

## 8. CATALOGUE

## 8.1 Shoes

## 8.1.1 Complete shoe and lining

► [1] **Find no. 110.5.1: Sole (Type 2), upper (Type Bii) with topband and felt lining (Illus 10; Illus 12, nos 1a-1d)**

Complete left sole, with short seat, slight narrowing for waist and broad, gently curved forepart, centrally aligned, ending in rounded toe – Type 2. Edge–flesh stitching channel, stitch length 5mm. Worn, with small hole in front forepart, and with cracks in centre forepart, waist and front of seat. Partially delaminated. Tunnel-stitch holes indicate that both seat and forepart have been repaired with clump soles. Length 231mm, width of seat 63mm, width of waist 61mm, width of forepart 90mm. Thickness not measured because of delamination.

Nine fragments of upper, comprising vamp, quarters, leg flap and topband. Probably originally one large fragment, plus leg flap and topband – one-piece wraparound design. Vamp has lasting margin with grain–flesh stitching channel, stitch length 5mm, and edge–flesh stitching channels at vamp throat and vamp wing, stitch length 3mm. Very worn and fragile, with large crack down centre of vamp and several smaller ones. Quarters consists of several exceedingly fragile pieces, but these were most probably all part of same piece as vamp. One fragment has lasting margin, as above. Two fragments have edge–flesh stitching channel, as above, for front of leg on one side and for attachment to vamp wing and leg flap on other side. One fragment also has three slits for thongs, with stitching around and beneath two; also traces of stitching for another thong hole. This stitching suggests that the ends of three thongs were attached to inside of quarters. Leg flap is small, approximately trapezoidal, with one oversewn edge and two edge–flesh stitching channels, as above. Surviving height of quarters (incomplete) *c* 75mm. Follicle pattern is very worn but appears to be cattlehide. Three fragments of topband or binding, originally one, formed by folding a strip of leather once. Hem-stitching and tunnel-stitching along top of fold indicate how the binding was attached to the upper. Two approximately parallel grooves on one side of each fragment may have been for decoration. This

was most probably a low ankleboot of one-piece construction, fastened with two or three wraparound thongs – Type Bi. No fragments of rand survive.

Almost complete felt lining for boot, comprising sole, vamp and quarters, all in one piece, and topband. Impression of stitching along top edge of quarters/leg. Also trace of stitching on topband. Crack down centre of vamp identical to one on vamp, suggesting that this might have been a deliberate slit, to relieve pressure caused by too tight a shoe. No apparent join in felt – possibly join has been pressed out.

## 8.1.2 Sole and upper fragments

► [2] **Find no. 110.5.3: Sole (Type 1) with rand and with strip of upper (Type A or B?) and with thread (Illus 12, no. 2)**

Sole complete except for worn holes. Probably left foot, judging from hole at big toe area. Short, broad seat, only slight narrowing for waist, wide, straight forepart, tapering to an oval toe, centrally aligned – Type 1. Edge–flesh stitching channel, stitch length 5–6mm. Worn, with large holes in seat and in centre forepart and with smaller hole in front of forepart, in big toe area. Also small cracks at rear of seat and at front of forepart. Length *c* 280mm, width of seat *c* 65mm (distorted), width of waist *c* 64mm, width of forepart *c* 88mm. Thickness *c* 1–2mm. Rand sandwiched between sole and upper, only around forepart, from front of waist on each side. No rand at waist or seat. Triangular cross-section. Upper survives as 10–25mm wide strip, 2–3mm thick, in two pieces. Larger extends from inside vamp wing, to inside edge of quarters, comprising both vamp and quarters. Smaller consists of triangular-shaped fragment, filling gap between vamp wing and front of quarters. Lasting margin is securely attached to sole with thread, thus stitching channel itself not visible. What is visible is very similar to that of no. 6, accordingly probably edge–flesh stitching channel; stitch length 5–6mm. Sideseam linking vamp wing and side-piece survives for *c* 20mm; edge–flesh stitching channel, stitch length 3–4mm. Edge–flesh stitching channel also links side-piece to diagonal edge of quarters, stitch length 3–4mm. This appears to be a wraparound upper of one-piece design – probably Type A or B. Rest of upper has been cut away, possibly for reuse. Worn, especially at front

of vamp. Thread survives in sole/rand/upper seam, good example of inside of seam, knot at inside waist. Follicle pattern worn.

► [3] **Find no. 110.5.2 and Find no. 110.5.3.2: Sole (Type 1 or 2) with rand and with vamp and with thread (Illus 12, no. 3)**

