

APPENDICES

Leatherwork including silk

<i>Cat/Accession</i>	<i>Leather type</i>	<i>Area</i>	<i>Rig</i>	<i>Feature</i>	<i>Phase</i>
South Sector					
172/A7580a	Strap (folded once)	2	VI	M14b(b)	Ie
229/A7588c	Upper (Type G)	2	V	M14b(c)	Ie,If

Leatherwork including wool

<i>Cat/Accession</i>	<i>Leather type</i>	<i>Area</i>	<i>Rig</i>	<i>Feature</i>	<i>Phase</i>
South Sector					
55/A9886b	Upper	1/2	V, VI	M2.1b	Ic
312/A12378b	Upper	3	VI	P5.3b	If,IIa
343/A6772c	Rand, sole (Type 1), upper	2	VI	MC061	IIb
352/A6773a	Sole (Type 2)	2	VI	MC061	IIb
356/A6773e	Rand	2	VI	MC061	IIb
358/A6773g	Upper (Type Bii)	2	VI	MC061	IIb
452/A10048a	Sole (Type 1)	4	VI	M1.1f, Pit 2383	IIb,IIc
462/A10599a	Sole (Type 1)	3	VI	M1.1c, Pit 5005	IIId
464/A10599c	Upper	3	VI	M1.1c, Pit 5005	IIId
469/A12285a	Sole (Type 1)	3	VI	M1.1c, Pit 5005	IIId
470/A12285b	Sole (Type 1)	3	VI	M1.1c, Pit 5005	IIId
471/A12285c	Sole (Type 1)	3	VI	M1.1c, Pit 5005	IIId
473/A12285e	Upper (Type Biv)	3	VI	M1.1c, Pit 5005	IIId
475/A12302a	Sole (Type 1)	3	VI	M1.1c, Pit 5005	IIId
504/A3447a	Sole (Type 1)	2	VI	M1.1d & M1.1e	IIId-IIIf
548/A6412	Upper (stiffener)	2	V	B5, North Room—Floor/Occupation (2)	IIa-IIff
783/A9372a	Sole (Type 3)	3	VI	M1.2, Pit 2648	<IIg(IIh)
789/A9546b	Sole	3	VI	M1.2, Pit 2648	<IIg(IIh)
792/A9546e	Rand	3	VI	M1.2, Pit 2648	<IIg(IIh)
813/A11220b	Rand, sole, upper	3	VI	M1.2, Pit 2648	<IIg(IIh)
821/A11221a	Sole (Type 4)	3	VI	M1.2, Pit 2648	<IIg(IIh)
822/A11221b	Rand	3	VI	M1.2, Pit 2648	<IIg(IIh)
857/A8527a	Sole (Type 3)	4	VI	M1.3	IIi
876/A8665c*	Rand	3	VI	M1.3	IIi
1003/A8011a	Sole (rounded forepart)	4	VI	M1.4a(a)	IIIa-IIIc
1026/A03-0317a	Sole (Type 1)	9	VII	P8.1b	IIIc
1028/A03-0317c	Grain-flesh stitching channel	9	VII	P8.1b	IIIc
1130/A03-0263a	Sole (Type 2)	9	VII	M15	IIId
2361/A03-0331a	Rand, sole (Type 2), upper	7	VI	M1.4f	IVc
2651/A03-0316a	Sole (Type 1)	7	VII	B18(Phase 1/2), Pit 7324	IVaa,IVb
2719/A03-0314c	Rand	7	VII	B18(Phase 2a), External (1)—Pit 7314	IVb
2725/A03-0413a	Rand, sole (Type 3), upper (Type C)	7	VII	B18 (Phases 2a & 2b), T7385	IVb
3068/A8668c	Sole (Type 7)	3	VI	M1.4d	IVb,IVc
3343/A03-0183a	Sole, upper	7	VII	M9a	IVc,IVcc
3427/A03-0051a	Upper, sole, rand	9	VII	M9a, Pit 9026	IVc,IVcc
3721/A03-0160e	Sole (forepart)	7	VI	B34, Courtyard	Va
3726/A03-0160j	Upper	7	VI	B34, Courtyard	Va

(continued)

1 The yarns used in the leatherwork

H Bennett and the late N Q Bogdan

While examining the leatherwork from the High Street, 55 pieces were found to have retained the yarn used in their construction or repair (see Illus 167). In two cases, both of which came from deposits that had been laid down shortly before 1150, silk thread survived. One, a band of leather (Cat No 172/A7580a), perhaps a binding for a garment or shoe, has lines of decorative surface stitching in pink and white silk; the other was a Type G upper (Cat No 229/A7588c). In the other 53 cases, the yarn appeared to be wool or animal hair.

Although examples were recovered from all six South Sector Periods, the chronological distribution appears to be significant. Twenty-three (43%) of these examples of 'wool' yarn came from contexts that dated from Period II, the second half of the 12th century, and another 14 (26%) from layers that dated from the first few decades of the 14th century, Phases Va to Vbb in Period V. Curiously in the light of the relatively large number of Period II examples, only one (2%) certainly came from Period I (the first half of the 12th century) and four (8%) from Period III (the first half of the 13th century). Low as the Period III figure is, it is perhaps pertinent to remember that the Period III leatherwork formed only 4% of the total recovered during the excavation. Of all the results, perhaps the most interesting is that from Period IV. 39% of all the leatherwork from the site came from deposits that

were laid down during this Period, the second half of the thirteenth century; and yet, only seven (13%) items with yarns formed from animal hair were recovered from Period IV contexts.

The state of preservation of the yarns is extremely variable: from tiny degraded remnants in stitch holes to considerable lengths which have retained some strength and resilience and still perform the function of holding together sections of shoe. Eight of the yarns, all plyed, are sufficiently well preserved to allow examination of their structure, although in some cases it is not clear whether one or more thicknesses of yarn are present. The yarns are listed above. All the yarns are in shades of brown, although one (Cat No 3343/A03-183a) contains blue fibres visible under a microscope.

The normal material for sewing leather shoes is thread of linen or hemp but, as the Perth yarns have an unusual appearance, it was decided to take a group of samples, from both poorly preserved and well preserved specimens for microscopic examination. The results of this analysis also appear in the lists above. Of the constructional yarns, seven proved to be wool, varying in type from hairy to generalised medium, one to be cow hair, and one cow or goat hair; a tenth sample proved on closer inspection to be extraneous plant matter and not in fact part of a yarn.

