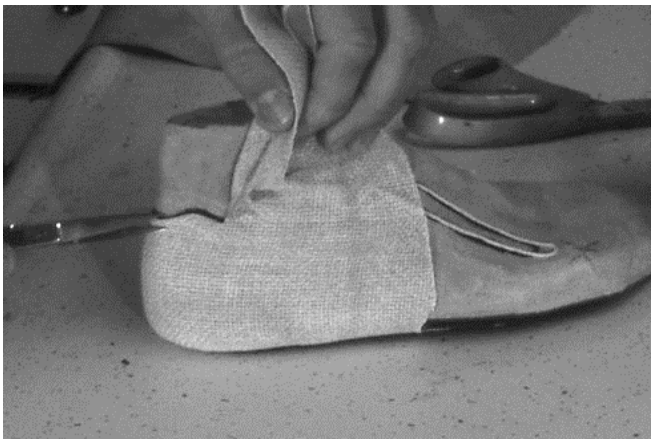


133 Ditto.

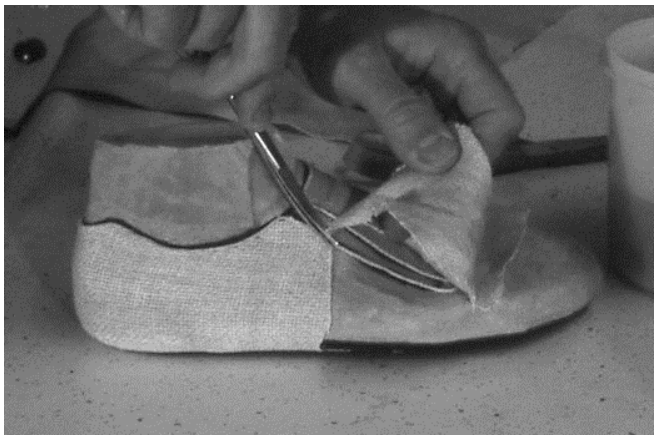


134 Excess is cut off above top of shoe design cord.

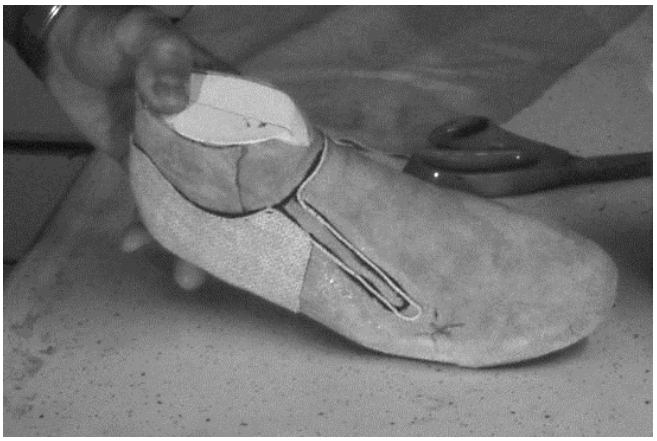
135 Ditto.



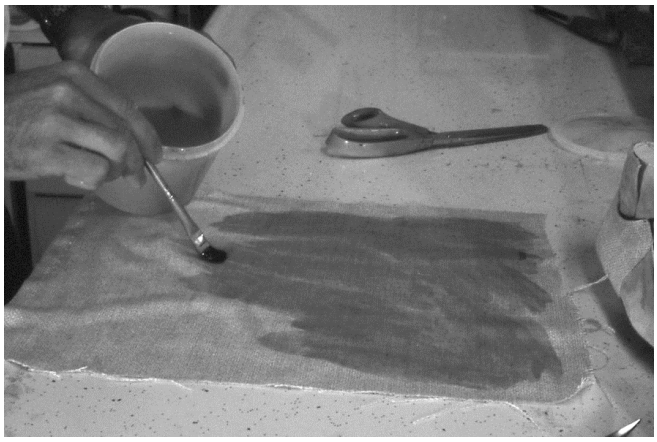
136 Ditto.



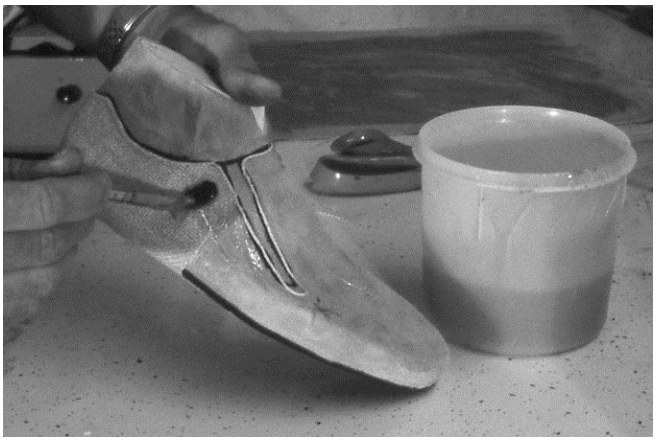
137 Ditto.



138 Finished view.



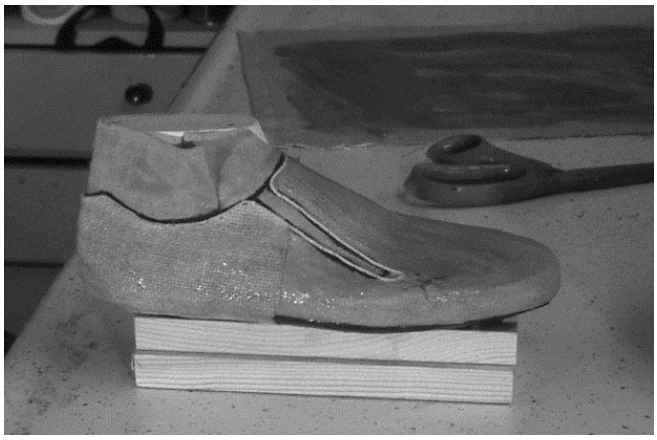
139 Glue is applied to top (front) Monks Cloth.



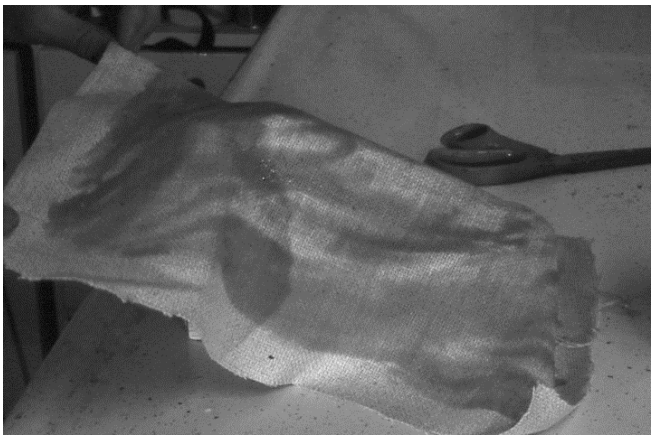
140 Glue is applied to all of shoe except inner part of bottom leather.

141 Ditto.

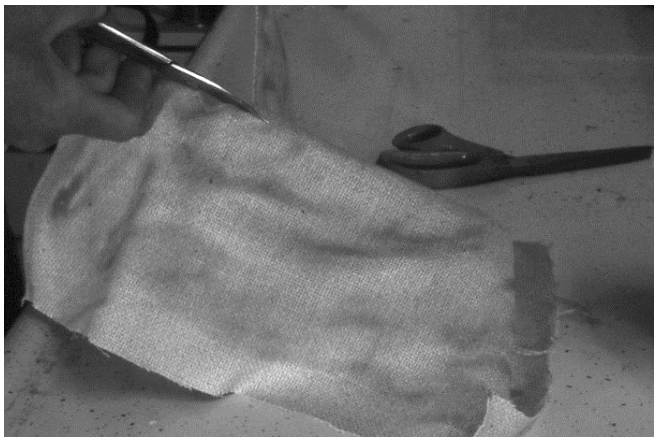
142 Ditto.



143 Glued shoe can be placed on blocks so as to be above table top.



144 Top Monks Cloth is placed over shoe.



145 Center cut is made from back of Monks Cloth to just before top of shoe design cord.

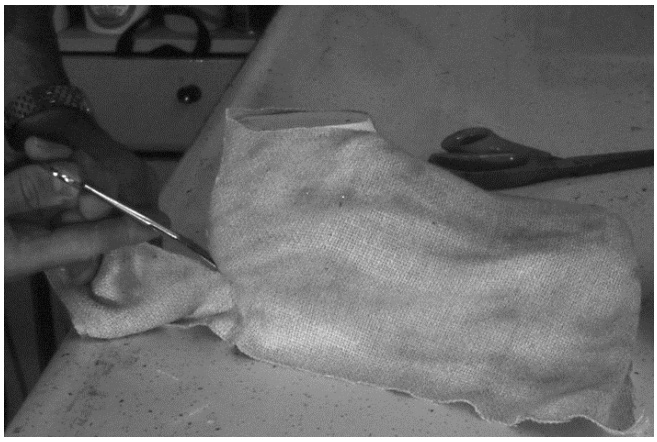
146 Top Monks Cloth is pulled, stretched and pressed into place.

147 Ditto.

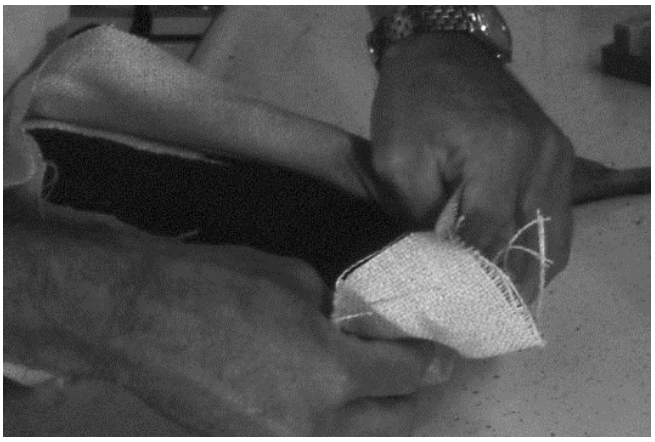
148 Ditto.

149 Sides are made to fit snugly at back of shoe.

150 Excess can be cut off at back to form a seam with or without overlap.



151 Ditto.



152 Bottom of Monks Cloth is secured to bottom leather.

153 Ditto.

154 Ditto.

155 Ditto.

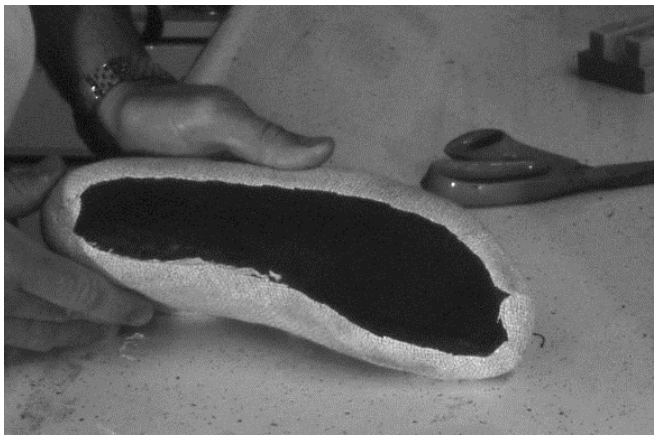
156 Ditto.

157 Ditto.

158 Ditto.

159 The desired overlap is about 1/2" from outside edge of bottom leather. Excess Monks Cloth is cut away.

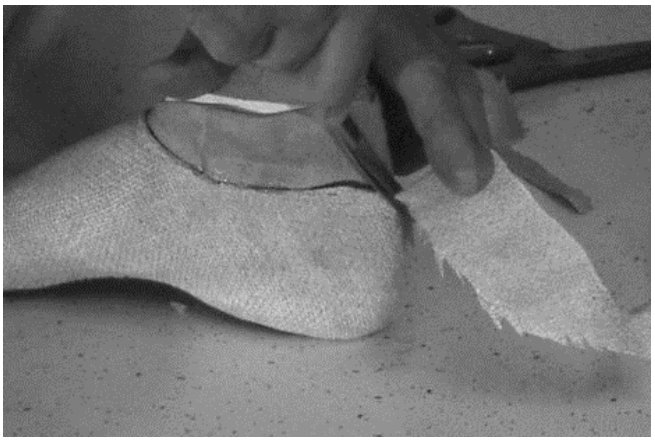
160 Ditto.



161 Complete view of bottom.

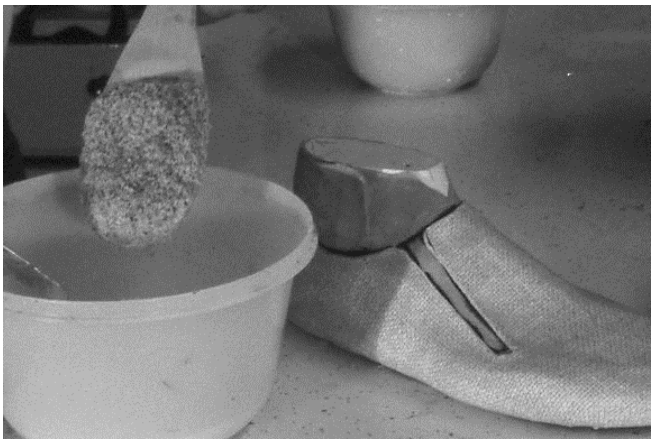
162 Top edge of Monks Cloth is cut away.

163 Ditto.



164 Ditto.

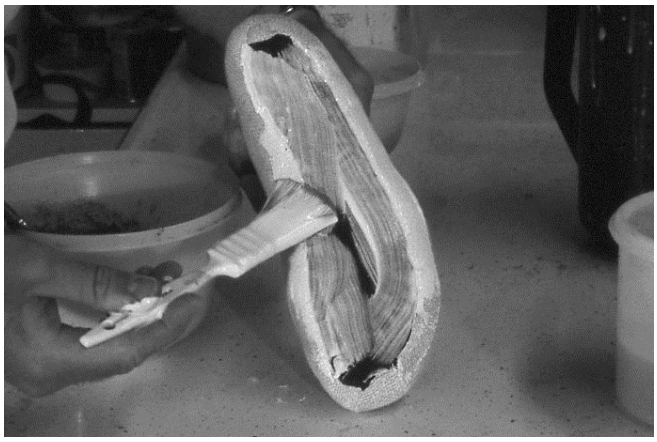
165 Latex is poured into mixing bowl.