Sole, complete apart from large hole in seat. Right foot. Short, broad seat, slight narrowing for waist, wide forepart, ending in centrally aligned rounded toe – Type 1 or 2. Edge–flesh stitching channel, stitch length 5–6mm. Exceedingly worn and partially delaminated, with holes in big toe area and in rear of forepart; also very large hole in seat, where stitching channel is torn. Traces of tunnel-stitch holes indicate that both seat and forepart have been repaired, forepart probably twice. Length *c* 265mm (distorted by wear in seat); width of seat *c* 72mm; width of waist 63mm; width of forepart *c* 82mm. Thickness not measured because of delamination. Rand survives, in situ, as three separate sections, from middle of inner edge of seat to outer waist. Triangular in cross-section. Two fragments of vamp survive; originally one piece. Small portion of vamp is still attached to rand and sole. Lasting margin with grain–flesh stitching channel, stitch length 5–6mm. Other edges torn. Larger fragment matches torn edges of smaller one. Lasting margin as above. Also vertical edge–flesh stitching channel on vamp wing, stitch length 3mm. Tunnel-stitch holes around a crack which runs inwards from vamp wing indicate that upper has been patched. Vamp throat cut but apparently not stitched. Worn and partially delaminated. Grain surface is very worn. Cattlehide. Thread survives in sole/rand/upper seam, and in lasting margin of larger fragment of vamp, but not as well as in nos 2 and 6. Length of vamp *c* 160mm; surviving height of vamp wing 60mm; thickness 2–3mm. Shoe is incomplete, as the quarters are missing. The curved nature of the vamp throat, with no apparent stitching, suggests that this might have been a low shoe. See also no. 25, fragment of quarters or leg from same context. Does not join vamp but possibly part of same shoe.

► [4] **Find no. 31: Sole (Type 2 ?), rand, part of vamp, part of quarters, side-piece, leg flap (Type Bi?) and thread (Illus 12, nos 4a–b)**

Sole, probably left foot, judging by hole in big toe

area; complete except for holes. Short, broad seat; slight narrowing for waist on inside of sole; long straight forepart, ending in central toe. Sole is now very distorted; probably Type 2. Edge–flesh stitching channel, stitch length 6mm. Exceedingly worn, with holes in big toe area, outer rear of forepart and in seat. Partially delaminated. Tunnel-stitch holes indicate that both forepart and seat have been repaired with clump soles. Forepart has been repaired more than once, possibly originally with two separate clump soles, then with one large one. Length *c* 245mm; width of seat 73mm; width of waist 65mm; width of forepart *c* 87mm; thickness not measured because of delamination. Rand survives around forepart, as three separate fragments, from outer waist to middle of inner forepart. No sign of rand where fragment of quarters is still attached to sole. Triangular cross-section. Two fragments of upper are still attached to sole – vamp and quarters. Vamp is exceedingly worn, and is detached from sole at front. Surviving fragment is only *c* 25–30mm wide. Rest appears to have been cut away, possibly for reuse. Quarters is also exceedingly worn, and is partially detached from lasting margin. Vertical edge–flesh stitching channel, stitch length 4mm, on inside of quarters, for attachment to vamp wing. All other edges of quarters have been torn, not cut. Both vamp and quarters have lasting margin with grain–flesh stitching channel, stitch length 6mm. Cattlehide.

Also two separate fragments of upper – side-piece and leg flap. Side-piece is small, approximately trapezoidal, with lasting margin, as above, with thread; edge–flesh stitching channels on other three sides, stitch length 3–4mm. Small oval thong hole, 4 × 2mm, *c* 4mm from front edge and *c* 16mm from top edge. Leather bears a distinct mark from a horizontal thong. Rear edge–flesh stitching channel matches that on quarters, while top one fits corresponding channel on leg flap. Worn, with crack. Height 100mm; width 23mm at base, 41mm at top; thickness 3mm. Cattlehide.

Leg flap is much larger, also approximately trapezoidal, with two edge–flesh stitching channels, as above, and with two oversewn edges. Worn, with large tear. Fits above side-piece, and presumably above vamp throat.

This is probably a wraparound upper of one-piece design, with horizontal thongs – Type Bi? Height

142mm; width 85–122mm; thickness 3mm. Cattlehide.

► [5] **Find no. 55: Sole fragment (Type 1) with rand portion of upper (Type A or B) and thread (Illus 13, no. 5)**

Fragment of sole, with part of seat, waist and forepart. Probably short seat, slight narrowing for waist, straight-sided forepart ending in rounded toe – Type 1. Torn lengthways. Edge–flesh stitching channel, stitch length 6mm. Very worn and delaminated. Tunnel-stitch holes indicate that both seat and forepart have been repaired with clump soles. Surviving length *c* 270mm; surviving width 80mm. Thickness not measured because of delamination. Rand survives, sandwiched between sole and lasting margin of upper. Triangular cross-section. Lasting margin of vamp still attached. Small portion of quarters or side-piece, probably the latter, survives, also attached to sole/rand. Both vamp and quarters have lasting margin with grain–flesh stitching channel, stitch length 6mm. Side-piece also has faint trace of side-seam. Vamp torn above lasting margin. Rest of side-piece cut away, possibly for reuse. Surviving height of side-piece *c* 70mm. Probably wraparound upper of one-piece design, Type A or B. Follicle pattern worn. Thread survives. Also, separate small fragment comprising sole and rand with thread. Maximum dimensions 55 × 15mm. Also small fragment of sole, 55 × 28mm. See also peculiarly-shaped clump sole (Cat no. 27) and offcut (Cat no. 80).

► [6] **Find no. 110.5.4: Sole fragment (Type 1?) with rand, strip of upper and with thread (Illus 13, no. 6)**

Fragment of sole, possibly comprising portion of waist and forepart. Probably broad and straight with little or no indentation at waist – Type 1? Edge–flesh stitching channel, stitch length 5–6mm. Surviving length *c* 210mm; width *c* 60mm; thickness 3mm. Fragment of rand, sandwiched between sole and upper, only around forepart, not in waist. Triangular cross-section. Strip of upper, still attached to sole and sole/rand by thread which survives in situ. Upper lasting margin with edge–flesh stitching channel, stitch length 5–6mm. Upper also has 10mm long stretch of side seam, with edge–flesh stitching channel, stitch length 4mm. Sole follicle

pattern exceedingly worn. Upper also worn but possibly cattlehide.