<i>Cat/Accession</i>	<i>Leather type</i>	<i>Area</i>	<i>Rig</i>	<i>Feature</i>	<i>Phase</i>
3819/A03-0164c	Upper (lasting margin)	7	VI	B34, Courtyard	Va
3820/A03-0164d	Sole (edge-flesh stitching channel)	7	VI	B34, Courtyard	Va
3865/A03-0068	Clump	7	VI, VII	M1.5b	Vaa
3906/A03-0132k	Upper	7	VI, VII	M1.5b	Vaa
3926/A03-0136b	Sole	7	VI, VII	M1.5b	Vaa
3927/A03-0136c	Miscellaneous fragment	7	VI, VII	M1.5b	Vaa
4041/A03-0159a	Sole (seat cut across waist)	7	VII	P8.4	Va
4088/A03-0210b	Sole (rounded forepart)	7	VII	P8.4	Va
4123/A03-0214a	Rand, sole (Type 3)	7	VII	P8.4	Va
4152/A03-0198a	Sole (seat cut across waist)	7	VII	P8.4, Pit 7216	Va
4816/A6237b	Sole (Type 9)	3	V, VI	M1.5a	Va, Vaa
5241/A03-0216	Rand, sole (Type 2), upper	7	VII	B53 (Phase 1), Central Area-T7152	Vb
5768/A9821a & b 5769/A9821b	Rand, sole (Type 2), upper (Type J)	3/4	V, VI	Unstratified	u/s
5851/A03-0133b	Sole	7	VI, VII	Unstratified	u/s
5854/A03-0133e	Sole (pointed forepart)	7	VI, VII	Unstratified	u/s
5855/A03-0133f	Clump	7	VI, VII	Unstratified	u/s

Discussion

That all the constructional yarns examined should be animal hair is most unexpected. Linen thread would not necessarily be preserved by the damp environment of the site and it is possible that the many leather fragments which lack any trace of yarn in the stitch holes were sewn with linen which has not survived. The finding of leather shoes sewn with animal hair, and in particular wool, which is much softer and less durable as a yarn than linen, is highly unusual. As far as is known, the only recorded parallel is a pair of shoes sewn with 3-ply woollen thread from the Dungiven (Ulster) costume, an outfit of the late 16th or early 17th century (Henshall and Seaby 1962, 119, 129, 135). The possibility has been considered that only lightweight indoor shoes were sewn in this manner, but at least two of the finds (Cat Nos 2725/A03–0413a and 5241/A03–0216) are substantial pieces of footwear with soles up to 2mm thick, which were presumably intended for general use.

It should be noted that the ancient practice of constructing shoes with leather thongs, which was being replaced in Britain by sewing with thread by the end of the first millennium AD, but which nonetheless continued in more remote areas, including parts of Scotland, to the end of the 19th century (Swann 1973, 17; Mackay and Carmichael 1894, 141–2), is not represented here (although thongs were used to repair some of the Perth shoes, eg Cat Nos 222/7436a, Illus 104; 286/A03–0017a, Illus 104; and 1804/A03–0367a, Illus 145). In other respects than the choice of yarn, the shoes from Perth represent construction methods normal in Britain in the late Middle Ages. The use of yarn made from animal hair may, therefore, represent a response to a sudden or unusual shortage of flax. It is perhaps pertinent to remember that 14 instances of the use of yarn made from animal hair dated from a period during which Perth is known to have been besieged (see Fascicule 1, Historical introduction, for further details).

2 Conservation of leatherwork

Tom Bryce

The preservation of wet/waterlogged leather (shoes, belts, straps, etc) from the High Street can, on the whole, be regarded as being very good. Treatment methods for this type of object generally involve cleaning, careful removal of water, applying various oils, fats and wax mixtures and manipulation of the specimens to their correct shape. After some experimental work, the great majority of the leather was treated by washing with 2% V/V Lissapol NBD, in water, to remove soil and dirt; soaked for one hour in 2% V/V Hydrochloric Acid;

thoroughly washed free of chemicals; immersed in two acetone baths of 30 minutes duration each; removed from Acetone and partly air-dried before applying one or two coats of a leather dressing. This was composed of anhydrous lanolin and Bavon (ASAK ABP) in Genklene, incorporating 1% fungicide. The leather was manipulated at intervals around the time that the lubricant was being applied.

Several repairs were carried out, using the leather consolidant Pliantex (in ethyl acetate).

3 Shrinkage during conservation

Clare Thomas

An attempt has been made to determine the rate of shrinkage of the leather during conservation, by comparing measurements taken from the original drawings with those made after conservation. This exercise was restricted to soles, sheaths and a few straps with easily comparable lengths; uppers were excluded as their irregular nature makes comparison of drawings by different hands unwise. Rates of shrinkage ranged between 0%

and 29% but mainly varied between 6% and 13%, with an average of 9%.

As noted in Appendix 2 above, the leather from the High Street was dried with acetone. Research in London has shown that leather conserved in this manner tends to shrink more (up to 16%) than leather which has been freeze-dried (up to 8%) (Grew and de Neergaard 1988, 138–9). For a discussion of shrinkage during burial, see Shoe sizes, above.

Table 14 *Shrinkage during conservation.*

Cat/Accession	Leather type	Phase	Pre-conservation length (mm)	Post-conservation length (mm)	Difference	%
South Sector						
28/A10800b	Sole (Type 6)	Ib	249	240	9	3.6
43/A8525	Sole (Type 6)	Ic	238	208	30	13
54/A9886a	Sole (Type 1)	Ic	282	255	27	10
58/A8635a	Sole (Type 1)	Ic,Icc	228	212.5	15.5	7
62/A8704a	Sole (Type 1)	Ic,Icc	194	167.5	26.5	14
68/A8809c	Sole (Type 1)	Ic,Icc	310–315	287	23	7
103/A03–0001	Sole (Type 1)	Ia–Icc>	292	263	29	10
104/A10798a	Sole (Type 1)	Ib–Id	205	193	12	6
120/A03–0005	Sole (Type 1)	Icc,Id	msl 267	250	17	6
121/A03–0006	Sole (Type 1)	Icc,Id	msl 291	266	25	9
125/A12297a	Sole (Type 1)	(Ia–)Id	205	186	19	9
136/A12291	Sole (Type 1)	(Ia–)Id	200	182	18	9
173/A7580b	Sole (Type 2)	Ie	245	221.5	23.5	10
175/A7589a	Sole (Type 2)	Ie	280	275.5	2	
185/A7600a	Sole (Type 1)	Ie	278	257	21	7.5
208/A7434	Sole (Type 1)	Ie	243	207	36	15
286/A03–0017a	Sole (Type 1)	If	284	263	21.7	
314/A10365a	Sole (Type 6)	Ila	296	256	40	14
323/A10600	Sole (Type 1)	Ila	281 (toe folded over)	255	26	9
331/A6774a	Sole (Type 1)	Ilb	307–315	271	36/44	12
334/A03–0011	Sole (Type 1)	(Ila)Ilb	313	274	39	12
385/A12304	Sole (Type 1)	Ila–Ilc	270	227	43	16
403/A12295	Sole (Type 5)	Ia–Ilc	281	240	41	15
406/A12493a	Sole (Type 1)	Ia–Ilc	300	277	23	8
462/A10599a	Sole (Type 1)	IId	msl 194	184	10	5
475/A12302a	Sole (Type 1)	IId	268	244	24	9
491/A12290a	Sole (Type 1)	Ilb–IIIf	261	231	30	11.5
570/A9120	Sheath (decorated)	IId–IIg	msl 97	97	–	0
611/A9879a	Sole (Type 2)	IId–IIg	231	212	19	8
625/A9885a	Sole (Type 1)	IId–IIg	294	264	30	10
733/A9887	Sole	Ile–IIg	msl 224	159.5	64.5	29
740/A9144	Sole (Type 3)	<IIg(IIh)	270	243	27	10
774/A9365	Sole (Type 3)	<IIg(IIh)	279	243	36	13
783/A9372a	Sole (Type 3)	<IIg(IIh)	258	242	16	6
788/A9546a	Sole (Type 3)	<IIg(IIh)	285	259.5	25.5	9
795/A9884a	Sole (Type 3)	<IIg(IIh)	237	212.5	24.5	10
798/A10366	Sole (Type 1)	<IIg(IIh)	198	179	19	10
821/A11221a	Sole (Type 4)	<IIg(IIh)	247	237.5	9.5	4
831/A8518a	Sole (Type 3)	IIh	268	251.5	16.5	6
846/A8544	Sole (Type 1)	IIIa–IIIc	280	240	40	14
919/A12536a	Sole (Type 2)	IIi	252	240	12	5
922/A11639a	Sole (Type 1)	IIb–IIIb	242	219	23	9.5
933/A03–0327a	Sole (Type 2)	IIIa,IIIb	285	267	18	6
937/A11644	Sole (Type 3)	IIIb	msl 238	213.5	24.5	10
970/A11261a	Sole (Type 8)	Ile–IIIc	86	79.5	6.5	8
971/A11261b	Sole (Type 9)	Ile–IIIc	178	158.5	19.5	11
1042/A8546	Sole (Type 4)	Ile–IIIc	266	240	26	10
1087/A03–0278b	Strap (folded)	IIIc	345	280	55	16