166 Dry "mud" flour is added.

167 Mixing "mud" flour and latex into rubber butter.

168 "Mud" has been created at the desired consistency.



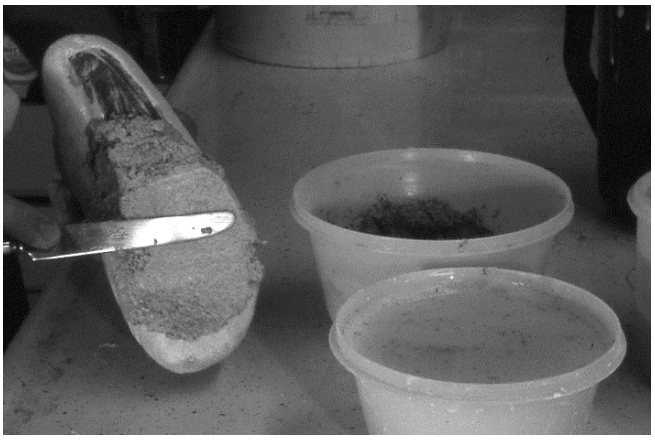
169 Latex is applied to bottom of shoe.

170 Ditto.

171 "Mud" is applied to bottom of shoe.

172 Ditto.

173 Water is used to help spread and shape "mud".

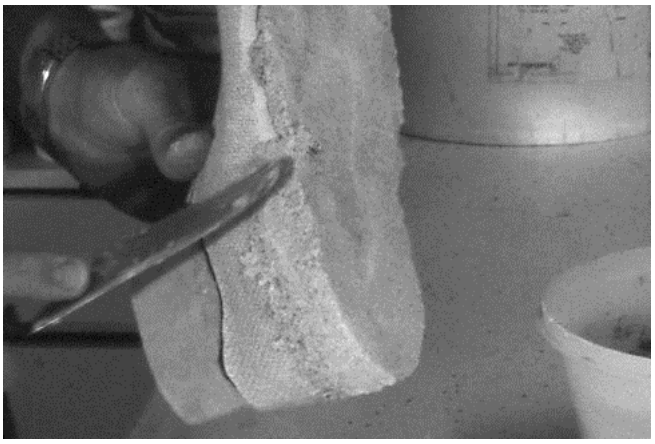


174 Ditto.

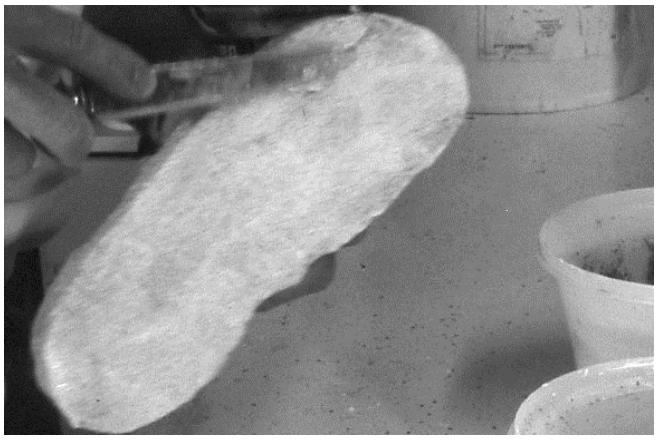
175 Ditto.

176 Ditto.

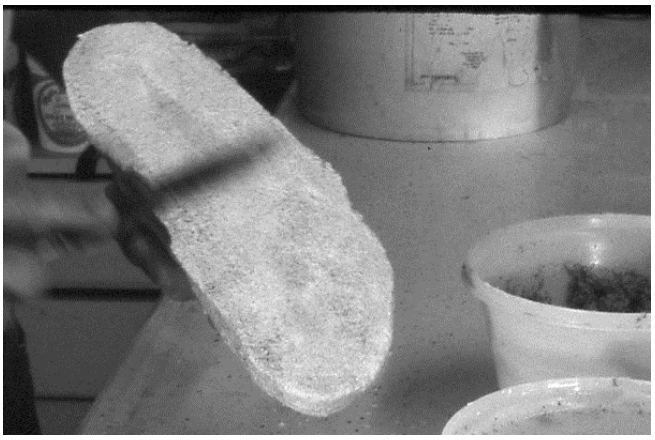
177 Ditto.



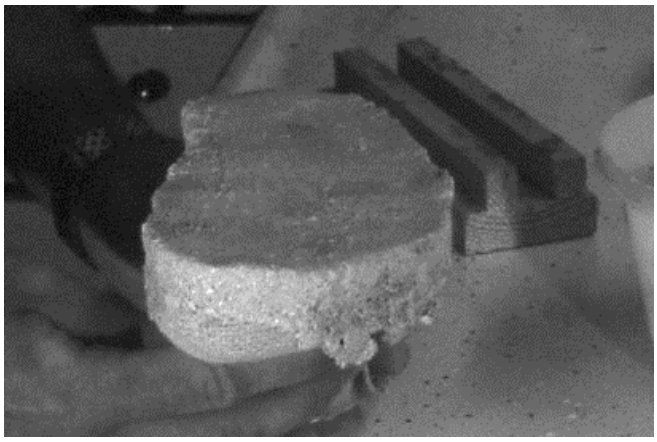
178 Ditto.



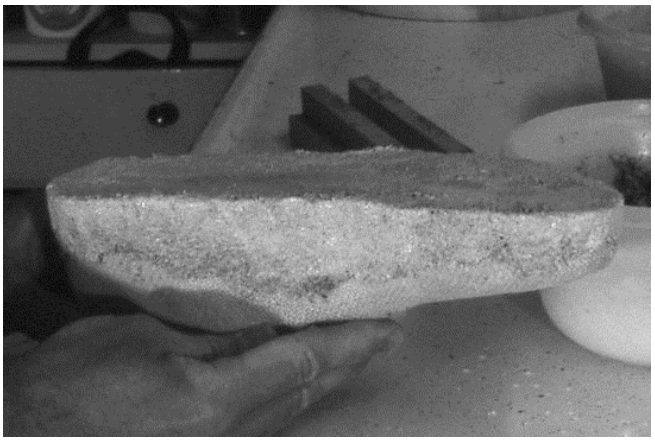
179 Ditto.



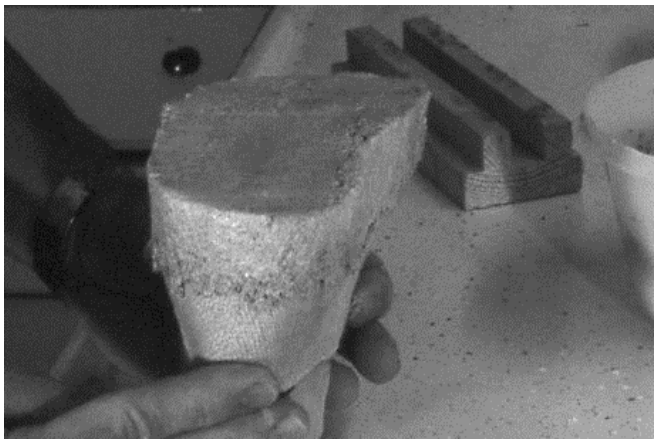
180 Ditto.



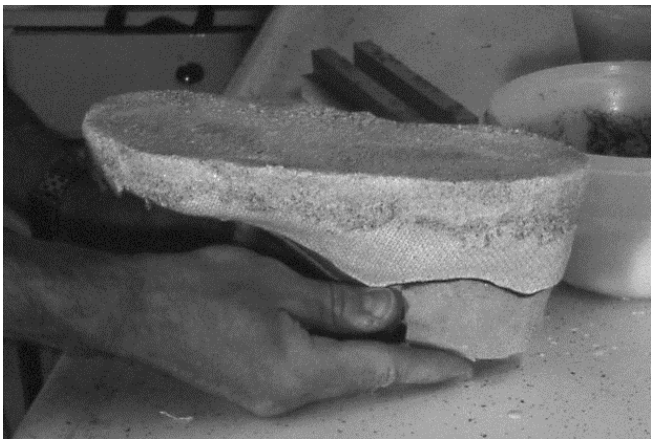
181 Finished view of "mudding".



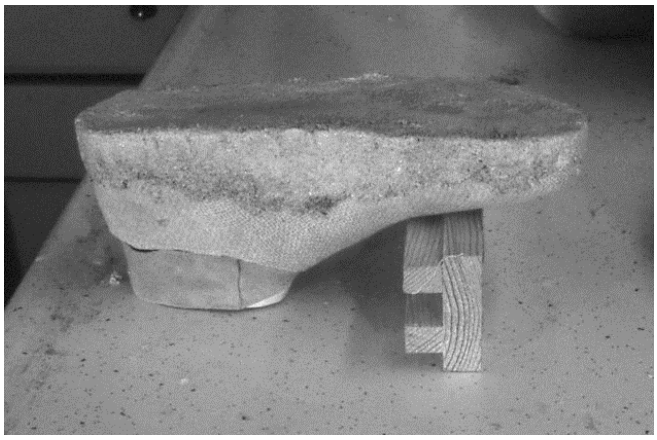
182 Ditto.



183 Ditto.



184 Ditto.



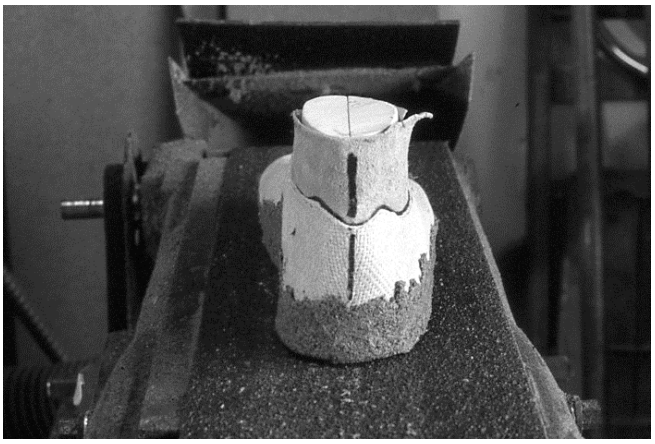
185 "Mud" is allowed to dry as required.

186 "Mud" has become firm enough to sand.

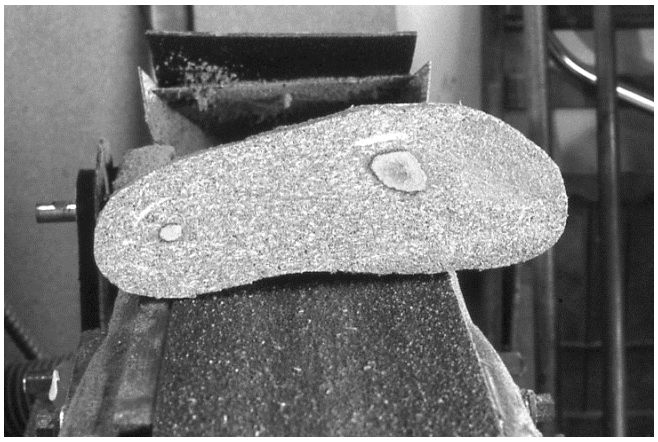
187 The dry shape of the "mud" is irrelevant at this point.

188 Ditto.

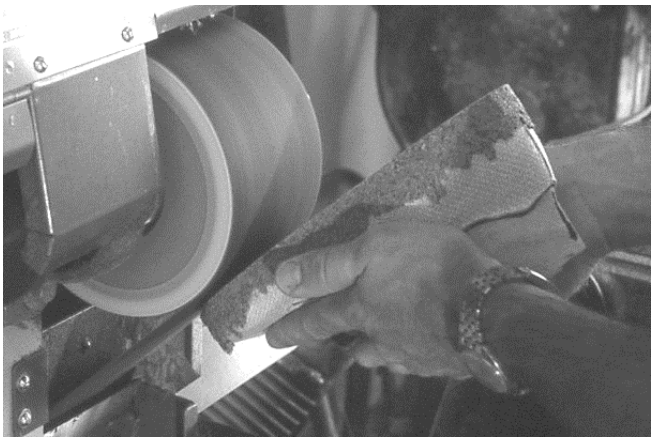
189 The sanding begins.



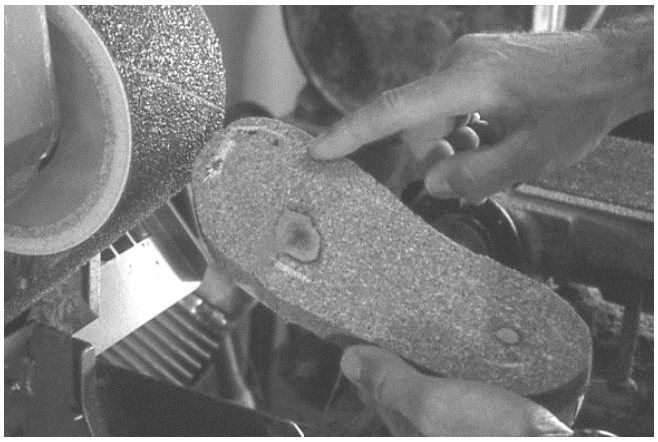
190 A vertical mark can be used to help maintain proper stance (left to right) during the sanding process.



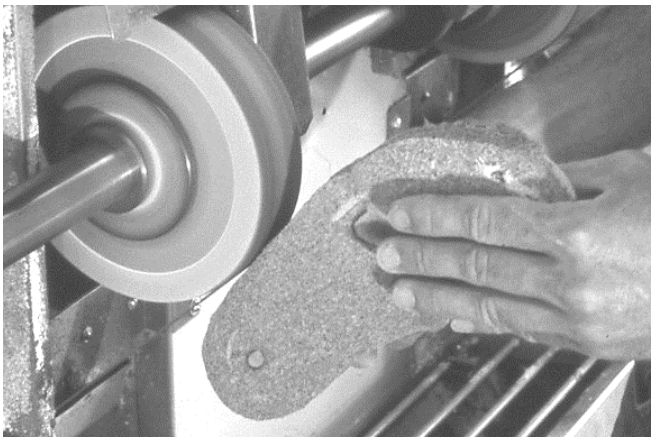
191 The bottom leather has been found. The flat belt sanding has been completed from center of heel to ball of foot.