► [7] **Find no. 84: Seat of sole (Type 1?) with rand and with quarters and vamp wing (Type A or B) and with thread (Illus 13, no. 7)**

Seat of sole, short and broad, cut across rear of waist – probably Type 1. Edge–flesh stitching channel, stitch length 5–6mm. Stitching channel also survives on each side for *c* 90mm. Very worn, with large hole. Surviving length of seat *c* 75mm, total surviving length *c* 190mm; width *c* 85mm; width at cut *c* 80mm; thickness 2–3mm. Three fragments of rand sandwiched between sole and upper, but not around rear of seat. Flat cross-section. Probably cattlehide. Strip of quarters and of vamp wing – two separate fragments – attached to sole/rand. Lasting margin appears to have edge–flesh stitching channel, stitch length 5–6mm. Butted edge–flesh seam, stitch length 3–4mm, links quarters to vamp wing. Surviving height of vamp/quarters *c* 30mm. Rest of upper has been cut away. Probably wraparound upper of one-piece design – Type A or B. Follicle pattern worn. Thread survives.

#### 8.1.3 Soles: complete

► [8] **Find no. 110.5.3: Sole (Type 1?) (Illus 13, no. 8)**

Left sole, complete except for holes. Short, broad seat, only very slight narrowing for waist, wide, straight forepart, centrally aligned, ending in broad rounded toe probably Type 1. Edge–flesh stitching channel, stitch length 4–5mm. Worn, with large holes in front of forepart and in seat. Length 263mm; width of seat 78mm; width of waist 78mm; width of forepart 105mm; thickness *c* 2mm.

#### 8.1.4 Soles: foreparts

► [9] **Find no. 271: Sole/fragment – forepart – (Type I?) (Illus 13, no. 9)**

Fragment of broad, oval forepart of sole, possibly right foot – probably Type 1. Edge–flesh stitching channel, stitch length 5mm. Torn irregularly across tread. Very worn, distorted and delaminated. Surviving length *c* 155mm; width *c* 105mm; thickness not measured because of delamination.

► [10] **Find no. 136: Sole fragment – forepart (Type 4/5/6?) (Illus 13, no. 10)**

Small fragment of forepart, with pointed toe – possibly Type 4 or 5 or 6. Edge–flesh stitching channel, stitch length 5mm. Other edges torn. Worn, cracked and delaminated. Faint suggestion of stitching for clump sole. Length 57mm; width *c* 47mm; thickness not measured because of delamination.

► [11] **Find no. 40: Sole fragment – forepart – (Type 6) with rand and with thread (Illus 13, no. 11)**

Wide forepart of left sole, ending in broad point – possibly Type 6. Edge–flesh stitching channel, stitch length 4 mm. Cut across rear. Traces of tunnel-stitch holes indicate that it has been repaired with a clump sole. Exceedingly worn, with holes in front and centre of forepart. Partially delaminated. Rand, with flat cross-section, still attached by thread to sole. Length *c* 139mm; width 97mm; thickness *c* 2mm.

8.1.5 Soles: seat

► [12] **Find no. 165: Sole fragment (not illustrated)**

Fragment of sole, probably seat, exceedingly worn and delaminated. Edge–flesh stitching channel, stitch length 5.5mm. Also trace of tunnel-stitching for clump sole. Maximum dimensions *c* 90 × 38mm.

8.1.6 Soles: fragments

► [13] **Find no. 106: Sole fragment with rand and thread (not illustrated)**

Small fragment of sole, with edge–flesh stitching channel, stitch length 5mm. Maximum dimensions *c* 30 × 50 × 3mm. One edge cut, rest torn. Fragment of rand attached to sole, approximately rectangular cross-section. Thread survives in situ.

► [14] **Find no. 158: Sole fragment with rand and thread (not illustrated)**

Tiny fragment of sole, with edge–flesh stitching channel, stitch length 4.5mm. Worn and delaminated. Maximum dimensions 35 × 7mm; thickness not measured because of delamination. Rand attached; flat cross-section. Thread survives in situ.

► [15] **Find no. 94: Sole fragment (not illustrated)**

Very small sole fragment. Edge–flesh stitching

channel, stitch length 5mm. Other edges torn. Delaminated. Surviving length *c* 50mm, surviving width 15mm; thickness not measured because of delamination.

► [16] **Find no. 123: Sole fragment with thread (not illustrated)**

Small, worn and delaminated fragment of sole, with edge–flesh stitching channel, stitch length not measurable. Other edges torn. Maximum dimensions *c* 40 × 30 × 2mm.

► [17] **Find no. 209: Sole fragment (not illustrated)**

Most probably fragment of sole, with traces of edge–flesh stitching channel. Exceedingly worn and delaminated. Maximum dimensions *c* 90 × 75mm.