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Cat/Accession	Leather type	Phase	Pre-conservation length (mm)	Post-conservation length (mm)	Difference	%
	once)					
1095/A03-0270a	Sole (Type 3)	IIIc	265	252	13	5
1103/A03-0287a	Sole (Type 2)	IIIc	278	256.3	21.5	8
1106/A03-0304a	Sole (Type 3)	IIIc	300	267	33	11
1144/A4817a	Sole (Type 2)	IIg-IIIc(-IVa)	266	233	33	12
1195/A9883	Sole (Type 3)	IIg-IIIId	287	271	16	6
1206/A8680a	Sole (Type 4)	IIg-IIIId	272	253	19	7
1215/A9373a	Sole (Type 3)	IIg-IIIId	233	214.5	18.5	8
1224/A8183	Sheath (decorated)	IIh-IVa	151	149	2	1
1426/A6187a	Sole (Type 3)	IVaa	244	228.5	15.5	6
1504/A03-0405	Sole (Type 5)	<IIIc-IVaa	msl 261	255	6	2
1553/A03-0422a	Sole (Type 4)	<IIIc-IVaa	msl 238	215	23	10
1659/A03-0417a	Sole (Type 2)	IVa-IVb	msl 250	235	15	6
1743/A03-0347a	Sole (Type 2)	IVaa,IVb	msl 285	247	38	13
1804/A03-0367a	Sole (Type 4), upper (Type Di), thong	IVaa,IVb	234	230	4	2
1809/A03-0374a	Sole (Type 2)	IVaa,IVb	msl 283	267.5	15.5	5.5
1991/A03-0362a	Sole (Type 3)	IVaa,IVb	267	248	19	7
2181/A03-0385a	Sole (Type 7)	IVaa,IVb	240	226	14	6
2300/A03-0276a	Sole (Type 8)	IVc	98	88	10	10
2312/A03-0280	Strap (folded twice)	IVc	(excluding projecting thong) 240	223	7	3
2333/A03-0291a	Sole (Type 3)	IVc	286	257	29	10
2361/A03-0331a	Sole (Type 2), upper, rand	IVc	268	240	28	10
2651/A03-0316a	Sole (Type 1)	IVaa,IVb	190	165.5	24.5	13
2713/A03-0299	Sole (Type 3)	IVb	278	261	17	6
2714/A03-0311a	Sole (Type 2)	IVb	161	144	17	10.5
2722/A03-0307a	Sole (Type 3)	IVb	276	245	31	11
2728/A03-0295a	Sole (Type 4)	IVb	278	254	24	9
2747/A03-0297a	Sole (Type 2)	IVb	156	141.5	14.5	9
2750/A03-0293	Sole (Type 3)	IVb	280	259	21	7.5
2754/A03-0288a	Sole (Type 2)	IVb	msl 281	255.5	25.5	9
2779/A03-0232	Sole (Type 4)	IVb	287	254.5	32.5	11
2819/A03-0273c	Miscellaneous fragment	IVc	245	223	22	9
2872/A4894	Sole (Type 2)	IVb,IVc	183	168	15	8
2985/A10521	Sole (Type 3), union	IVb,IVc	251	227.5	23.5	9
3033/A3459	Sole (Type 3)	IVb,IVc	225	200	25	11
3047/A8334	Sheath (decorated)	IVb,IVc	msl 268	242	26	10
3048/A8335	Sole (Type 3)	IVb,IVc	184	161.5	22.5	12
3068/A8668c	Sole (Type 7)	IVb,IVc	225	217	8	4
3117/A8681a	Sole (Type 5)	IVb,IVc	246	226	20	8
3246/A6195	Sole (Type 3)	IVb-IVcc	270	253	17	6
3321/A03-0066a	Sole (Type 3)	IVc,IVcc	msl 242	226.5	15.5	6
3335/A03-0261a	Sole (Type 2)	IVc,IVcc	159	138	21	13
3352/A03-0246a	Sole	IVc,IVcc	msl 227	200	27	12
3376/A03-0240a	Sole (seat cut	IVc,IVcc	113	102	11	10

(continued)