192 The toe to ball is sanded flat (usually).

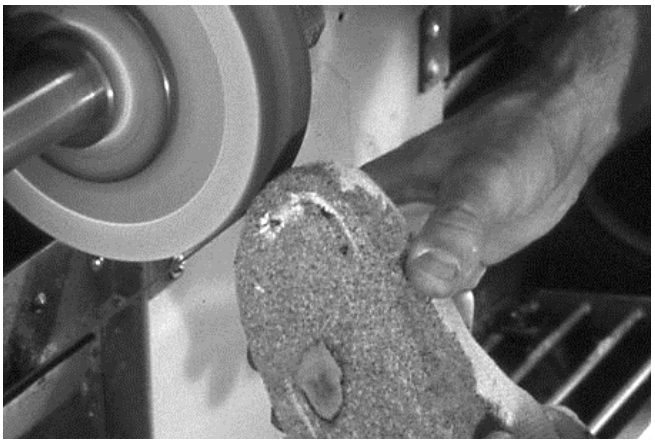


193 Finished toe to ball.

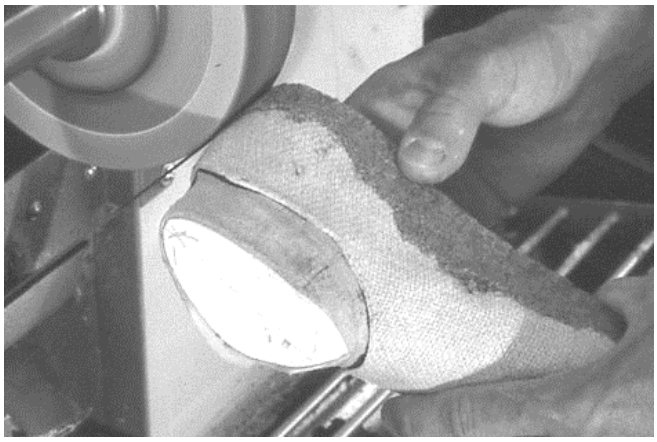


194 Outer edge of "mud" is sanded.

195 Ditto.

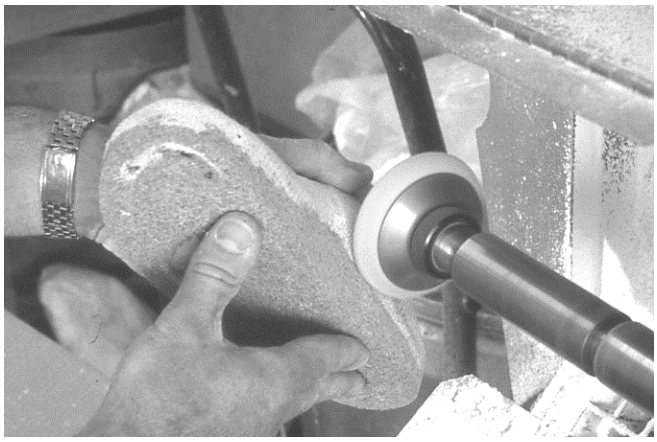


196 Ditto.

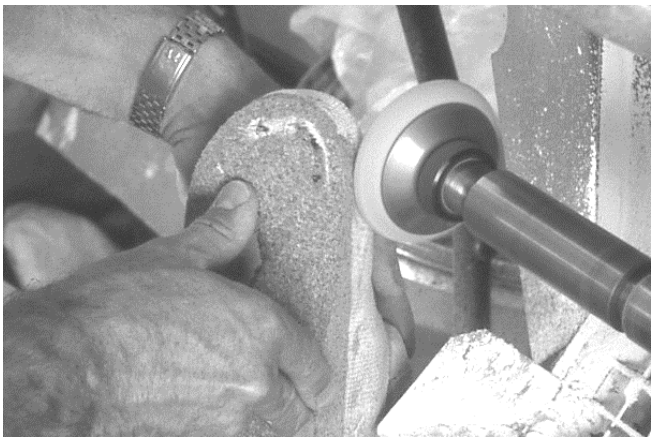


197 Ditto.

198 The Monks Cloth is wire brushed clean of "mud". Monks Cloth is a stronger fabric than a knitted sock. The weave can be very flexible if the fabric is not "sized".



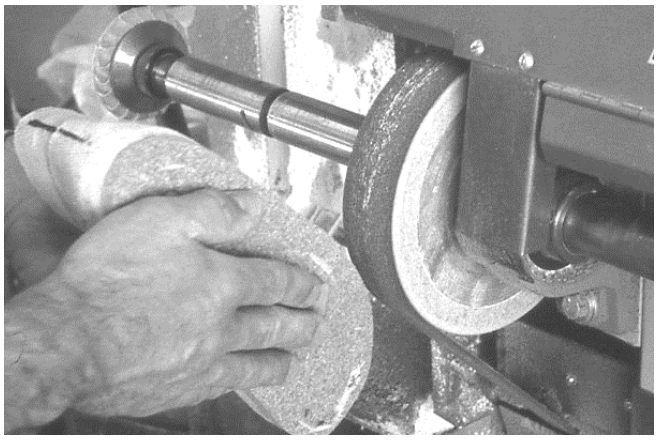
199 Artistic groove is made at top edge of "mud" base.



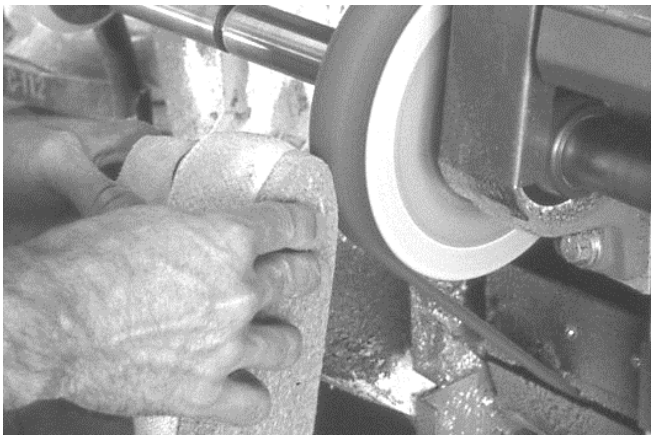
200 Ditto.

201 Ditto.

202 Ditto.

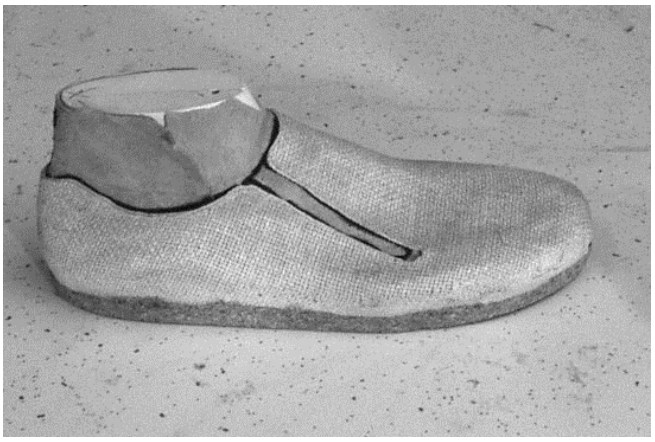


203 Final sanding of outer edge of "mud" base.

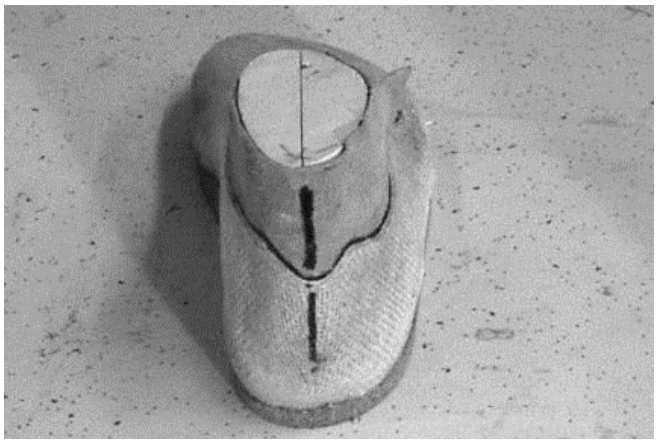


204 Ditto.

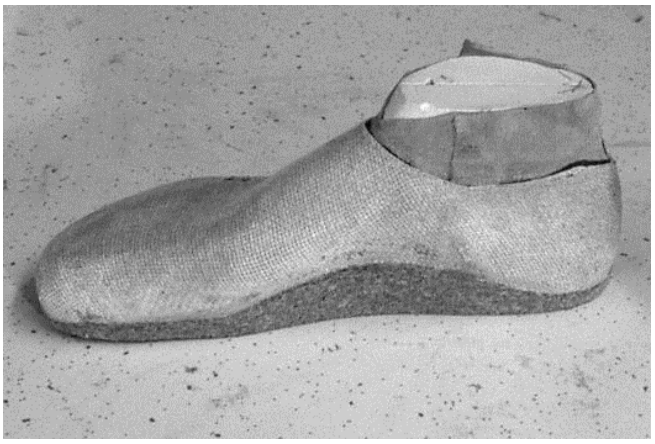
205 Final wire brushing of Monks Cloth above artistic groove.



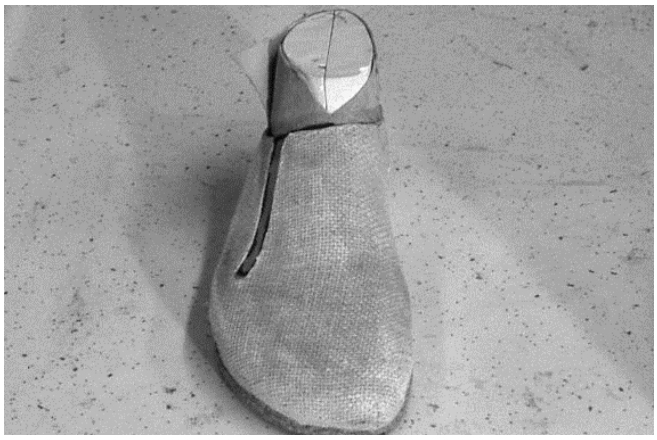
206 View of last with upper materials and "mud" base completed.



207 Ditto.

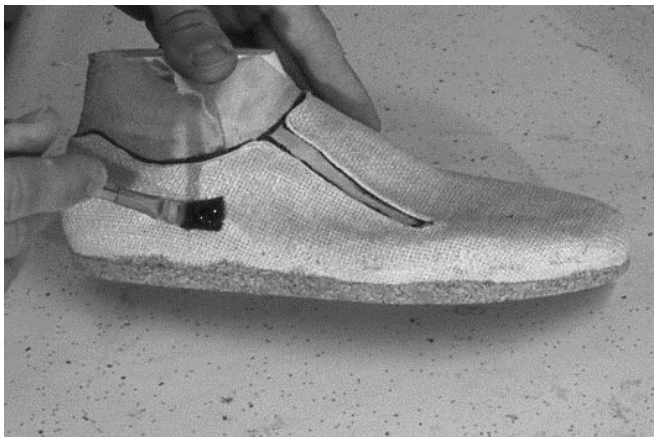


208 Ditto.

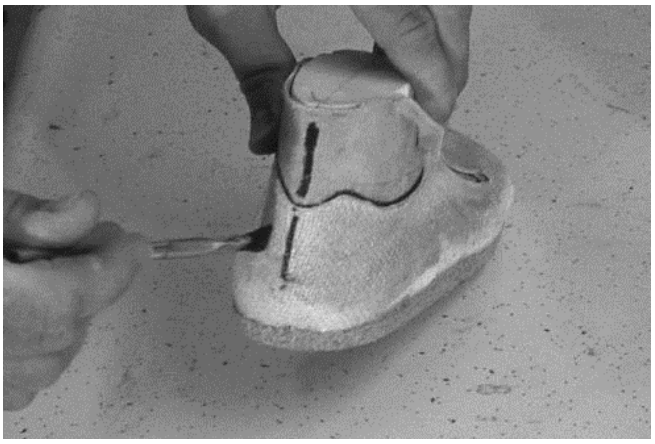


209 Ditto.

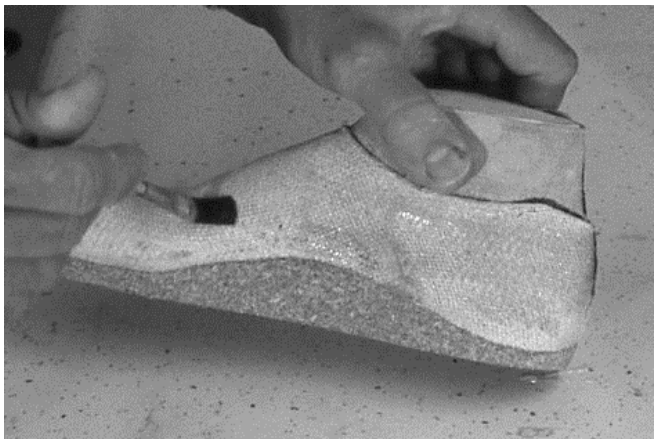
210 Appling glue to design cord.



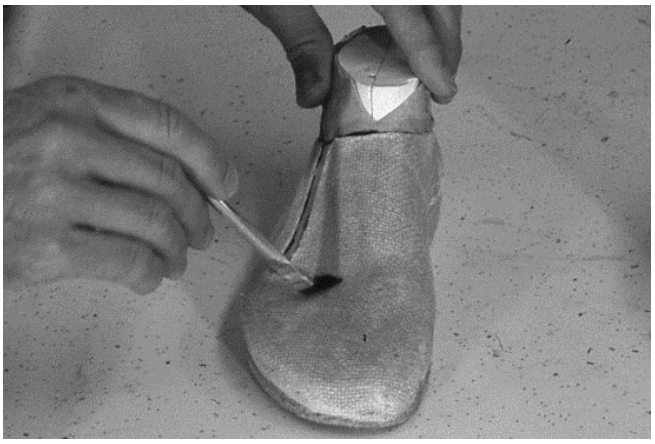
211 Appling glue to shoe upper.