8.1.7 Uppers: complete

► [18] **Find no. 110.5.4: Upper with side-piece and stiffener – PHS Type A (Illus 14, nos 18a–e)**

Almost complete upper of one-piece, wraparound design, missing only a leg flap. Large fragment comprises vamp with broad oval toe and with vamp wing and vamp throat, and quarters with leg flap. Separate side-piece fills gap between vamp wing and quarters, extending from lasting margin to top edge. Both fragments have an unusual lasting margin, with an edge–flesh stitching channel, stitch length 4mm. Edge–flesh stitching channels, stitch length 3mm, on vamp wing, vamp throat, vertical edge of quarters and on both vertical edges of side-piece. Top edges of quarters and side-piece oversewn. Tunnel-stitching on inside of quarters indicates position of low semi-circular stiffener, which survives separately. Stiffener has lasting margin with normal grain–flesh stitching channel, stitch length 4mm. No tunnel holes for thongs; no impressions from thongs – hence Type A. Worn, with split at vamp throat. Follicle pattern indistinct. Length (front of vamp to rear of quarters) 249mm; length of vamp 135mm; height of side-piece 97mm; thickness 2mm.

8.1.8 Uppers: vamp and quarters

► [19] **Find no. 43: Upper – vamp and quarters (Type A or B?) (Illus 14, no. 19)**

Fragment of upper, comprising vamp and quarters. Vamp has broad, oval toe. Lasting margin with grain–flesh stitching channel, stitch length 5–6mm.

Lasting margin is very worn, missing in parts and in other parts bears extra, repair stitch holes, especially on inner vamp and on rear of seat. Tunnel-stitching on inside of quarters for low, semi-circular heel stiffener. No surviving edge–flesh seams. Upper has been cut or torn *c* 30–70mm above lasting margin. Probably wraparound upper of one-piece design – Type A or B. Worn, with crack towards rear of vamp. Surviving length of vamp *c* 90mm; approximate length of upper (front of vamp to middle of stitching for stiffener) *c* 260mm; surviving height of quarters 36mm. Thickness 3mm. Cattlehide.

#### 8.1.9 Uppers: vamp

► **[20] Find no. 45: Upper – vamp with thread (Illus 14, no. 20)**

Front of vamp, with broad oval toe. Lasting margin with grain–flesh stitching channel, stitch length 5–6mm; thread survives in some stitch holes. Worn, with a large crack. Rest of vamp has been cut or torn away. Cattlehide. Surviving length *c* 148mm; surviving width *c* 90mm; thickness 2mm.

► **[21] Find no. 156: Vamp of upper, with thread (not illustrated)**

Fragment of vamp of upper, consisting of a strip *c* 5–10mm wide, with lasting margin with grain–flesh stitching channel, stitch length 5–6mm. Thread survives in some stitch holes. Extra stitch holes above lasting margin, especially at front of vamp, suggest repair, probably the attachment of a clump to the sole. Rest of upper has been cut away. Surviving length of vamp 175mm; thickness 2.5–3mm. Cattlehide.

#### 8.1.10 Uppers: quarters

► **[22] Find no. 29: Upper fragment – quarters? – (Type Bi?) (Illus 14, no. 22)**

Approximately rectangular fragment of upper, probably quarters of side-piece, with two edge–flesh stitching channels, stitch length 3mm, and with oversewn top edge. Fourth edge torn, possibly originally lasting margin. Above torn edge and adjacent to one edge–flesh stitching channel, tunnel-stitching for repair patch. Small, oval thong hole, 4 × 1mm, *c* 30mm above tunnel-stitching. Worn. If quarters, separate from vamp. Probably part of wraparound upper with horizontal thong,

possibly Type Bi. Cattlehide. Height 118mm; width 114mm; thickness 3mm.

#### 8.1.11 Uppers: quarters/leg

► **[23] Find no. 68: Upper fragment – leg (Type Bi?) (Illus 14, no. 23)**

Approximately trapezoidal fragment, probably part of leg of boot. Edge–flesh stitching channels on four sides; stitch length on the three longer sides 3–4mm; on shorter edge 5–6mm. Side edge and part of longest edge–flesh side oversewn. Single thong hole, 3 × 2mm, *c* 4mm above shortest edge–flesh side. Length 120mm; height 65mm; thickness 3–4mm – unusually thick for an upper. Probably cattlehide. Stitch length on shortest edge–flesh side raises possibility that this might be a lasting margin, as in no. 6; however, the thong hole makes this most unlikely. The short oversewn stretch is most unusual; it is conceivable that it is not really oversewn but a worn stretch of edge–flesh seam. Possibly part of upper of one-piece design with wraparound thong – type Bi.

► **[24] Find no. 391: Upper fragment – quarters and leg? (Type Bi?), with thread (not illustrated)**

Two upper fragments, one tiny and triangular, other long and narrow, stitched together with butted edge–flesh seam, stitch length 3–4mm. Tiny fragment also has oversewn edge, third edge cut. Larger fragment has a 70mm long edge–flesh stitching channel – vamp throat? Other edges cut. Thong through slit in corner between the two edge–flesh stitching channels, knotted on flesh side. Tunnel hole for thong parallel to end of longer edge–flesh stitching channel and 9mm from edge.

Clear marks on grain side indicate that thong had long unsecured stretches. This suggests that it was a horizontal wraparound thong and not a vertical one. Hence the oversewn edge on the smaller fragment must be a vertical one. This in turn implies that the longer edge–flesh stitching channel may have been the higher portion of a vamp throat seam. Possibly part of a boot of one-piece design with wraparound thong – Type Bi? Cattlehide. Length 185mm; height 26mm; thickness 2mm.