Cat/Accession	Leather type	Phase	Pre-conservation length (mm)	Post-conservation length (mm)	Difference	%
	across waist)					
3382/A03-0249a	Sole (Type 3)	IVc,IVcc	msl 230	215.5	14.5	6
3384/A03-0233a	Sole	IVc,IVcc	msl 235	221	14	6
3396/A03-0268a	Sole	IVc,IVcc	-	-	-	-
3405/A03-0052a	Sole (Type 3)	IVc,IVcc	msl 249	233	16	6
3501/A03-0186a	Sole (Type 3)	IVc,IVcc	msl 245	235	10	4
3508/A03-0221	Clump	IVc,IVcc	138	120	18	13
3511/A03-0251	Clump	IVc,IVcc	102	86	16	16
3624/A6077c	Sole (Type 7)	IVcc(Va)	218	202	16	7
3707/A03-0134a	Sole (Type 3)	Va	278	260	18	7
3857/A03-0044	Sole (Type 5)	Vaa	msl 225	215	10	4
3858/A03-0047	Sole (Type 4)	Vaa	msl 221	206.5	14.5	7
3863/A03-0067a	Sole (Type 4)	Vaa	msl 266	238.5	27.5	10
3869/A03-0070	Sheath (decorated)	Vaa	209	183.5	25.5	12
3873/A03-0116b	Sole (Type 3)	Vaa	141	135.5	5.5	4
3875/A03-0118	Sheath (decorated)	Vaa	120	108.5	11.5	10
3877/A03-0120b	Sole (Type 2)	Vaa	275	253	22	8
3947/A03-0140a	Sole (Type 9)	Vaa	160	147	13	8
3985/A03-0170b	Sole (Type 5)	Vaa	262	240	22	8
4228/A6419	Sole (Type 3)	IVcc,Va	msl 278	244	34	12
4229/A6373	Sole (Type 3)	IVcc,Va	271	236	35	13
4283/A4901a	Sole (Type 5)	IVb-Vc	235	212.5	22.5	10
4493/A4289a	Sole (Type 2)	Va,Vaa(VI)	137	127	10	7
4533/A6400	Sole (Type 3)	Va,Vaa(VI)	msl 198	180	18	9
4811/A6189	Sole (Type 4)	Va,Vaa	265	241	24	9
4815/A6237a	Sole (Type 2)	Va,Vaa	226	206	20	9
4827/A03-0106	Sole (Type 4)	Va,Vaa	242	222.5	19.5	8
5240/A03-0090	Sole (Type 4)	Vb	291	273.5	17.5	5
5241/A03-0216	Sole (Type 2), upper, rand	Vb	(incl vamp) 288	262.5	25.5	9
5329/A6399a	Sole (Type 5)	Vb-Vc	270	238	32	12
5599/A4352a	Sole (Type 7)	Vd	202-205	185	17	8
5608/A03-0065	Sole (Type 4)	(Va-)Vd(Vdd)	msl 177	165	12	7
5768/A9821a & 5769/A9821b	Sole (Type 2), rand, upper (Type J)	u/s	260	229	31	12
5779/A0800a	Sole (Type 2)	u/s	268	239	29	11
5824/A03-0127a	Sole (Type 9)	u/s	195	177	18	9
5868/A03-0004a	Sheath (decorated)	u/s	200	183	17	8.5
5871/A03-0008	Sole (Type 3)	u/s	258	235.5	22.5	9
North Sector						
5908/A0113	Sole (Type 5)	4-11	msl 155	133	22	14
5924/A0115	Strap (single thickness)	6-12(b-e)	267	233	34	13
5929/A0110a	Sole (Type 9)	6-12(b-e)	164	145	19	12
5958/A0100	Strap/belt (single thickness)	14-16	msl 138	113	25	18

4 Identification of animal species

Clare Thomas

The hair follicle pattern on the leather was examined, in order to determine the animal species. Only the conserved leather was included. A large proportion of the leather was too worn, or particularly in the case of uppers, too stretched and distorted, for the pattern to be identified. Most of the soles proved too worn; however, in some cases, the pattern was clear on the upturned edge of edge–flesh stitching channels. All the identified soles were made of cattlehide. The follicle pattern survived better on uppers, where it was usually cattlehide. Some instances of goatskin were observed but unfortunately this information appears to have been

lost in the interval between the original identification and final work on the report, and is thus not recorded in the catalogue, as the instances of cattlehide are.

The preponderance of cattlehide is perhaps surprising, given the evidence from the mammal bone (see Fascicule 4, The mammal bone) which indicated that goats were being slaughtered in large numbers, presumably for cheap meat. The use of cattlehide for soles is however to be expected, as it is thicker. The use of cattlehide for uppers may indicate a preference for tough, practical footwear.

5 The history of leatherworking in Perth

Clare Thomas

The evidence from the High Street site demonstrates that leather was being worked and made into shoes, boots, straps, sheaths and clothing from the early 12th century onwards. The history of this trade is further illuminated by documentary references, but unfortunately these are almost all later in date than the stratified deposits from the site. Despite this, they have been studied in the hope of finding information which might be applicable to the period 1100–1350. Relevant sources include the *Perth Guildry Book*, royal charters, minutes of the Shoemakers' Incorporation and Glovers' Incorporation, and sundry burgh records.

Early references

Early references to leatherworking include a mention in 1362 of 'vico sellatorum' ('Saddlers' Street') in a charter of David II (Fittis 1875, 525). Even earlier, monastic records name Baldwin the Lorimer, originally from the Low Countries. Baldwin made harness, one terret and two horse-collars being the annual rent for his toft (Stavert 1991, 15). David I allowed Scone Abbey to have its own shoemaker and tanner, who together with the abbey's third servant, a smith, enjoyed the 'same privileges in Perth as the king's burgesses' (ibid).

Perth Guildry Book

Further evidence for leatherworkers can be found in the *Perth Guildry Book* which recorded entries of new members as well as other guild business, from 1452 to 1601 (Stavert 1993). Skinners, for example, are mentioned regularly. Soutars (souters) or cordinars occur less frequently, and fall into three chronological periods. Thus, the book records the entry of six soutars between 1461 and 1494, but only two from 1528 until 1558. During this period, however, 'David Nicol Decane of the Cordinaris' is mentioned in a letter of the Guild, dated to 1545, showing that the shoemakers, along with other crafts, were becoming more involved with the Guild. Eleven years later, in 1556, 'David Roberstone cordonar' is reproved for breaking Guild rules.

However, from 1567 to 1594, entries appear to become more regular, with eight souters or cordinars admitted to the guild (Stavert 1993, 29, 72, 76, 77, 87, 123, 126, 169–70, 237–8, 256, 269, 273, 288, 297, 358, 367, 392).

Only one harness-maker, John Richardsone, is mentioned. His date of entry, 30 September 1575, sits between those of eight saddlers who joined the guild between 1561 and 1589. It is interesting that there are

no earlier instances of saddlers. The date range for their admittance is similar to that for the last phase of entries of soutars (Stavert 1993, 246, 252, 260, 284, 289, 294, 313–14, 343, 348, 364).

In the earlier years, membership of the guild was restricted to merchants and their heirs. Conflict between the guild and the crafts led to an agreement in 1555, after which the number of craftsmen admitted to the guild increased markedly. Thus the large number of entries of soutars and saddlers in the second half of the sixteenth century reflects the growing power and importance of the craft incorporations (Stavert 1993, vii).

The Shoemakers' Incorporation

In 1927 Peter Baxter, a Perth journalist and amateur local historian, published a history of the Shoemakers' Incorporation of Perth, based on their minute books, which dated from 1545 onwards. It is not always possible to distinguish between the substance of the original entries and Baxter's comments (Baxter 1927). Unfortunately, the present location of the original minute books dating to before 1793 is not known; unlike those of the Glovers' Incorporation, they are not in Perth and Kinross Council Archive. Nevertheless, Baxter's commentary, although it must be treated with caution, does provide considerable information on the organisation and activities of the Incorporation, especially as regards its existence before 1545, control of entry to the craft, guardianship of its monopoly, financial dealings, property transactions and welfare. Minutes of the Shoemaker Incorporation of Perth (1793–2000) are held in Perth and Kinross Council Archive, A K Bell Library (MS 156).