212 Ditto.



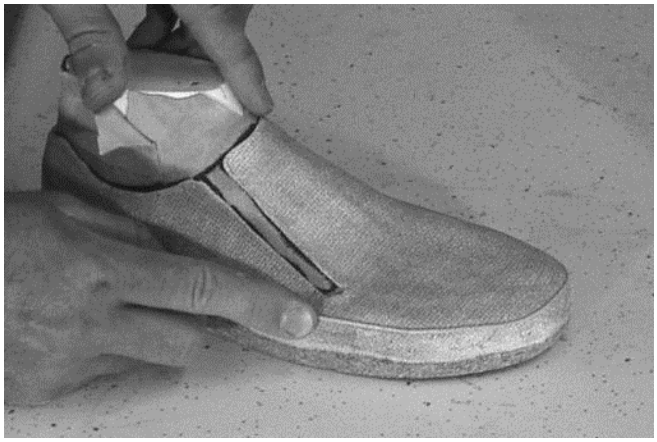
213 Ditto.



214 Ditto.

215 Appling artistic design cord to upper.

216 Ditto.

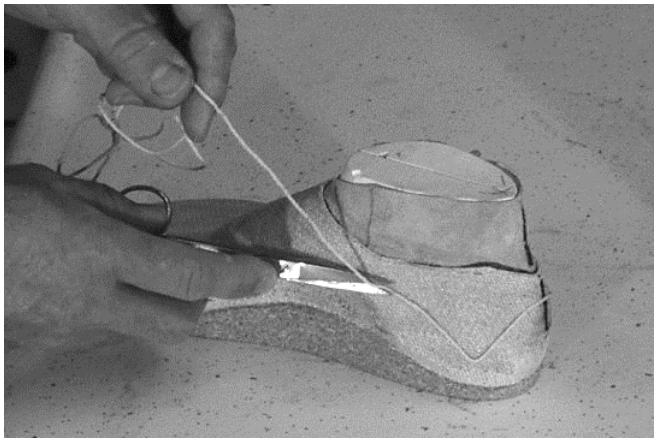


217

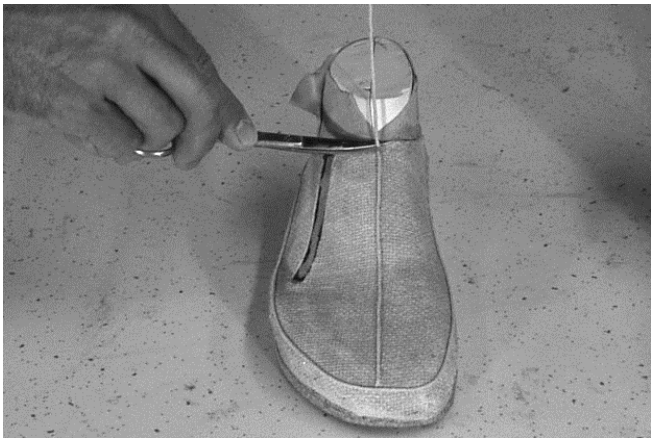
Ditto.

218

Ditto.

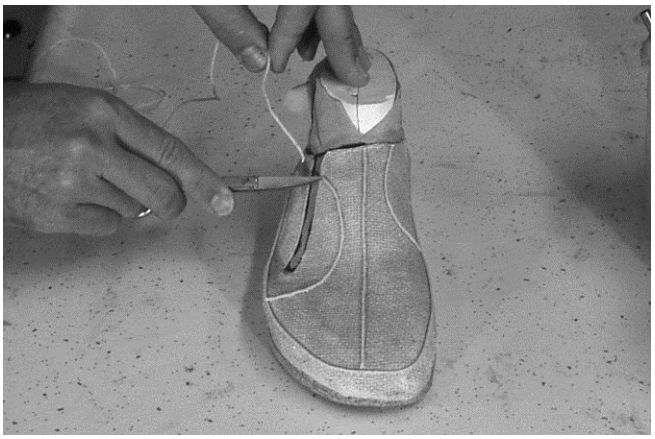


219 Ditto.

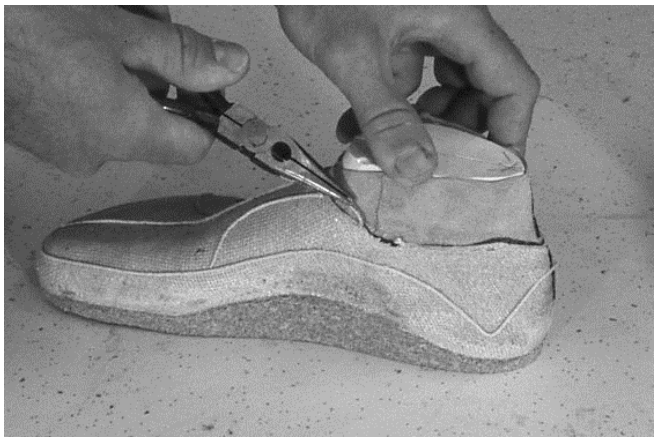


220 Ditto.

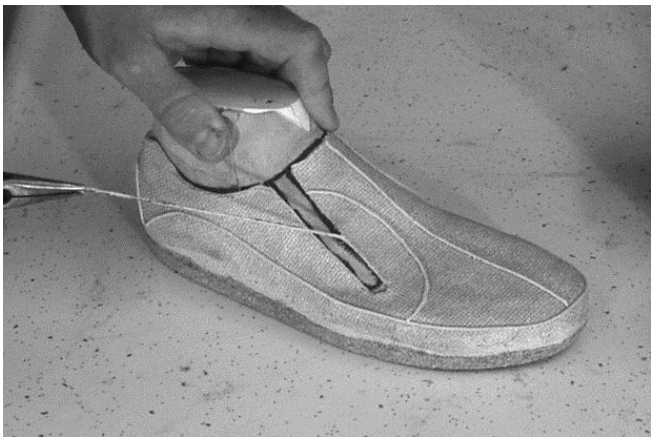
221 Ditto.



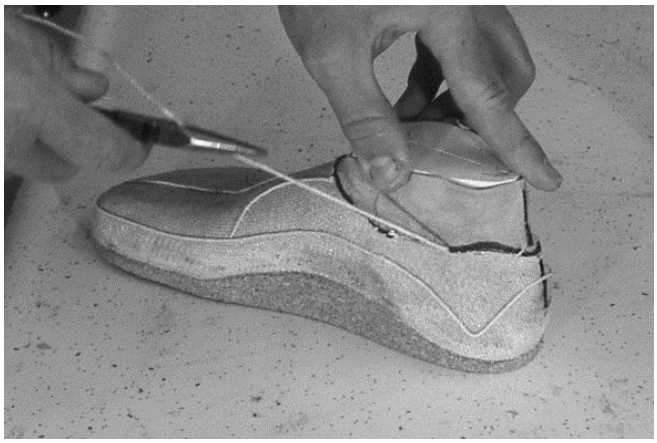
222 Ditto.



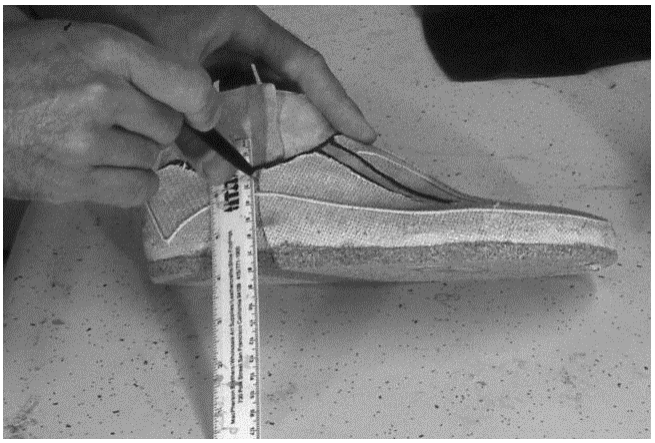
223 Removing top design cord.



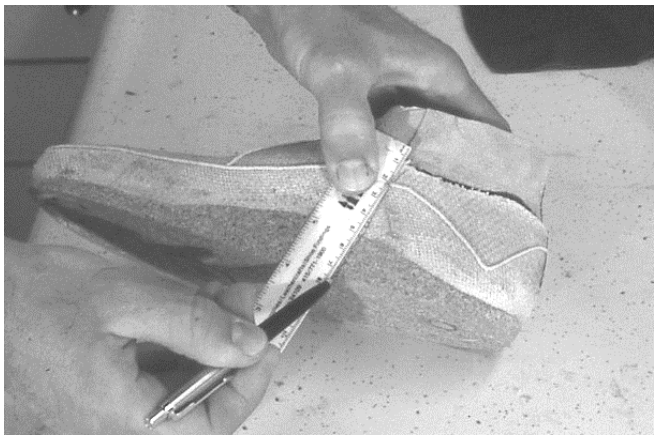
224 Ditto.



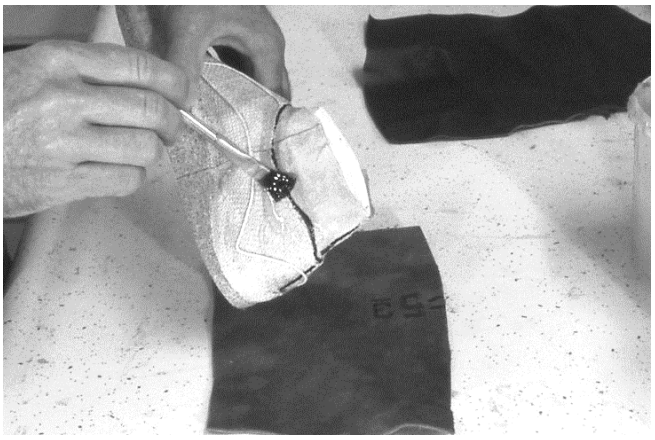
225 Ditto.



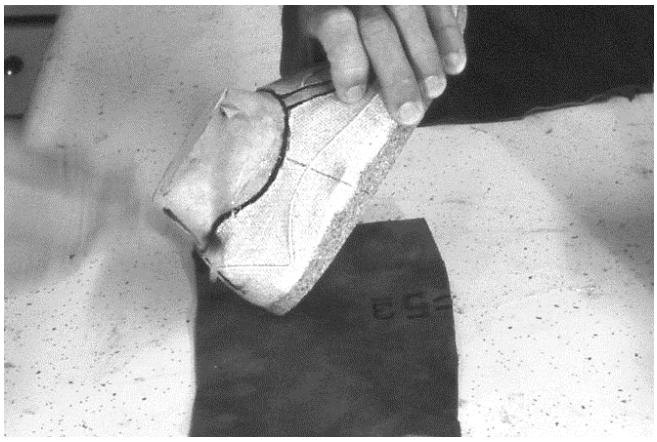
226 Marking medial side seam.



227 Marking lateral side seam.

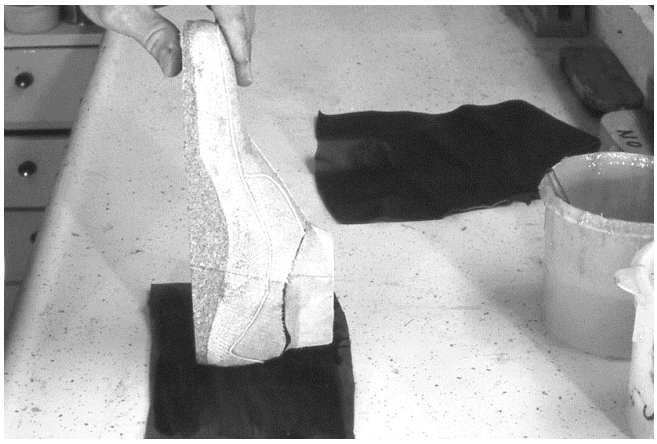


228 Appling glue to back of shoe before leathering.

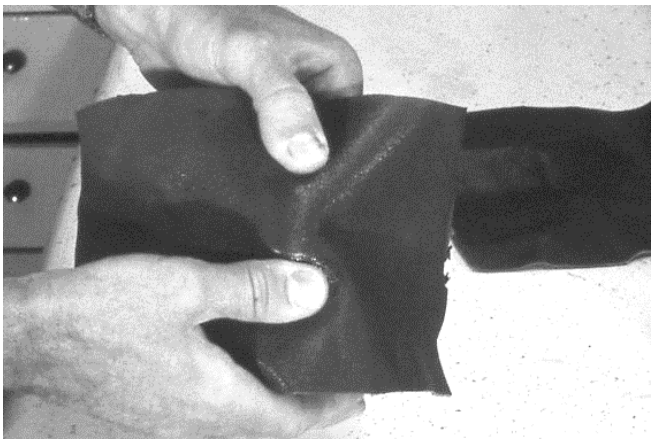


229 Ditto.

230 Appling glue to under side of heel leather.



231 Placing back of shoe onto heel leather.



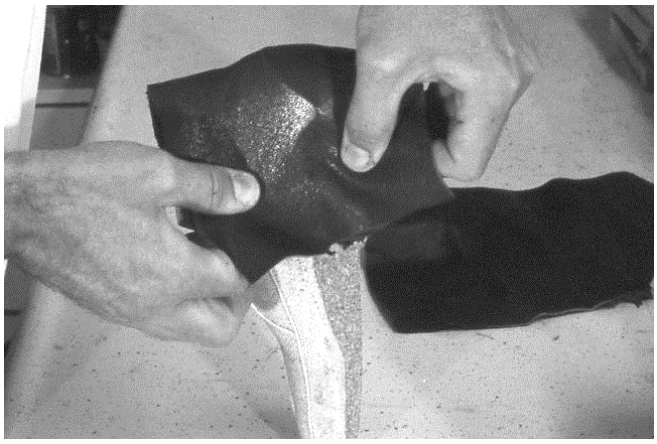
232 Pressing heel leather to back of shoe.

233 Appling leather stretch.

234 Stretching leather to "mold" (conform) it to the shoe.

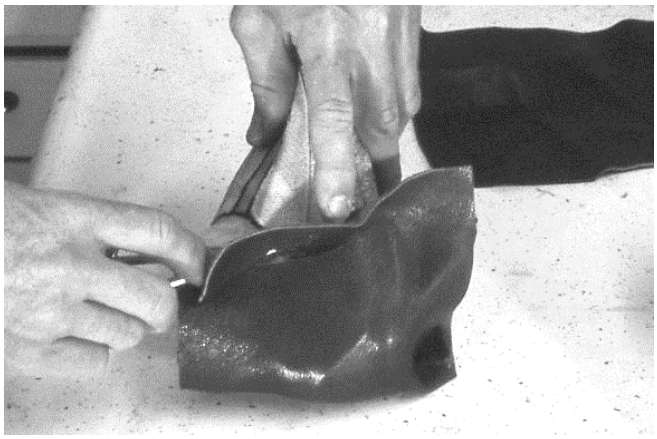
235 Ditto.