► **[25] Find no. 110.5.5: Upper fragment – quarters or leg? (Type Bi?) (not illustrated)**

Small, approximately triangular fragment of

upper, possibly part of quarters or leg. Edge–flesh stitching channel, stitch length 4mm on one side, second side oversewn, third torn. Also two small oval thong holes, 3 × 1mm. Possibly part of upper of one-piece design with wraparound thong – Type Bi. Might be part of same upper as 3, but grain surface is significantly less worn. Cattlehide. Maximum dimensions 80 × 60 × 2mm.

► **[26] Find no. 83: Upper fragment – leg? (not illustrated)**

Small fragment of upper with two oversewn edges meeting in a right-angle. Worn and partially delaminated. Cattlehide. Maximum dimensions 90 × 50 × 3mm.

► **[27] Find no. 157: Upper fragment – leg? (not illustrated)**

Small, approximately trapezoidal upper fragment, with two oversewn edges and one edge–flesh stitching channel, stitch length 4mm. Fourth edge cut. Part of leg? Cattlehide. Maximum dimensions 30 × 37 × 3mm.

8.1.12 Uppers: side pieces

► **[28] Find no. 52: Two upper fragments – side-pieces – one with vertical thong (Type Biii) (Illus 14, no. 28)**

Larger fragment consists of trapezoidal side-piece, with three edge–flesh stitching channels, stitch length 3mm; fourth edge oversaw. Stretch of vertical thong threaded through three tunnel holes and single slit. Thong appears to have crossed down to lower piece of upper. Top end of thong secured through tunnel hole on flesh side. Thread fibre held in place by thong. Bottom end of thong torn. Worn. Possibly goatskin (upper and thong). Height 115mm; width 60–65mm; thickness 2mm. Length of thong (on grain side) *c* 55mm; width 4–7mm; thickness *c* 1mm.

Smaller fragment possibly fits first near top edge. Edge–flesh stitching channel, matching that on larger fragment. Top edge oversewn. Rest of fragment torn. Very worn. Surviving height 47mm; surviving width 57mm; thickness *c* 2mm.

8.1.13 Uppers: fragments

► **[29] Find no. 54: Upper fragment with thong (Type Bi) (Illus 14, no. 29)**

Irregularly shaped upper fragment with two edge–flesh stitching channels, stitch length 3–4mm, one diagonal, *c* 85mm long, the other horizontal ?*c* 160mm long – unusual in an upper. Also, short length of thong threaded through tunnel hole and single slit adjacent to diagonal stitched edge. Thong ends in wide tab on flesh side. End of thong on grain side torn. Also trace of tunnel hole for thong adjacent to torn edge. Bottom edge of fragment cut. Probably part of upper of one-piece design with wraparound thong – Type Bi. Worn, with torn edge and cracks. Cattlehide. Surviving length 179mm; surviving height 77mm; thickness 2mm.

► **[30] Find no. 91: Upper fragment (Illus 14, no. 30)**

Triangular fragment, with one edge–flesh stitching channel, stitch length 3–4mm, and with one, possibly two oversewn edges. Worn. Cattlehide? Length 45mm; height 48mm; thickness 2mm.

► **[31] Find no. 98: Upper fragment (not illustrated)**

Upper fragment with edge–flesh stitching channel, stitch length 3.5–4mm. Other edges torn. Cattlehide. Maximum dimensions 90 × 35 × 3mm.

► **[32] Find no. 99: Upper fragment (not illustrated)**

Small upper fragment with edge–flesh stitching channel, stitch length 3.5mm. Faint traces of tunnel-stitching on flesh side, possibly for stiffener. Goatskin? Maximum dimensions *c* 62 × 45 × 2mm.

► **[33] Find no. 106: Upper fragment (not illustrated)**

Small upper fragment, with edge–flesh stitching channel, stitch length not measurable. Cattlehide. Maximum dimensions 94 × 17 × 2.5mm.

► **[34] Find no. 106: Upper fragment (not illustrated)**

Small upper fragment, with trace of oversewn edge. Possibly cut to allow reuse of remainder. Delaminated. Cattlehide. Maximum dimensions 50 × 55 × 1.5mm.

► [35] **Find no. 113: Upper fragment (not illustrated)**

Small upper fragment with lasting margin with grain–flesh stitching channel, stitch length 4–5mm. Thread survives. Cattlehide. Maximum dimensions 65 × 15 × 2mm.

► [36] **Find no. 132: Upper fragment (not illustrated)**

Completely delaminated upper fragment, with grain layer only surviving. Faint trace of edge–flesh stitching channel. Exceedingly worn. Maximum dimensions 108 × 35 mm.

► [37] **Find no. 138: Upper fragment (not illustrated)**

Completely delaminated upper fragment, with flesh layer only surviving. Trace of edge–flesh stitching channel, stitch length 3mm. Maximum dimensions 107 × 58mm.

► [38] **Find no. 157: Upper fragment (not illustrated)**

Small, approximately oblong upper fragment, with one edge–flesh stitching channel, stitch length 2.5–3mm, and with three grain–flesh stitching channels, grain bent slightly as if to form edge, stitch length 2.5–3 mm. Not lasting margin, substitute for edge–flesh stitching channel. Faint suggestion of tunnel-stitching on flesh side. Worn and partially delaminated. Probably cattlehide. Maximum dimensions 51 × 40 × 1.5mm.