Evidence for the Shoemakers' Incorporation prior to 1545

Although the minute books examined by Baxter only begin on 14 July 1545, evidence suggests that the Incorporation existed earlier, at least as some form of craft body. According to Baxter, the records of King James VI Hospital, Perth, refer to 'St Duthan, the patron saint of the shoemaker craft'. Baxter also mentions 'an agreement between the Town of Perth and the Cordiners (Shoemakers), anent St Duthan's altar, of date 26th January 1496' (ie, probably 1497), but unfortunately he does not quote his source (Baxter 1927, 1). However, the calling's connection with the altar is substantiated by the first minute (14/7/1545) and by an entry of 1696: 'the calling's papers concerning

the altarage of St Duthan ... had been put in the Trade chest' (Baxter 1927, 19).

The altar is also mentioned in other sources, though with slightly different dedications. Thus, on 23 November 1514, 'Sir Robert Keillor, Chaplain of the altar of St Duchay' gave up a tenement in the Southgate (Fittis 1885, 307–308). The *Perth Guildry Book* also names the altar twice. On 9th March 1548, the persons concerned were instructed to attend on the following day at 'Saint Duthas altar, within the paroch kirk'. Similarly, on 14 May 1548, the parties involved were told to meet 'in saint John's kirk at Saint Duthis altar the morn' (Stavert 1993, 191, 194). Later, in 1738, a piece of land is described as bounded by the 'Aiker of St Crispian, founded within the Church of Perth' (Fittis 1885, 307–8). Fittis also talks of an altar dedicated to 'SS. Duchane, Crispin and Crispinian. To these three saints an altar was founded by the shoemakers. Of St Duchane we know nothing' (ibid).

Crispin and Crispinian were 3rd-century AD martyrs, who were popularly believed to have 'exercised their trade of shoemaking so as to avoid living from the alms of the faithful and thus became the patron saints of cobblers, shoemakers and leatherworkers' (Farmer 2004, 124–5). St Duchane or Duthas is possibly Duthac, an 11th-century Scottish bishop, who worked mainly in Ross-shire (ibid, 153–4).

Furthermore, the earlier existence of the Shoemakers' Incorporation is also suggested by a brass candelabra (Illus 168), which was bought in 1812 by the Perth Literary and Antiquarian Society, 'lately belonging to the Shoemaker Incorporation of this place' (Perth Museum – extract from Minute Book 22/12/1812). Baxter refers to it as 'the brass candelabra of St Duthan's altar', while according to a note in the museum, it 'originally is said to have hung in the Shoemakers' Incorporation Gallery and belonged to them' (Baxter 1927; Perth Museum – Note 8/4/1926). The candelabra, which once again hangs in St John's Kirk, is probably Flemish, possibly dating to the mid-15th-century (Hunter 1932, 32). If it originally belonged to the Shoemakers, then it implies that they were already a wealthy body in the 15th century. However it should be noted that there were frequent rearrangements of the use of St John's Church in the post-Reformation years. Thus the association of the candelabra with the Shoemakers may be accidental.

Further evidence for the existence of a formal body of shoemakers before 1545 is provided by their ownership of the 'Soutarland', between Coupar Angus and Burrelton. According to Baxter, it had been given to them by Coupar Angus Abbey, in return for the provision of shoes for the monks. Again, Baxter does not explain his source, but the Souterland is mentioned at least four times in the minutes, in 1693, 1694, 1696 and finally in 1752, when it was sold (Baxter 1927, 14, 16, 19, 83).

Thus, the reference to the altar of St Duthan and its candelabrum, and to the Souterland, imply the existence of an organised craft body of shoemakers

prior to 1545. The absence of early charters or other documents is almost certainly explained by the destruction by fire in February 1745 of the Incorporation's Charter chest. The fire at Deacon Buchan's house and the loss of the chest are recorded in the Minute Book and in a letter to the Town Clerk of Perth, informing him that the town's bond of 2500 merks, due to the Incorporation, had been destroyed (Baxter 1927, 70; PKCA, B59/29/84).

The other information to be gleaned from Baxter all dates to after 1545. Some of the regulations may have existed earlier, but their relevance to the period 1100–1350 is dubious. Hence, they have been summarised very briefly. Firstly, entry to the craft was carefully controlled, and was restricted to burgesses of the town. Secondly, the Incorporation was very careful to protect its privileges. Non-freemen who attempted to sell shoes had their wares seized, and were taken to court, as, for example, James Moor, who in 1762 or 1763 was accused of making faulty shoes and of not paying the required dues. Similarly, in November–December 1771, David Miller, Joseph Scott and others were fined for 'encroaching on the liberties of the trade'. On payment of five shillings sterling yearly, they were allowed to mend shoes in the future (Baxter 1927, 32). Similarly, c1707–10 the Incorporation opposed a proposal to introduce a 'Public Shoemarket' at which non-freemen might sell their wares, including, to the horror of the Incorporation 'high and raised-heel shoes'.

The welfare of members and their dependants was one of the Incorporation's concerns. Thus in 1698, at the instigation of the Town Council, the calling agreed 'to pay various sums monthly to six poor members' (ibid, 20). The Incorporation also possessed mortcloths, which were draped over coffins at funerals; one of these survives in Perth Museum, along with the charter chest which replaced the one burnt in 1745. It still bears the Incorporation's coat-of-arms and the date 1745. The Museum also retains the money box and the deacon's chair.

Other evidence for the Shoemakers' Incorporation in the Perth Archives

Documents in Perth and Kinross Council Archive reflect the Burgh's involvement with the Shoemakers' Incorporation. For instance, a late 17th-century letter to the Town Council, by an unknown author, complains of a lack of service to the town by the Shoemakers (Illus 169). No mention of this letter is made in the Incorporation's minutes. It is possible that this letter is somehow linked to the attempt in 1709–10 to hold a public shoe market (PKCA, B59/29/29).

The Archive also records the Burgh's part in the formal life of the Incorporation, as, for example, in numerous 18th-century Indentures of Apprenticeship, and in the official account of the 1771–72 trial of unfreemen shoemakers David Millar, Joseph Scott, James Simson and others (see above). The minutes

of the Shoemaker Incorporation, 1793–2000, are now deposited in the Archive. However there is nothing of relevance to the medieval period.

The Glovers' or Skinners Incorporation

Various records of the Glovers' or Skinners' Incorporation survive in Perth and Kinross Council Archive. These include three volumes, which comprise the minutes from 1593 to 1726, a 17th–18th-century index to the minutes, and extracts from the minutes, ranging from 1593 to 1904. Other documents consist of a ratification of the craft's customs, dating from 1485, a letter of James VI prohibiting the export of skins, and numerous title deeds. The minutes are similar to those of the Shoemakers, with detailed

regulations on behaviour of members, apprentices, entry of new members, purchase of mortcloth, etc. Of particular interest is the prohibition on attempts to sell sheepskin or dog leather as if it were goat skin.