236 Ditto.

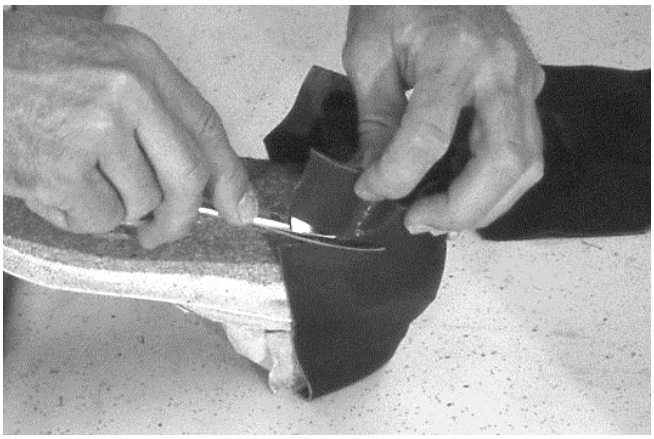


237 Ditto.

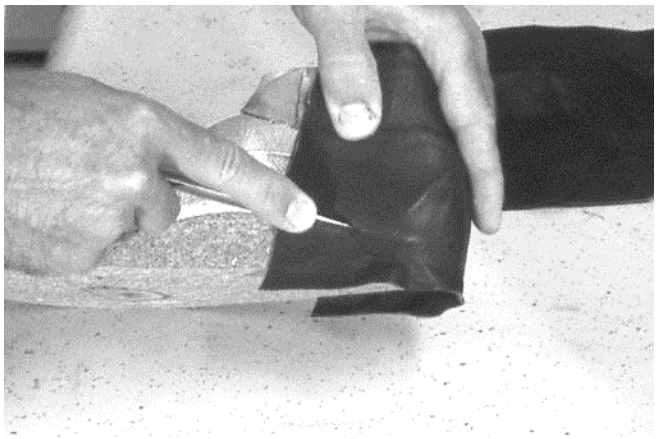
238 Cutting leather at side seam marking.



239 Cutting off excess leather on bottom leaving enough to fold over.

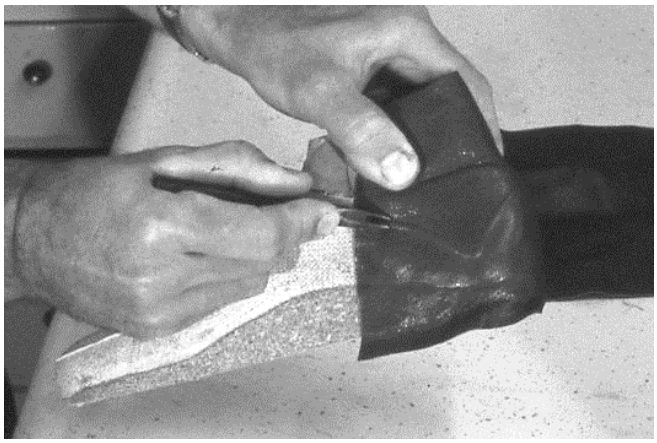


240 Ditto.



241 Pressing leather in at artistic base groove.

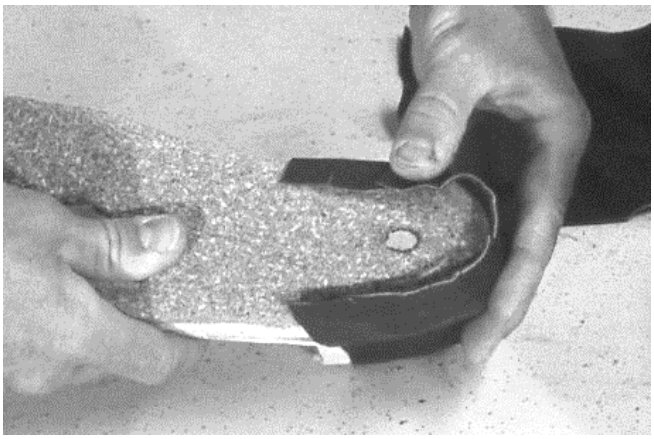
242 Pressing leather in at top of shoe.



243 Pressing leather on both sides of artistic design cord.

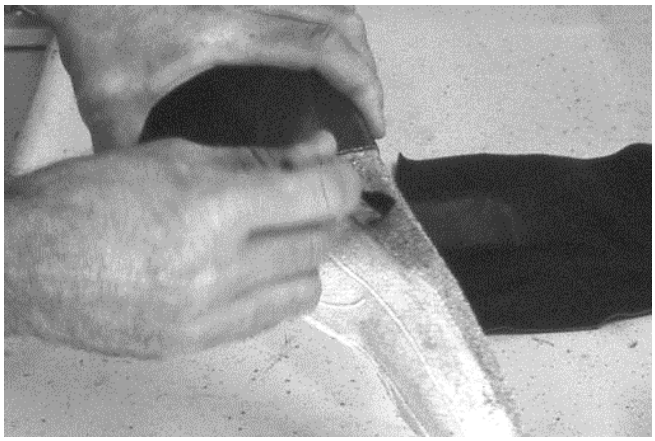
244 Appling glue to bottom.

245 Cutting heel leather at bottom.

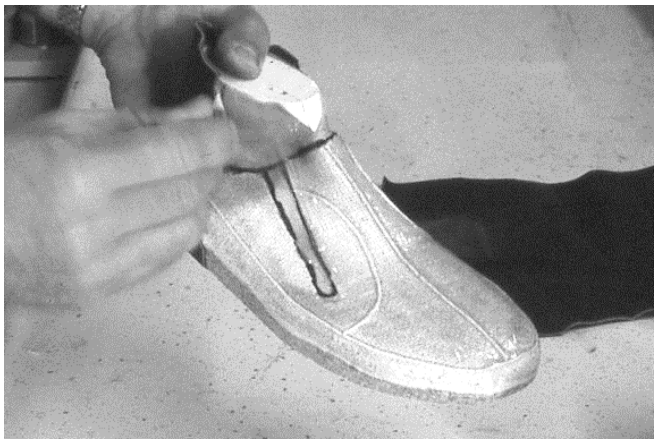


246 Folding over bottom of heel leather.

247 Finished result of overlapping heel leather to bottom of shoe.

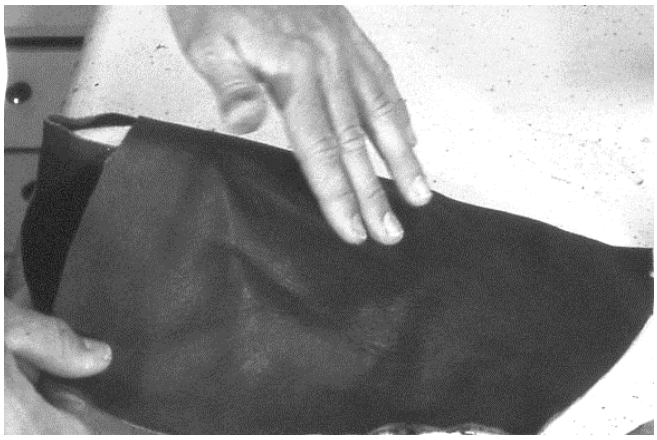


248 Appling glue to front of shoe.

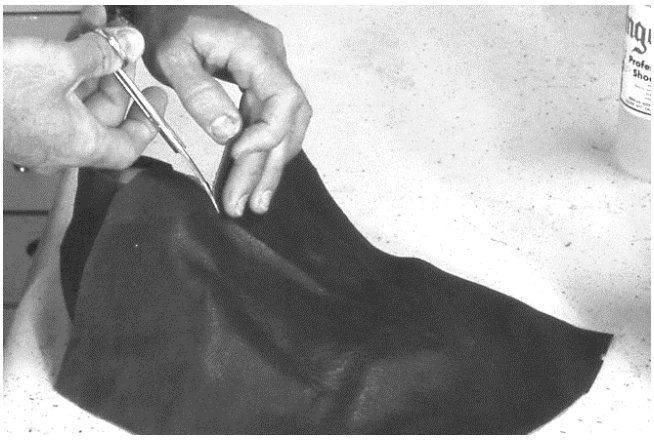


249 Ditto.

250 Appling glue to underside of front leather.

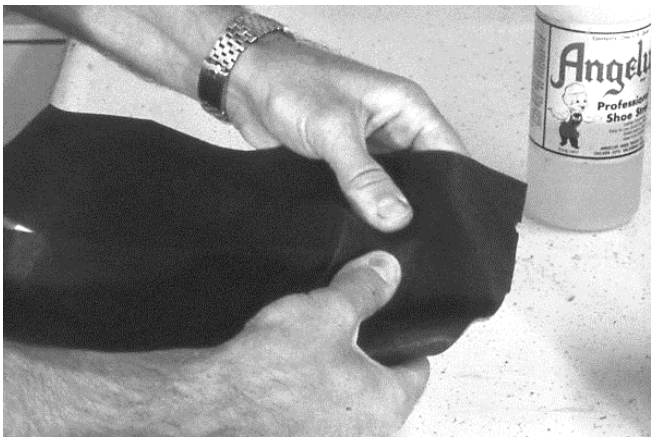


251 Placing front leather on top of shoe.



252 Cutting center of front leather from back to front of top of shoe.

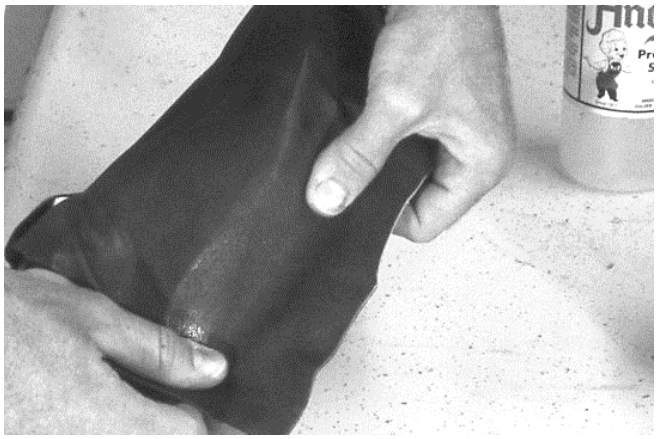
253 Spraying leather stretch.



254 Stretching and pressing front leather into place on shoe.

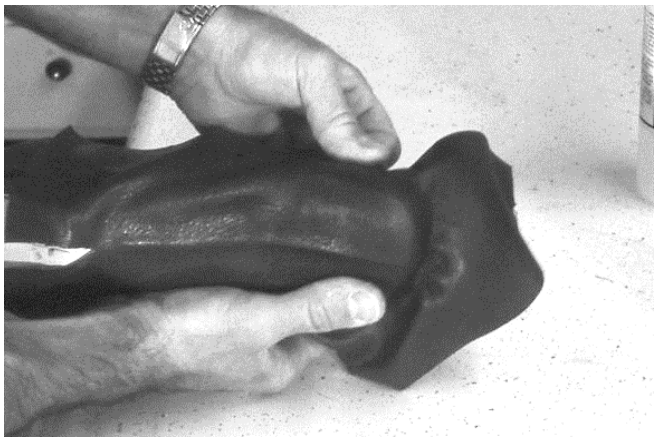
255 Ditto.

256 Ditto.



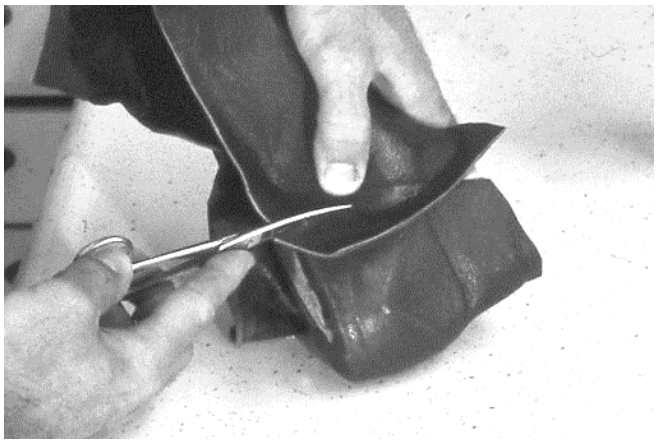
257 Ditto.

258 Ditto.

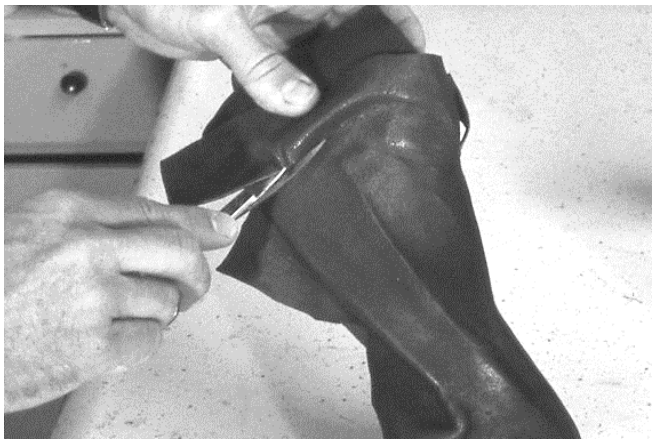


259 Ditto.

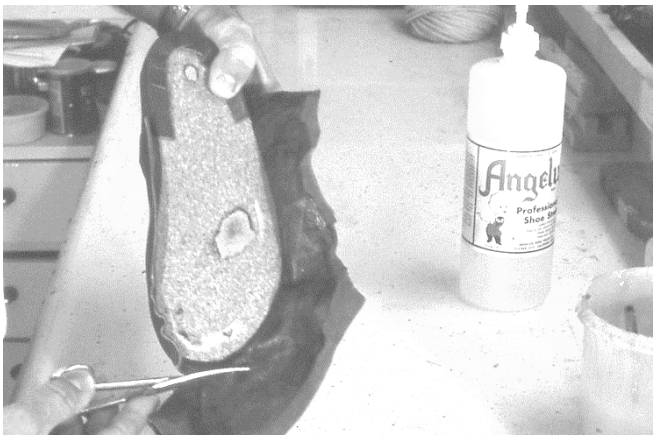
260 Ditto.