► [39] **Find no. 104: Upper fragment? (not illustrated)**

Approximately seat-shaped fragment, with trace of edge–flesh stitching channel, stitch length 5mm. Exceedingly worn and delaminated. Possibly cut for reuse as clump. Probably cattlehide. Maximum dimensions 100 × 75mm.

► [40] **Find no. 183: Upper fragment (not illustrated)**

Upper fragment, with lasting margin with grain–flesh stitching channel, stitch length 6mm. Worn and completely delaminated, only grain layer survives. Cattlehide. Length 125mm; height 38mm.

► [41] **Find no. 196: Upper fragment (not illustrated)**

Small upper fragment with oversewn edge. One edge cut, others torn. Cattlehide? Maximum dimensions 44 × 21 × 2mm.

► [42] **Find no. 212: Upper fragment (not illustrated)**

Tiny upper fragment with oversewn edge. Two other edges cut, fourth torn. Goatskin? Maximum dimensions 25 × 15 × 1.5mm.

► [43] **Find no. 224: Upper fragment (not illustrated)**

Upper fragment, with lasting margin with grain–flesh stitching channel, stitch length 5mm. Cut with an irregular line *c* 20–47mm above lasting margin – to allow reuse of remainder? Cattlehide. Length *c* 210mm, height 47mm, thickness 1.5mm.

► [44] **Find no. 81: Upper fragment (not illustrated)**

Small fragment of upper, with one edge–flesh stitching channel, stitch length 3–4mm. Rest of fragment torn. Worn and partially delaminated. Cattlehide. Maximum dimensions 73 × 43 × 2mm.

8.1.14 Uppers: clump soles and upper repair patches

► [45] **Find no. 28: Clump sole or upper repair patch with thong (Illus 15, no. 45)**

Approximately triangular fragment, with tunnel-stitching along long, straight edge and with hem-stitching on the other edges. Short fragment of thong, with knot, threaded through slit near apex of triangle. Also small slit – for thong? – *c* 9mm from long, straight edge. Worn. Possibly made from reused fragment of upper. Length 120mm; width 73mm; thickness 2–3mm.

► [46] **Find no. 277: Clump sole or upper repair patch (Illus 15, no. 46)**

Approximately oval fragment, with one long straight edge formed by an edge–flesh stitching channel, stitch length 5mm; tunnel-stitching on curved edges. Either upper repair patch or part of clump sole. A clump sole from Perth High Street was made of two reused pieces of upper joined together with

a butted edge–flesh seam. Worn. Length 73mm; width 27mm; thickness 2–3mm.

► **[47] Find no. 55: Clump sole or upper repair patch? (not illustrated)**

Approximately rectangular fragment, with tunnel-stitching. Also oval thong hole, 6 × 2mm. Grain surface is distorted but not badly worn – probably cattlehide. This suggests that it was not used as a clump sole; possibly upper repair patch. Possibly reused fragment of upper. Length 100 × 32 × 4mm.

► **[48] Find no. 36: Clump sole – forepart (Illus 15, no. 48)**

Forepart-shaped clump with broad oval toe, with tunnel-stitching for attachment to sole. Worn. Length 118mm; width 95mm; thickness *c* 2mm.

► **[49] Find no. 106: Clump sole – forepart? (not illustrated)**

Fragment of clump sole, probably for forepart. Exceedingly fragmentary, worn and delaminated. Length *c* 125mm; surviving width 65mm; thickness not measured because of delamination.

► **[50] Find no. 52: Clump sole – forepart (not illustrated)**

Clump sole for forepart, with tunnel-stitching. Very worn and delaminated. Length 110mm; width 80mm.

► **[51] Find no. 222: Clump sole – seat? (not illustrated)**

Almost rectangular clump sole, probably for seat. Tunnel-stitching for attachment to sole. Worn. Length 75mm; width 61mm; thickness 2mm.

► **[52] Find no. 49: Clump sole (Illus 12, no. 52)**

Clump sole with tunnel-stitching for attachment to sole. Worn and delaminated. Length *c* 110 mm; width *c* 90mm.

► **[53] Find no. 51: Clump sole (Illus 12, no. 53)**

Very irregularly shaped clump sole, with tunnel-stitching for attachment to clump sole. Worn and delaminated. Length 94mm; width 58mm.

► **[54] Find no. 70: Clump sole (Illus 12, no. 54)**

Approximately oval clump sole, with one flattened

end and one pointed end. Tunnel-stitching for attachment to sole. Worn and delaminated. Length 91mm; width 75mm; thickness 2mm.

► **[55] Find no. 165: Clump sole (not illustrated)**

Two fragments of clump sole, with faint trace of tunnel-stitching. Very worn and delaminated. Maximum dimensions *c* 70 × 38mm.

8.1.15 Uppers: rand

► **[56] Find no. 113: Rand (not illustrated)**

Short strip of rand, with grain–flesh stitching channel, stitch length 5mm. Length 100mm; width 5–9mm; thickness *c* 2mm.

**8.2 Straps**

8.2.1 Topbands (not illustrated)

► **[57] Find no. 98: Topband**

Strip folded once and stitched where edges meet. Partially delaminated, slightly worn. Goatskin? Length *c* 115mm, width (folded) 10mm, thickness *c* 1mm.