Conclusion

The surviving documentary references to Perth leatherworkers date to post-1545, with very few exceptions. Our information on the Shoemakers' Incorporation for the period 1545–1793 is restricted to Baxter's account and interpretation, apart from the records of indentures and of the 1771–2 trial. However, despite this, it is possible to say that from 1545 there was an organized body of shoemakers, and that it might have existed earlier.

6 Glossary of textile terms used in this fascicule

P Z Dansart

bast fibres Fibres extracted from the stems of some dicotyleonous plants (eg, nettle, flax or hemp) or from the inner bark of certain trees and shrubs.

binding warp A warp which is secondary to the main warp (see below); it serves to bind the weft floats in a compound weave.

chevron twill In a 2/1 twill or 2/2 twill (see *twill weaves* below), if the direction of the diagonal lines formed by the weave is reversed in one system, the effect produced is that of a chevron.

comber unit A section of a textile (or a pattern repeat in a textile), the warp ends of which are controlled by the comber board. In a drawloom, the comber board is threaded with pulleys which control the warp ends belonging to each pattern repeat.

compound weaves A weave with two functionally differentiated warp sets (known respectively as the main warp and the binding warp), and two or more different weft series. Such textiles, usually of silk or silk and some other fibre, such as linen, were woven on a drawloom. Many of them were produced in Persia, Byzantium, Syria, Egypt, Islamic Spain, Italy and Sicily. One of the most common forms of compound weave is known as weft-faced compound twill, also termed ‘samitum’ or ‘samite’, in which the weft follows an under one, over two order of interlacing (that is, 1/2) with the binding warp threads. Other weave possibilities include an under one, over three order of interlacing (1/3). Compound weaves may also be executed in tabby or plain weave.

diamond twill In a 2/1 twill or 2/2 twill (see *twill weaves* below), the direction of the diagonal formed by the weave may be reversed in both warp and weft. The effect achieved is that of a diamond or lozenge shape.

extended weave A weave in which the threads of one system or both systems are paired or grouped, so that two or more threads follow the same course. Four of the PHSAE textiles (tabby and 2/1 twill) are extended by pairing threads in one system (probably the weft).

four shed twill A twill formed from units of four threads in both warp and weft; many authors use term to refer to 2/2 twill (see *twill weaves* below).

freis Old Scots spelling of frieze, a coarse woollen cloth with a nap, usually on one surface only; from the French *friser*, ‘to curl’.

gore 1 A locally inserted weft which serves to level the fell of a textile where unequal warp tension prevents the weft from being perpendicular to the warp (Hoffman 1964, Figures 146 and 147). In warp-weighted looms, the warp elements may sag and pull the weft into a curve, which may be corrected by inserting extra weft passes in order to even up the weaving. Similar problems may also occur in horizontal looms, for example if the breast and end beams are not of a consistent diameter, or if warp yarns with different diameters are used. In European medieval textiles, this feature is usually associated with the warp-weighted loom. 2 A triangular insert of cloth in the side, front or back seams of a garment such as a tunic.

grège Reeled silk thread from which the gum sericin has not been removed.

heddle A device for lifting and lowering selected warp threads (eg, alternate threads in the case of a loom set up for tabby weave) in order to open a shed, prior to entering the weft.

knitting the heddles This is the term employed by Hoffman (1964, 133–5) for the process of forming heddles (see *heddle* above) using a continuous yarn, which is passed round selected threads and a rod. The heddle rod may then be lifted in order to open the shed (see *shed* below). Möller-Wiering (2011, 62) employed the phrase ‘knotting of heddles’.

lozenge twill See *diamond twill* above.

main warp The ground or principal warp of a textile. In many cases, it is the only warp employed in a textile. However, in some compound weaves there are two sets of warp, the main warp (which is often obscured by the weft floats) and a binding warp (see above).

nap A term which refers to the surface of a textile. A nap may be produced as part of the finishing process whereby some of the fibres are ‘raised’ from the surface of the fabric. It involves loosening fibres from the yarns which constitute the cloth by means of teasles or mechanical processes. Note that the term nap was formerly used to denote a rough surface on a cloth which was sheared and smoothed, in other words, to a surface which was subject to finishing (Emery 1980, 173–4). However, the term is used here generally to refer to the process of producing (or the effect of) a raised surface.

pick An individual weft thread, or group of weft threads, which passes through one shed.

pin-beater A small, pointed, slightly curved tool of bone or wood. It was used for beating the weft into the fell of the cloth, in an upward motion, on the warp-weighted loom. It is assumed that it was employed for weaving cloth with a fairly high warp density (Hoffman 1964, 320–1). In an experiment of the 1950s to weave wadmál (see *wadmál* below) twenty ells long, the pin beater was used to push up the weft first with the shed open, and again after it had been closed (ibid, 135–6). In contrast, the sword-beater was only employed when the shed was closed.

reeled silk Untwisted yarn formed by reeling together the paired filaments from cocoons of the silkmoth. The silkmoth secretes a pair of silk filaments known as a bave, one of which is too fine to be used alone. Accordingly, a group of baves (three to ten) are combined (Emery 1980, 8). See *grège* and *thrown silk*.

samitum A medieval term for a weft-faced compound twill. The term samite is also employed.

satin A weave which is formed from units of at least five threads in the warp and weft. Each end passes over four (or more) threads and under one thread or each end passes under four (or more threads) and over one.

selvedge A closed edge on a textile. In this work it refers to the edge formed by turns of the weft as it passes round the outermost warp thread(s).

shed An opening formed by raising selected warp threads. The weft is passed through this space. Various devices may be employed for opening the warp, eg leashes, shafts or tablets.

sprang A form of interlinking ('plaiting'), oblique interlacing ('braiding') or oblique twining executed on a frame. One set of threads is employed and no weft. The interworking of the threads at the top of the frame duplicates the movements, in a simultaneous fashion, at the bottom. Where the working of the two ends coincides at the transversal median line, a distinctive structure holds the final interworking to prevent the piece from unravelling (Emery 1980, 66, 69).

SS A textile in which both the warp (or system 1) and the weft (or system 2) are of S spun yarn.

starting edge (or **starting border**) A transversal closed edge which forms the top of a cloth as woven on a warp-weighted loom (Hoffman 1964, 151–83). This border is produced in the process of warping and setting up such a loom; it may be woven or twined (ibid, Figure 70).

tabby A weave in which each weft thread passes over and under successive warp threads. The over one, under one interlacing in the first passage of the weft, is followed by an under one, over one order in the second. The unit of weave is constituted by two warp and two weft threads. It is also known as plain weave. The term tabby derives from cloth made in the quarter known as *attābī* in Baghdad (May 1957, 67).

tablet weaving A form of warp twining in which the warp threads spiral round each other and enclose the weft within each twist. The shed is produced by a series of tablets (cards) which are square and flat in shape; the warp is threaded through perforations in the corners of each. In order to change shed, the weaver turns the tablets.

three shed twill A twill formed from units of three warp and three weft threads. Many authors employ the term to refer to a 2/1 twill (see *twill weaves* below).

thrown silk Yarn produced by twisting reeled filaments of silk.