261 Allowing for overlap of side seam and cutting off excess.

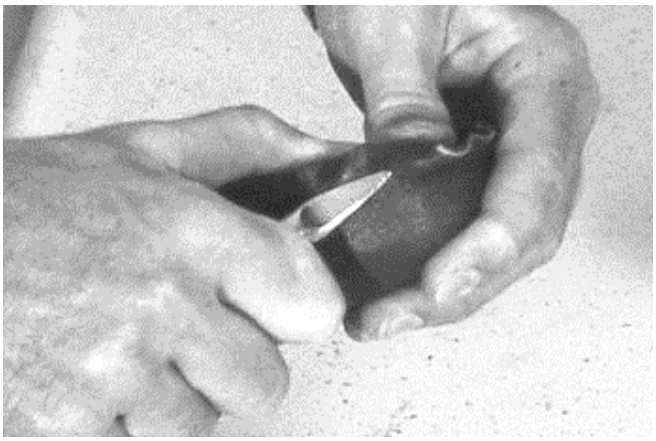


262 Ditto other side.



263 Allowing for fold over and cutting off excess from bottom.

264 Pressing in top leather down to bottom edge.



265 Ditto.

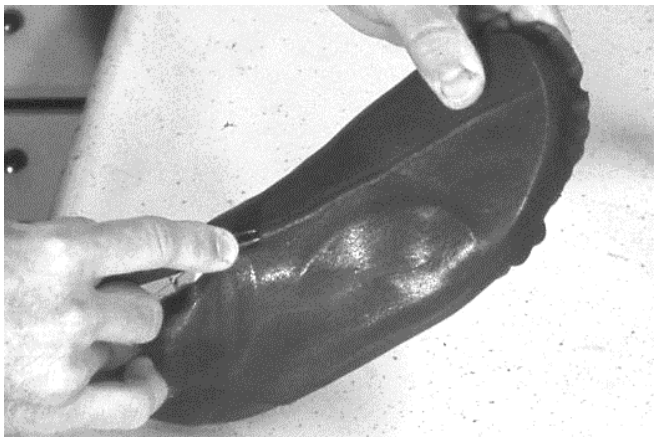
266 Pressing in at artistic groove above base.

267 Ditto.

268 Pressing in at lace opening.

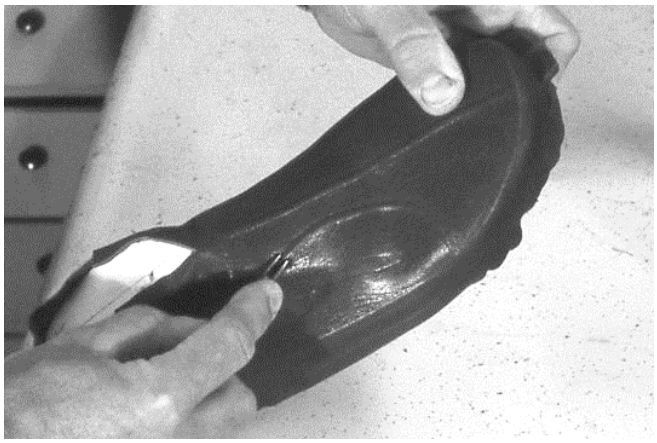
269 Pressing in along top edge.

270 Ditto.

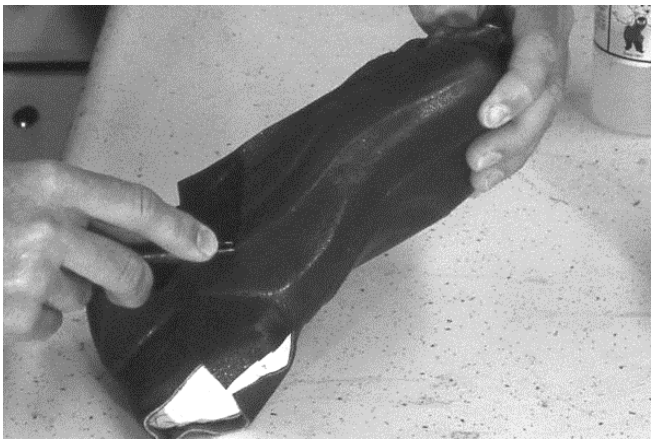


271 Pressing in along artistic design cord.

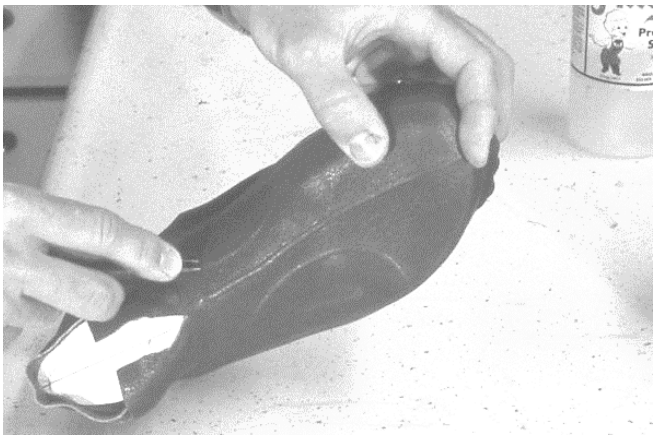
272 Ditto.



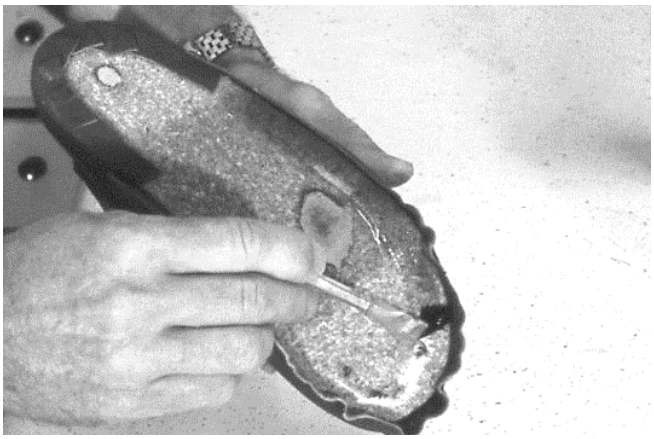
273 Ditto.



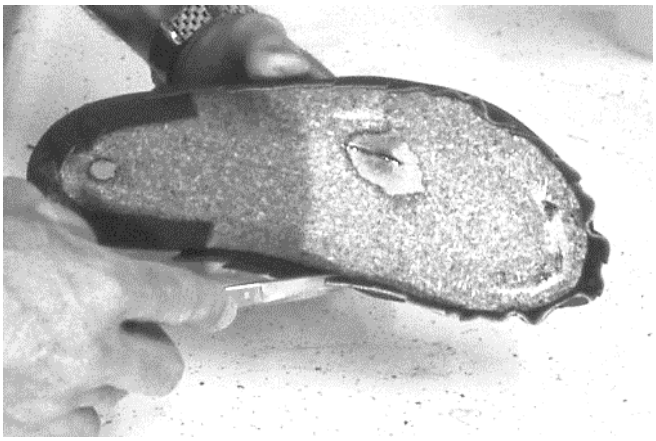
274 Ditto.



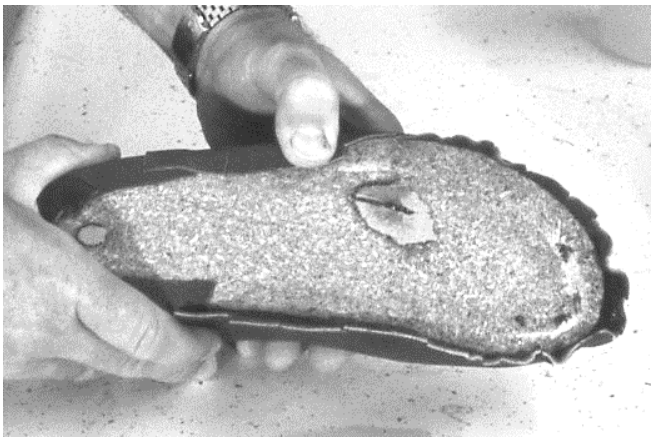
275 Ditto.



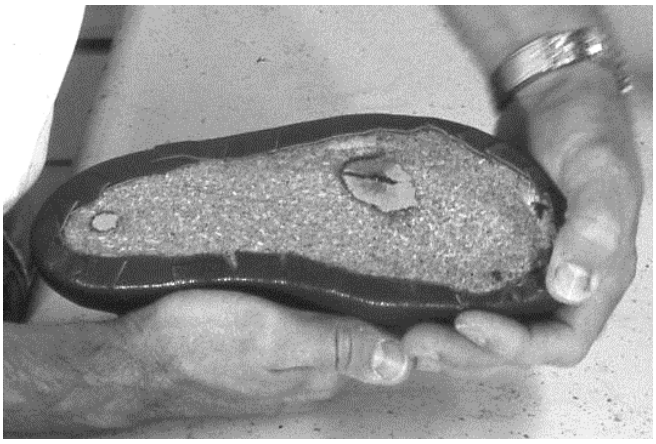
276 Appling glue to bottom of "mud" base.



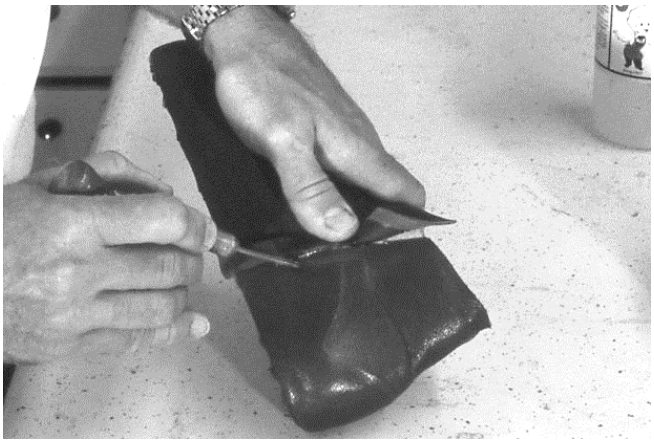
277 Cutting overlap so it folds better.



278 Pressing in overlap.

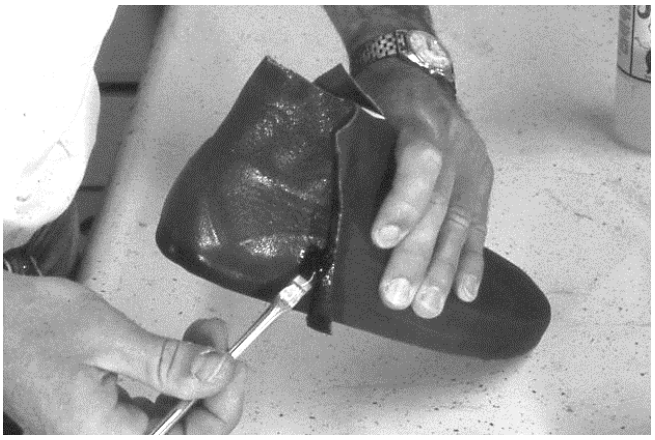


279 Ditto.



280 Folding back side seam overlap and scratching area to be glued.

281 Appling glue to inside of overlap area.

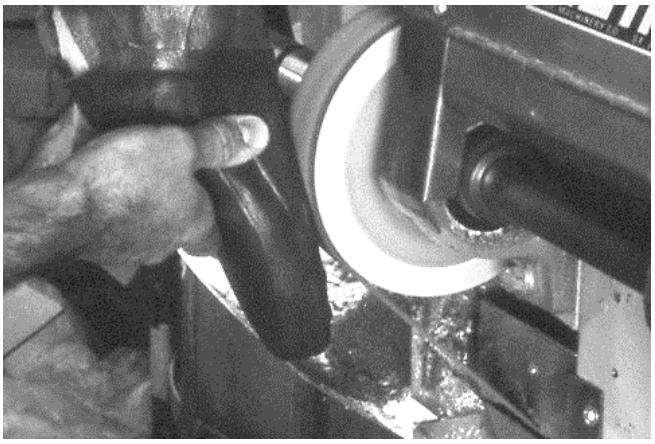


282 Ditto.

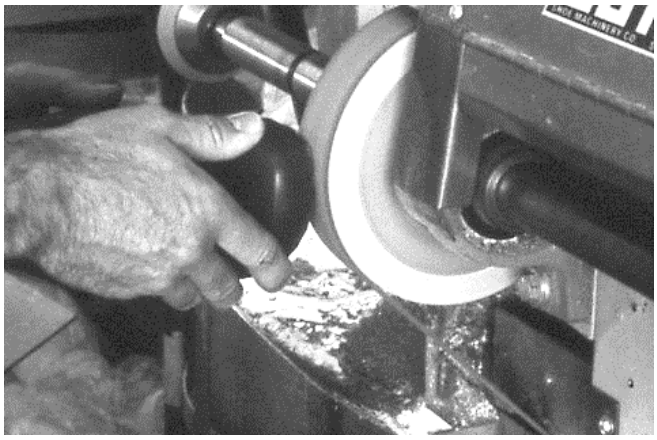
283 Pressing overlap together.