► **[58] Find no. 109: Topband**

Strip folded once and stitched where edges meet. Very worn and partially delaminated, grain too worn for follicle analysis. Maximum dimensions *c* 143 × 7–12mm.

► **[59] Find no. 136: Topband**

Strip folded once and stitched where edges meet. Worn and incomplete. Cattlehide? Maximum dimensions 135 × 14 (unfolded) × 1mm.

► **[60] Find no. 233: Topband**

Strip folded once and stitched where edges meet. Worn. Length 185mm; width (folded) 6mm; thickness 1mm.

8.2.2 Thong

► **[61] Find no. 275: Thong? (Illus 15, no. 61)**

Strip, tapering slightly towards one end; wider end spilt lengthways; trace of grain–flesh holes. Thong or other fastening? Worn. Length *c* 200mm; width 5–7mm; thickness 2mm.



## 8.2.3 Strap of single thickness

## ► [62] Find no. 252: Strap of single thickness (Illus 15, no. 62)

Strap of single thickness, consisting of a strip of leather, with an irregular row of grain–flesh slits parallel to one long edge, and faint trace of similar slits parallel to the other long edge. Short edges torn. Also row of slits crossing strap near one end. At other end, two parallel rows of slits, *c* 4mm long; four of these slits have been elongated and are at least 15mm long. Two slits have merged into one. Worn and delaminated. Cattlehide? Length 110mm; width 23mm.

## 8.3 Waste material – offcuts and scraps (not illustrated)

## 8.3.1 Offcuts

## ► [63] Find no. 23: Offcut

Irregularly shaped, with two cut edges, rest torn. No stitching but two faint semicircular marks on flesh side. Grain worn. Goatskin? Maximum dimensions 105 × 60 × 1mm.

## ► [64] Find no. 31: Offcut

Long thin strip, with long edges cut, short edges torn. Cattlehide. Maximum dimensions *c* 190 × 10–15 × 2mm.

## ► [65] Find no. 52: Offcut

Long thin strip, tapering to a point at one end; other end also tapered but blunt. Grain slightly worn. Cattlehide. Maximum dimensions 204 × 1–112 × 2mm.

## ► [66] Find no. 71: Offcut

Approximately triangular, with one cut and two torn edges. Possibly reused although does not look worn. Goatskin? Maximum dimensions 47 × 40 × 1mm.

## ► [67] Find no. 90.1: Offcut

Rectangular, now folded. Delaminated. Cattlehide. Maximum dimensions (before folded) 50 × 38–42 × 0.5mm.

## ► [68] Find no. 98: Offcut

Irregularly shaped. Probably reused leather. Delaminated. Cattlehide. Maximum dimensions *c* 44 × 25mm.

## ► [69] Find no. 106: Offcut

Small, approximately rectangular, probably from reused leather. Worn and partially delaminated. Cattlehide. Maximum dimensions 30 × 12 × 3mm.

## ► [70] Find no. 116: Offcut

Small, rectangular, now folded. Cattlehide? Maximum dimensions 52 × 19 × 1.5mm.

## ► [71] Find no. 164: Offcut

Approximately rectangular, worn. Cattlehide? Maximum dimensions 100 × 20–30 × 3mm.

## ► [72] Find no. 164: Offcut

Irregularly shaped. One cut edge, rest torn; worn. Maximum dimensions 36 × 30 × 3 mm.

## ► [73] Find no. 168: Offcut

Irregularly shaped. Worn. Maximum dimensions 109 × 10 × 3mm.

## ► [74] Find no. 170: Offcut

Triangular; slightly worn. Cattlehide. Maximum dimensions 47 × 20 × 2mm.

## ► [75] Find no. 184: Offcut

Long thin strip; all edges cut. Cattlehide. Maximum dimensions 144 × 10–22 × 3mm.

## ► [76] Find no. 189: Offcut

Approximately forepart- or vamp-shaped. Faint trace of tunnel-stitching. One straight edge and one curved edge, both cut; other edge torn. Worn. Possibly cut from upper for reuse as patch. Cattlehide. Maximum dimensions 60 × 59 × 2mm.

## ► [77] Find no. 190: Offcut

Thin strip. All edges cut. Worn and partially delaminated. Maximum dimensions 83 × 3 × 1mm.

## ► [78] Find no. 223: Offcut

Approximately circular. Edges cut. Worn. Maximum dimensions 39 × 39 × 4mm.

## ► [79] Find no. 228.1: Offcut

Triangular, worn and delaminated. Cattlehide. Maximum dimensions 48 × 25mm.

## ► [80] Find no. 23.1: Offcut

Approximately trapezoidal. All edges cut. Cattlehide. Maximum dimensions 63 × 47 × 4mm.

► **[81] Find no. 23.1: Offcut**

Thin strip, tapering to one end. All edges cut. Cattlehide. Maximum dimensions 60 × 2–10 × 2mm.

► **[82] Find no. 233: Offcut**

Short strip. All edges cut. Cattlehide. Maximum dimensions 58 × 11–23 × 2mm.

► **[83] Find no. 94: Offcut**

Irregularly shaped. Cattlehide. Maximum dimensions 75 × 110 × 3mm.

► **[84] Find no. 55: Offcut**

Irregularly shaped. Worn. Maximum dimensions *c* 130 × 25 × 2mm.