twill weaves Twill weaves are formed from units of at least three threads in warp and weft. In a 2/1 twill, the weft passes over two warp threads and under one, and for each subsequent passage of the weft, the warp grouping is stepped one warp thread to the right or left. In a 2/2 twill, the weft passes over two warp threads and under two, producing warp and weft floats of equal span. If the shift is always to the right or left, continuous diagonals are formed on both faces of the fabric, but the direction of the diagonal on one surface is the reverse of that on the other (Emery 1980, 92).

vaðmál A Norse term for a measure of cloth, used both as a value and to make payments (Østergård 2009, 62). The cloth was made in Scandinavian countries, including Shetland, Orkney and Greenland, but it was particularly associated with Iceland. It was woven on a warp-weighted loom often in a 2/2 twill (see *twill weaves* above), and also in other weaves, including tabby and 2/1 twill.

velvet A textile with a pile in the warp. During weaving, a supplementary warp passes over a series of rods in order to raise loops above the ground weave. Subsequently the loops may be shorn, or they may be left as loops.

wadmál See *vaðmál*.

warp A set of longitudinal threads held under tension on the loom.

warp end A single warp thread.

warp-weighted loom A vertical loom consisting of supports and an upper horizontal beam; the warp is kept under tension by a number of free-hanging weights to which groups of warp threads are tied (Hoffman 1964, 5).

weft Threads which interlace with the warp in a transversal direction; during weaving the weft is passed through the sheds.

woollen A soft, somewhat fuzzy yarn spun from wool which has been carded, so that the fibres lie at right angles to the yarn after it has been spun (Leadbeater 1976, 91).

worsted A smooth, firm yarn spun from wool which has been prepared by combing. The process of combing means that the fibres lie parallel to each other, and that they tend to follow the direction of the yarn when spun (ibid, 90).

ZI In this fascicule, this term is employed in reference to silk tabbies in which the warp (or system 1) is composed of Z twisted yarn and the weft (or system 2) of untwisted yarn.

ZS A textile in which the warp (or system 1) is composed of Z spun yarn and the weft (or system 2) of S spun yarn.

ZZ A textile in which both the warp (or system 1) and weft (or system 2) are composed of Z spun yarn.

7 Glossary of leatherworking terms used in this fascicule

butted seams The edges of adjoining upper sections are butted together and joined by a seam, often an edge–flesh one (qv), invisible on the reverse side (Thornton 1973b, 44).

clump (or **clump sole**) A half-sole added to a shoe, usually as a repair (Thornton 1973b, 45).

delamination The condition of leather which has separated during burial into grain and flesh layers, due to the incomplete penetration of the tan liquor when it was made (Thornton 1973b, 45).

eared shoe In the 16th century, following a long period of pointed shoes, toes became very square and wide; for a short time, 1535–55, the corners of the toe were extended sideways resembling ears (Thornton 1973b, 45).

edge–flesh seams The stitching holes are pierced from the edge of the section (usually the sole) to the flesh side; commonly used in the majority of medieval shoes (qv) (Thornton 1973b, 45). Also used to link fragments of uppers.

facing A strip of leather or other material used to strengthen tie-holes.

flesh The inner surface of a piece of leather originally next to the animal's body; the loose fibres are usually prominent (Thornton 1973b, 45).

follicle pattern The distinctive pattern left on the grain side of the leather by the animal's hairs.

forepart The front of the shoe (or sole or insole).

grain The outer surface of a piece of leather originally bearing the hair, fur, wool etc. Each animal has a characteristic grain pattern and the surface is normally smooth. Soles usually have the grain side downwards resting on the ground; insoles usually have the grain side upwards so that the foot rests on it. Uppers normally have the grain side outwards except for suedes (Thornton 1973b, 45).

heel A component added to the rear (or seat) end of the sole, originally for utility but then as fashion. May consist of separate 'lifts' ('built heel') or be a block of wood covered with leather or other material. In either case the bottom section which rests on the ground is called the 'top piece' (Thornton 1973b, 45).

insole The inside bottom part of a shoe on which the foot rests, sometimes referred to as 'the foundation of

the shoe'. In a turnshoe (qv) there is no separate insole, the foot resting on the inner surface of the sole which also acts as an insole (Thornton 1973b, 45).

instep A rather imprecise area on top of the foot between the rear of the toes and the ankle joint. The name is also incorrectly used for the arch or waist of the foot underneath (Thornton 1973b, 45).

lasting margin The lower edge of the shoe upper which is turned under and fixed to the insole (or sole) during lasting (Thornton 1973b, 46).

latchets The top fronts of the quarters (qv) are extended into straps which pass over the instep of the foot, sometimes resting on the tongue of the shoe vamp. These straps or latchets may not quite touch each other, in which case they may be joined by a buckle (Thornton 1973b, 46). Also used in this report to describe the low flaps found on shoes of Types D and E, but which do not appear to have been fastened in any way other than by possibly being stitched to each other.

leg flap Used in this report to describe the top fronts of quarters of boots, of Types A, Bi–iii, C and H. None of these leg flaps show any signs of central fastening, eg toggles. Some pairs may have been bound, either with stitching or with a top band, and thus the front of the boot was left open.

quarters The sides of a shoe upper joining on to the vamp at the front and meeting each other at the back of the heel. If there is a seam here it is called a 'backseam'. The term 'quarters' is derived from the fact that if there is a join at the back, then a pair of shoes has four of them. Medieval shoes do not usually have a backseam, the inside and outside quarters forming a continuous section (Thornton 1973b, 46).

rand A long narrow strip of leather of roughly triangular cross-section included in an upper/bottom seam (or elsewhere) to make it more waterproof or decorative. Some early turnshoes have such a rand and if this is wide enough, an additional sole (possibly a repair one) can be stitched to it (see **Turn-welt**) (Thornton 1973b, 46).

seat (**heel seat**) The rear end of the insole or sole on which the heel of the foot rests (Thornton 1973b, 46).

sole The part of the shoe which is in contact with the ground. If the shoe has a separate heel (qv) the bottom section of this next to the ground is called the 'top-piece'. (Thornton 1973b, 47).

stiffener (or heel stiffener) A reinforcement placed inside the back of the quarters. In early shoes the top edge is often stitched to the quarters by a type of hem stitch (or overseam or whipped seam) which produces a scalloped effect along this edge; the bottom edge is lasted in with the upper (Thornton 1973b, 47).

stitching channel A row of stitch holes, sometimes set in a groove.

stitch length The distance between the centres of the stitches or stitch holes in a row (Thornton 1973b, 47).

throat The central position of the rear end of the vamp resting on the instep of the foot. (Thornton 1973b, 47).

tie holes The holes in quarters, latches or tongues through which a string, ribbon or thong is passed to hold the shoe on the foot (Thornton 1973b, 47). In shoes or boots with side lacing, tie holes are also found on the side-pieces.

tongue A backwards extension from the vamp throat (qv) resting on the instep of the foot. Latchet ties (qv) may pass over or under it and sometimes there is a pair of holes through which the tie string passes (Thornton 1973b, 47).