284 Ditto.

285 Sanding bottom of overlap leather flat and smooth.

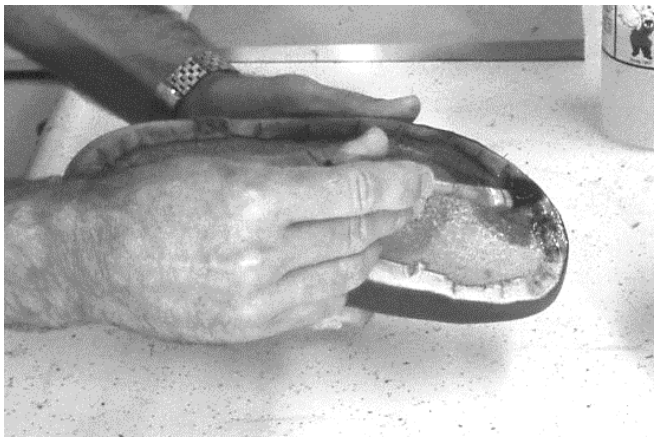


286 Ditto.



287 Ditto.

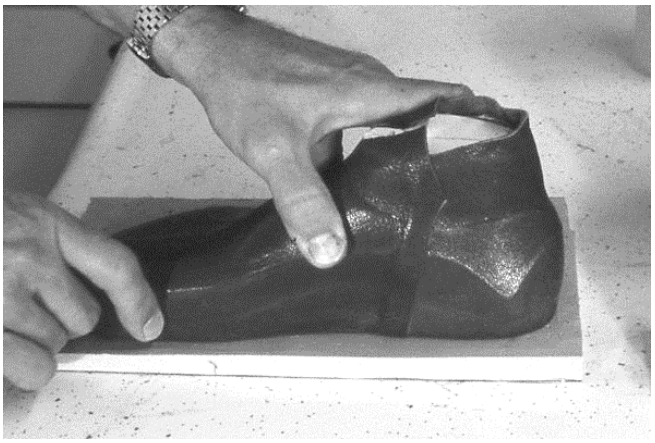
288 Ditto.



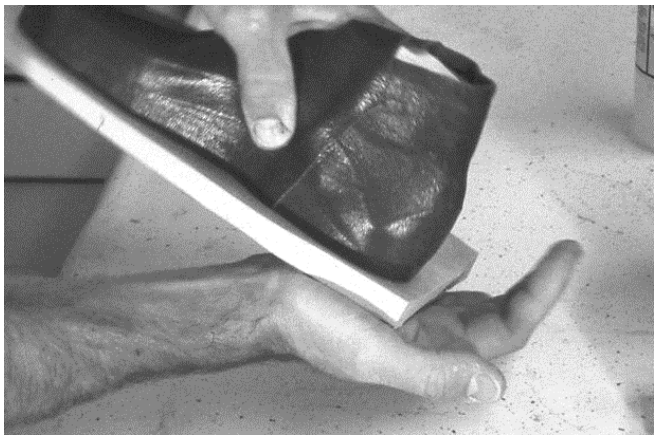
289 Appling glue to bottom over lapped leather and bottom of "mud" base.

290 Ditto.

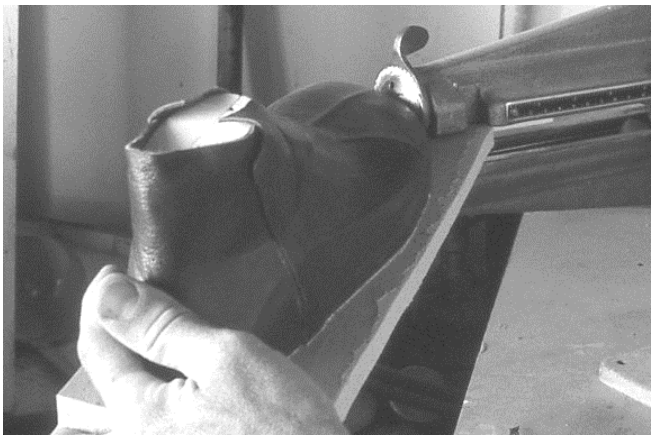
291 Appling glue to mid sole and heel wedge material. This is a special shoe and it used Kingsley Medathane® cushion material which is available from Kingsley Manufacturing company.



292 Shoe is pressed into Kingsley Medathane® cushion material. Kingsley Mfg. Co.: 1984 Placenta Ave., P.O. Box 5010, Costa Mesa, CA 92628-5010, tel. 949-645-4401.

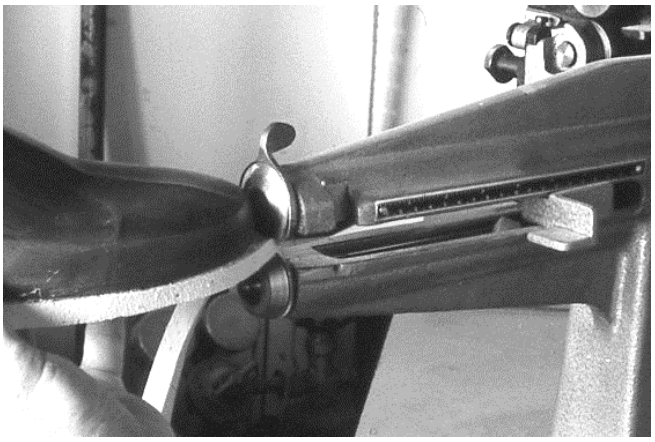


293 Ditto.



294 Excess material is trimmed away.

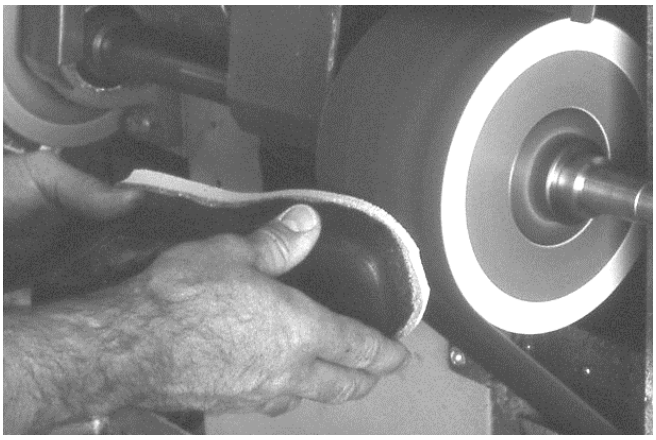
295 Ditto.



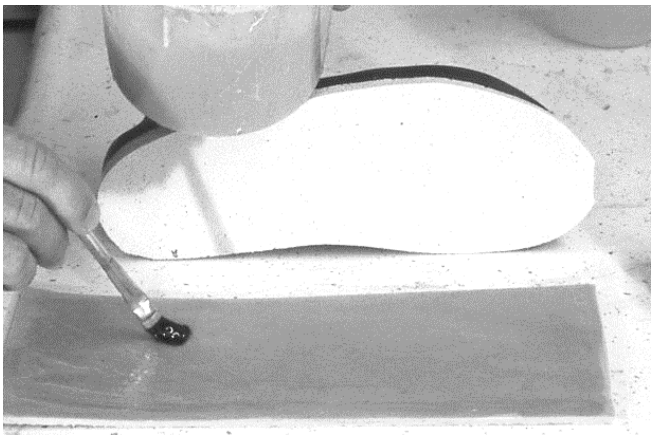
296 Ditto.

297 Mid sole/heel wedge is sanded to desired taper from heel to ball on flat belt sander.

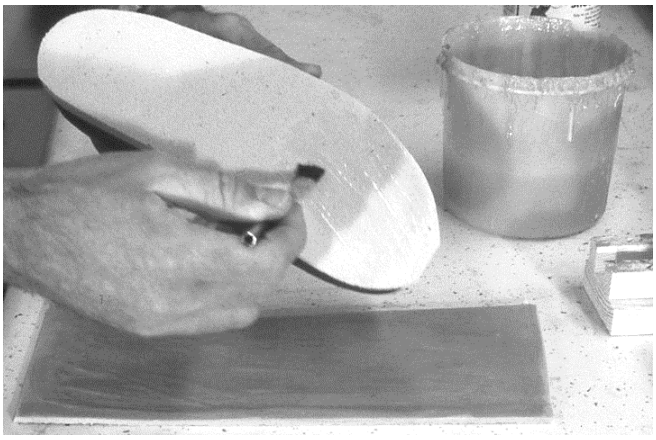
298 Ball to toe is sanded on wheel and/or flat belt sander.



299 Ditto.



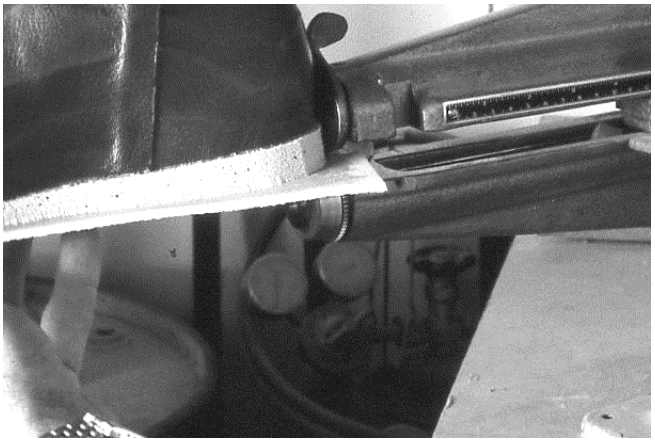
300 Glue is applied to outer soling.



301 Glue is applied to mid sole/heel wedge.

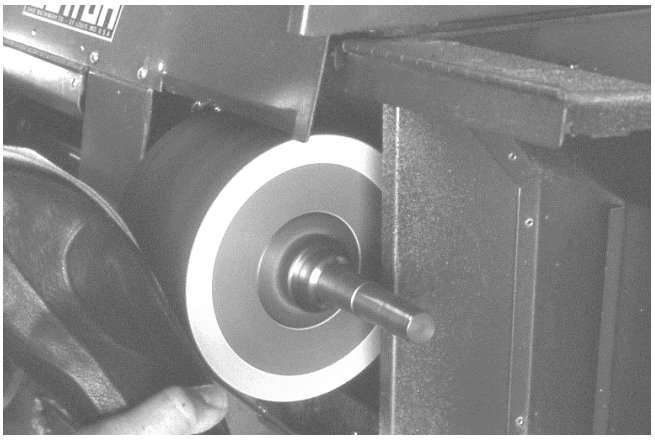
302 Shoe is placed on outer sole.

303 Outer sole is pressed onto shoe.



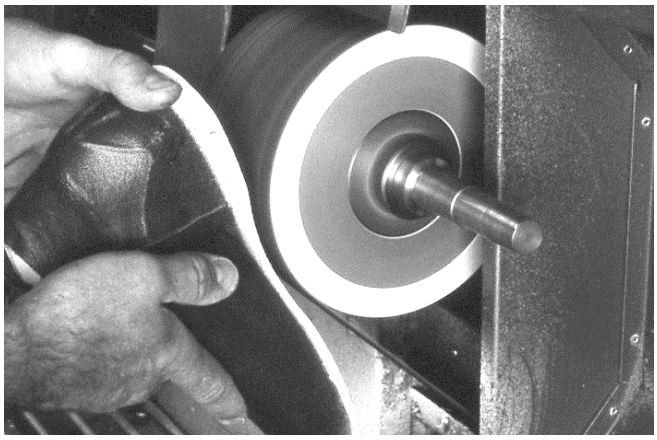
304 Outer sole is trimmed.

305 Ditto.

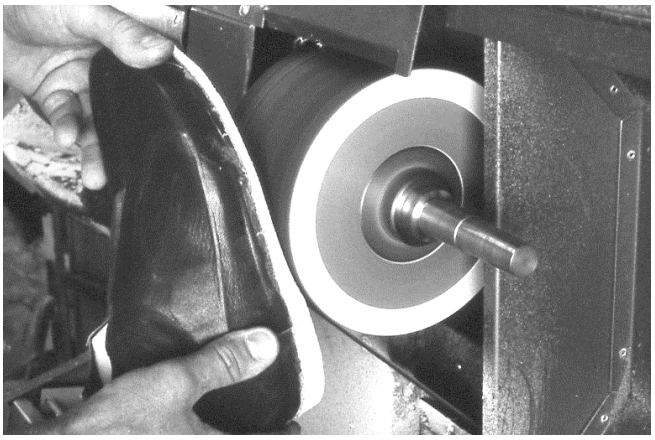


306 Outer sole and mid sole/heel wedge are sanded.

The process was interrupted at this point in order to show an alteration to the process. The outer sole was removed.



307 The medial arch curve was sanded.

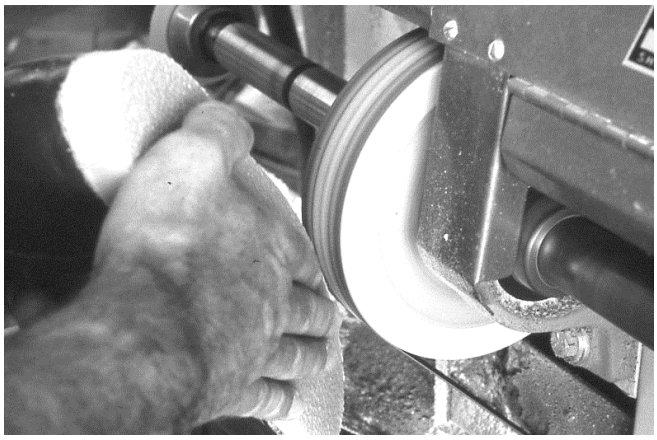


308 The lateral arch curve was sanded.

309 The outer sole was re-glued to the shoe.

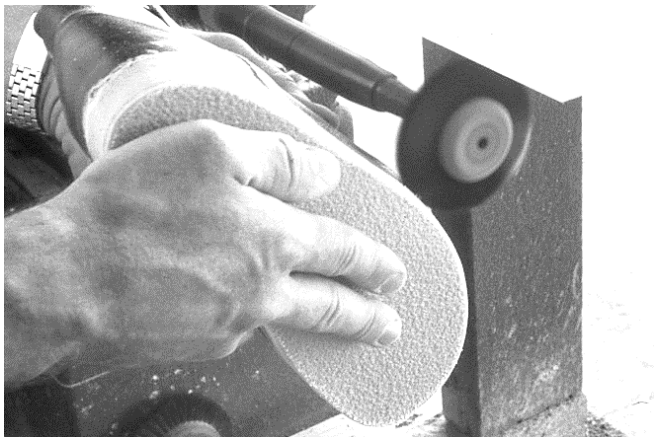
The picture sequence continues with sanding of the outer sole and mid sole/heel wedge.