top band A narrow strip of leather or other material stitched to the top edge of the quarters (or legs of a boot) for decorative purposes. (Thornton 1973b, 47).

tread The widest part of the sole forepart in closest contact with the ground (Thornton 1973b, 47).

tunnel holes Pairs of slits forming tunnels through which thongs of Type B boots have been threaded.

tunnel stitch A seam used in repairing to attach a new piece of leather, eg a clump sole (qv), on top of an old one. The holes enter the surface of each piece, pass for a short distance through the substance (between grain and flesh) and then reappear on the same side. Sometimes called a 'caterpillar stitch' (Thornton 1973b, 47). Also used in this report to describe the stitches used to attach facings and top edges of quarters to the flesh side of the shoe, without perforating the leather.

turnshoe construction The shoe is made inside out (normally with the flesh side outwards) by sewing the lasting margin (qv) of the upper to the edge of a single sole, which also acts as an insole. The shoe is then turned the right way round so that the grain side of the leather is on the outside of the shoe and the upper/sole seam is now inside. It was apparently introduced to this country by the Saxons (Thornton 1973b, 47).

turn-welt A turnshoe which has an extra wide rand (qv) included in the seam so that this becomes a welt to which a first sole, and later a repair one, can be stitched. It is the intermediate stage between a turnshoe and a welted shoe appearing 1500 (Thornton 1973b, 48).

vamp The front section of a shoe upper covering the toes and part of the instep (Thornton 1973b, 48).

vamp wings The sides of the vamp extending backwards either side of the throat to join the quarters (Thornton 1973b, 48).

waist The narrow part of a shoe sole or insole under the arch of the foot (also called the waist) (Thornton 1973b, 48).

welt A narrow strip of leather sewn round the lasting margin (qv) of the upper and joining it either to the insole edge or to a 'rib' raised on the flesh side of the insole near the edge. The sole is attached to this welt by a second seam. It appears to have been developed from the rand (qv) and the two names are sometimes confused with each other (Thornton 1973b, 48).

welted construction A method of shoe construction introduced to this country about 1500 and still used (although mechanised). It takes place in three stages:

- i* The upper is lasted and held in position by nails or bracing thread.
- ii* The lasted upper is sewn together with a welt (qv) to the edge of the insole (early examples use the actual edge itself with an edge–flesh seam (qv) but later ones used an upstanding rib set in a short distance from the edge).
- iii* The sole is then stitched to this welt (Thornton 1973b, 48).

8 Glossary of archaeological terms used in this fascicule

A Accession number given to artefacts.

Area The excavation was divided into ten areas, each of which was administered by a supervisor. Areas 1–6 were excavated during the 1975–6 Season; 7–10 during the following season. Area 1 lay on the High Street frontage, Areas 5 and 6 on the Mill Street frontage.

Building (with letter) Standing structures, ie those standing and surveyed in 1975 (see CD insert in Fascicule 1); (with number) excavated timber and stone buildings (see Fascicule 1, The buildings).

byre Scottish term for a cow shed.

c circa; about/approximately.

C Context number, a reference number assigned to every feature and layer during the excavation.

close Scottish term for a lane/path between buildings.

Context/Feature index Index of the Context Numbers (arranged numerically) and including the following fields of information:

- i* Context/Feature Number
 - ii* Rig(s)
 - iii* Area(s)
 - iv* Context Group Designation
 - v* Context Group Sequence Number
 - vi* Feature Designation and Reference Number
 - vii* Phase(s)
 - viii* Matrix Level(s)
 - ix* Figure Numbers
 - x* Page Numbers of description/discussion
- Deposited in site archive.

Context Group (CG) One or more contexts grouped together on the basis of interpretation, eg Buildings, Paths etc, and/or their relationship to other context groups (indicated by the prefix CG).

Context Group Designation The Context Groups were divided on the basis of interpretation into twenty-one categories.

Context Number Reference number (indicated by the prefix C) assigned to every feature and layer during the excavation; see Context Index in archive for full list.

D Drain; a Feature Category.

Drains Feature Category (indicated by the prefix D).

ft feet (Imperial measurement).

Gully (Gullies) Feature Category (indicated by the prefix T).

H Hearth; a Feature Category.

HBF Highland Boundary Fault

Hearths Feature Category (indicated by the prefix H)

Lade The Town Ditch/Moat; Context Group Designation within North Sector.

Layers Those Context Numbers which were not designated as Features.

MC Miscellaneous Context Group; Context Group Designation within the South Sector.

MF Miscellaneous Feature; a Feature Category

Midden Context Group Designation (indicated by the prefix M).

Miscellaneous Context Group(s) Context Group Designation (indicated by the prefix MC).

Miscellaneous Features Feature Category (indicated by the prefix MF).

Miscellaneous Wood Feature Category (indicated by the prefix MW).

mm Millimetre(s).

MW Miscellaneous Wood; a Feature Category.

Natural Context Group Designation (Undisturbed fluvio-glacial sand).

North Sector That part of the site containing Areas 5 and 6 and Trenches A and B.

occ Occupation layer(s).

OPH Old Parliament House.

ORS Old Red Sandstone.

Oven Context Group Designation within Area 5.

PA Post Alignment(s); a Feature Category.

Path(s) Context Group Designation (indicated by the prefix P).

Period Chronological division.

Period I Pre-1150.

Period II 1150–c1200

Period III c1200–c1250.

Period IV c1250–c1300.

Period V c1300–1350>.

Period VI Post-medieval and/or modern.

Phase 1 Chronological division; sub-division of a Period reflecting a variation in the site's structure/path pattern. **2** Phases of buildings.

PH Post Hole(s); a Feature Category.

PHSAE Perth High Street Archaeological Excavation.

PHSAEC Perth High Street Archaeological Excavation Committee.

Pit(s) Feature Category.

Post Alignment(s) Feature Category (indicated by the prefix PA).

Post Hole(s) Feature Category (indicated by the prefix PH). This category includes post pits and robbed postholes.

Post Pits Pits dug to insert a post/stake; see *PW* below.

Post(s) Feature Category (indicated by the prefix PP).

PP Post(s)/stake(s); Feature Category.

PW Post Pits with timber in situ; Feature Category.

RCAHMS Royal Commission on the Ancient and Historical Monuments of Scotland.

Rig(s) Property (division).

SA Stake Alignment(s); a Feature Category.

SDD Scottish Development Department (of Scottish Office).

Sondage Machine-cut pit.

South Sector That part of the site containing Areas 1–4 and 7–10.

Stake Alignment Feature Category (indicated by the prefix SA).

SUAT Scottish Urban Archaeological Trust.

T Trench/Gully; Feature Category.

TS Tree Stump; Feature Category within the South Sector.

Trench(es) Feature Category (indicated by the prefix T).

U/S Unstratified.

Vennel(s) Scottish term for a Lane/Path.

Wall Stone Wall(s); Feature Category.

Wattle Wall(s) Feature Category (indicated by the prefix WW) within the South Sector.

WW Wattle Wall(s); Feature Category.

Wynd Scottish term for a Lane/Path.

yd yard (Imperial measurement).