310 Ditto.



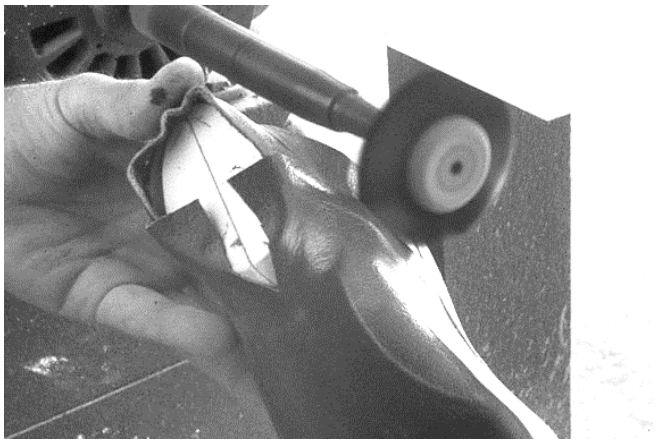
311 The feather edge is removed from outer sole.

312 Ditto.



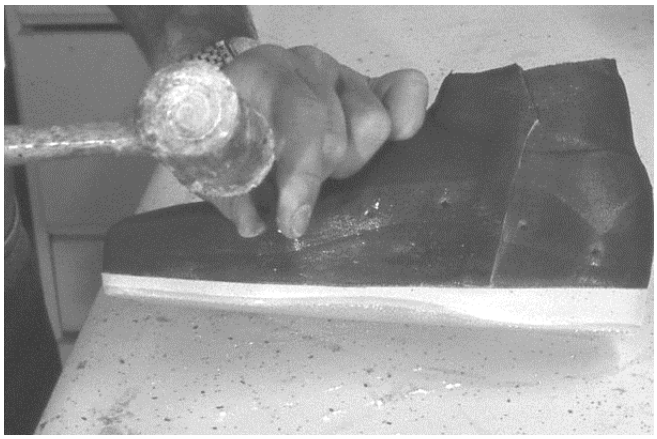
313 A dental lab brush is used to clean leather to mid sole joint area.

314 Ditto.

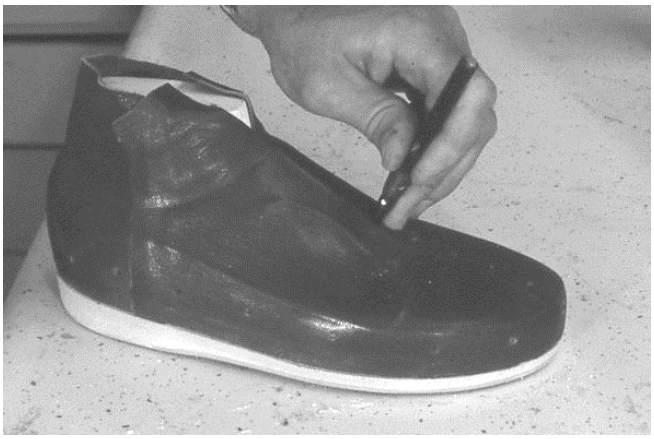


315 Dental lab brush is used to clean residual glue at side seam.

316 Base perforations are punched.



317 Ditto.



318 Top or cord perforations are punched.

319 Ditto.

320 Lace opening is punched.

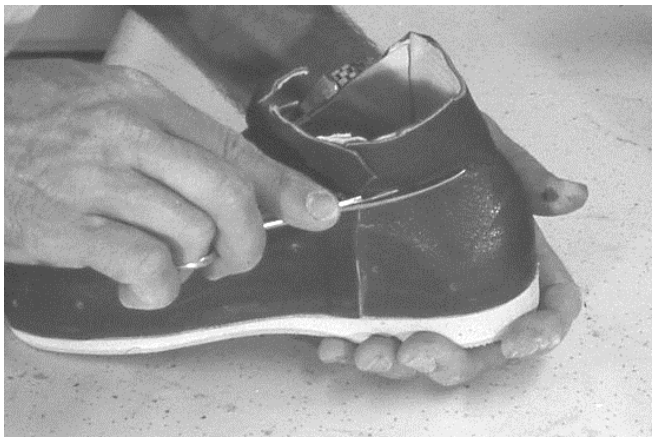
321 Lace opening is cut with single edge razor blade.

322 Last is broken with a big screwdriver and mallet.

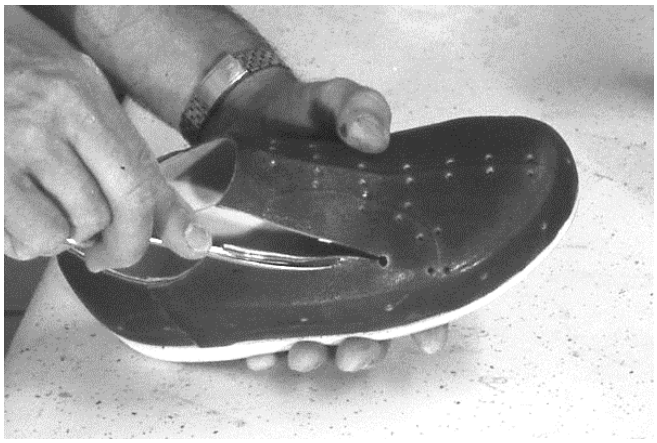
323 Last is pried out of shoe.

324 Remainder of last is pulled out of shoe.

325 Excess leather is cut off above top of shoe.

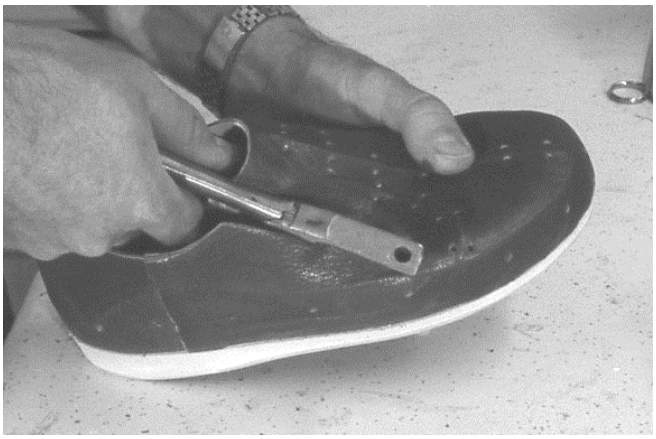


326 Ditto.

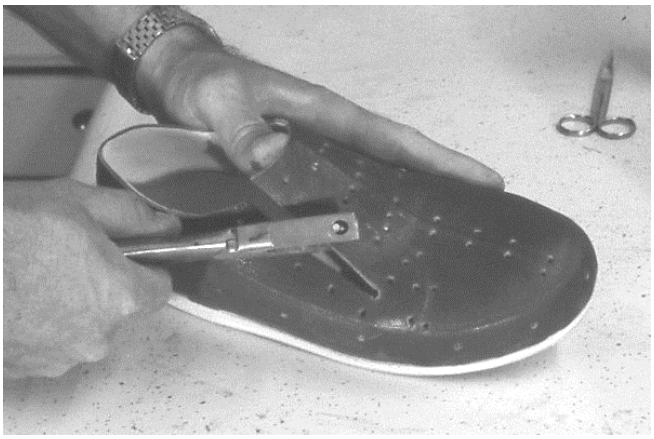


327 Lace opening is trimmed.

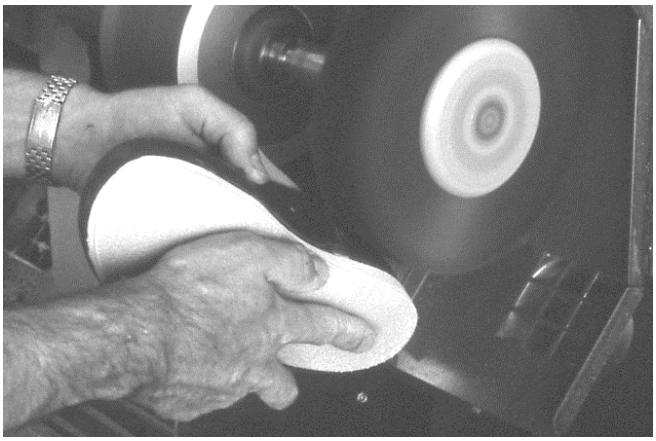
328 Ditto.



329 Lace holes are punched.



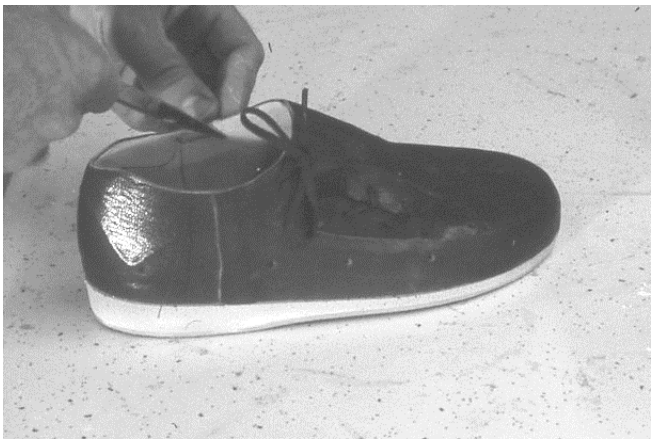
330 Ditto.



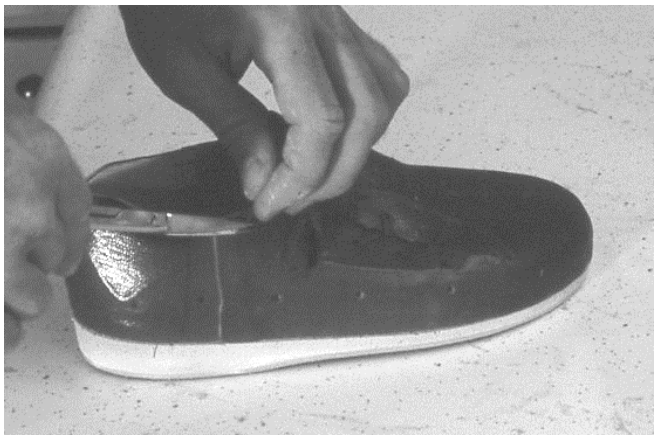
331 Shoe upper is polished.

332 Side seam is stitched at top of overlap.

333 Ditto.

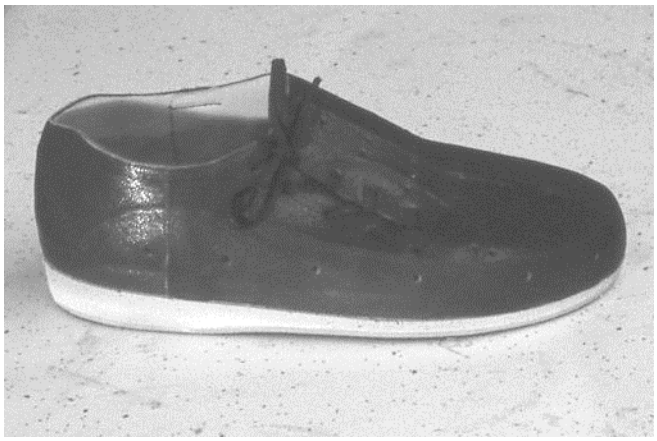


334 Excess thread ends are cut off.

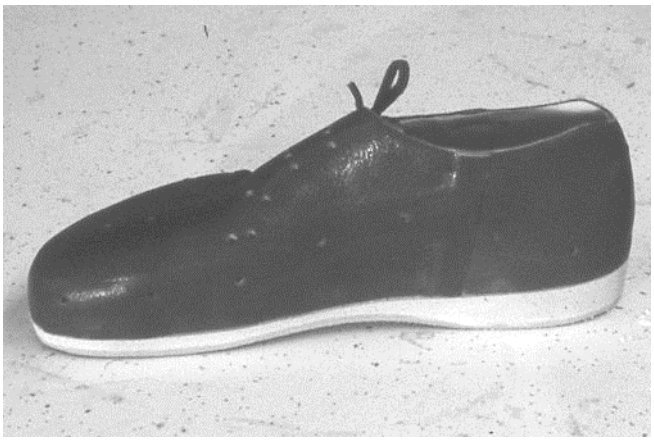


335 Ditto.

336 Finished shoe is shown next to a cut away showing achievement of individualized molded shoe, which fits contours of the individual foot, as reproduced from a cast of the wearer's foot.



337 Lateral view of completed shoe.



338 Medial view of completed shoe.

It is important to recognize that no one formula is going to suit everyone.

As you expand your knowledge of alternatives, you will develop the ability to satisfy many different needs.

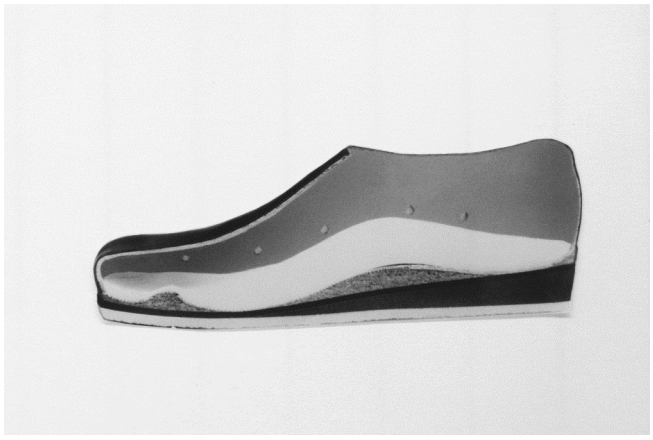
As you become more practiced, your performance will appear easy and effortless.

As you visualize what you want to do, your visualization will flow from thought into reality.

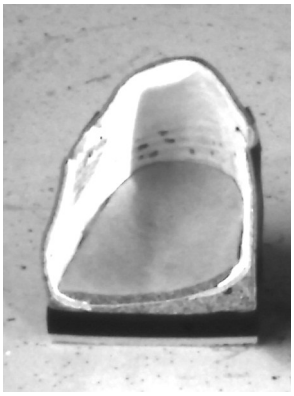
You will become an accomplished artisan and craftsperson.

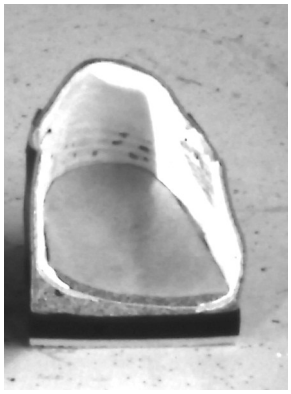
You will become a master at molded footwear fabrication.

Traditional Regular Weight



Alternative Light Weight





"Good" success is in the base of the shoe, boot or sandal.
Craft it carefully!