8.3.2 Scraps

► **[85] Find no. 94: Scrap**

Possibly delaminated sole fragment. Maximum dimensions 44 × 43mm.

► **[86–88] Find no. 118: Three scraps**

Three scraps of irregular shape, probably all originally fragments of upper. All worn and partially delaminated. Cattlehide. Maximum dimensions 75 × 42 × 2mm; 65 × 32 × 2mm; 27 × 5 × 2mm.

► **[89] Find no. 148: Scrap**

Irregularly shaped. Very worn, especially grain surface. Maximum dimensions 103 × 60 × 1.5mm.

► **[90] Find no. 178: Scrap**

Irregularly shaped. Worn. Maximum dimensions 40 × 37 × 2mm.

► **[91–93] Find no. 220: Three scraps**

Three delaminated and worn scraps, all of irregular shape. Maximum dimensions 65 × 70mm; 40 × 40mm; 15 × 15mm.

► **[94] Find no. 227: Scrap**

Irregular shape. Exceedingly worn. Maximum dimensions *c* 90 × 105mm.

**8.4 Miscellaneous fragments**

► **[95] Find no. 39: Miscellaneous fragment (not illustrated)**

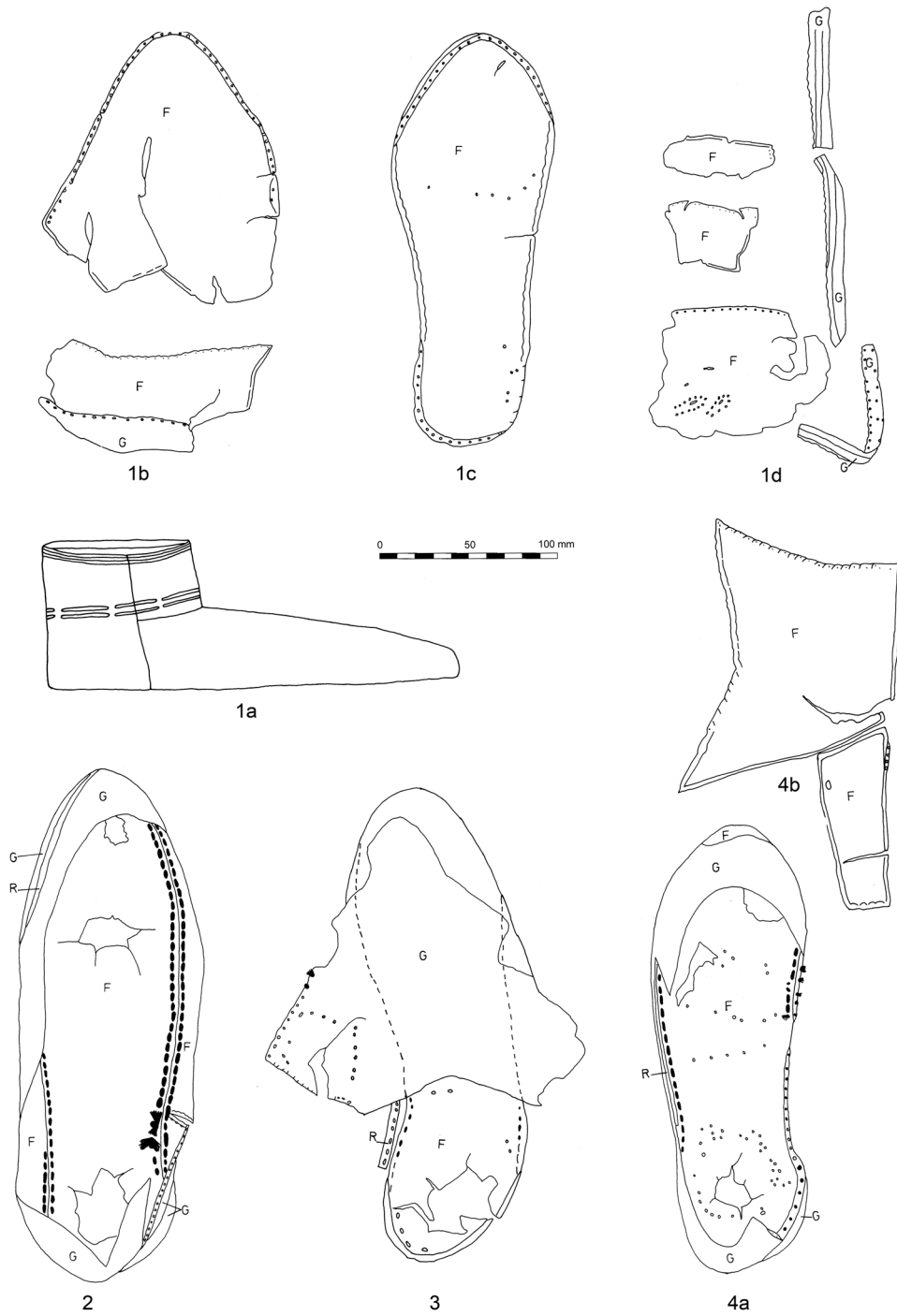
Irregularly shaped fragment, with traces of tunnel-stitching and of oversewn edge. Possibly part of heel stiffener. Worn. Maximum dimensions 60 × 30 × 2mm.

► **[96] Find no. 166: Miscellaneous fragment (Illus 12, no. 96)**

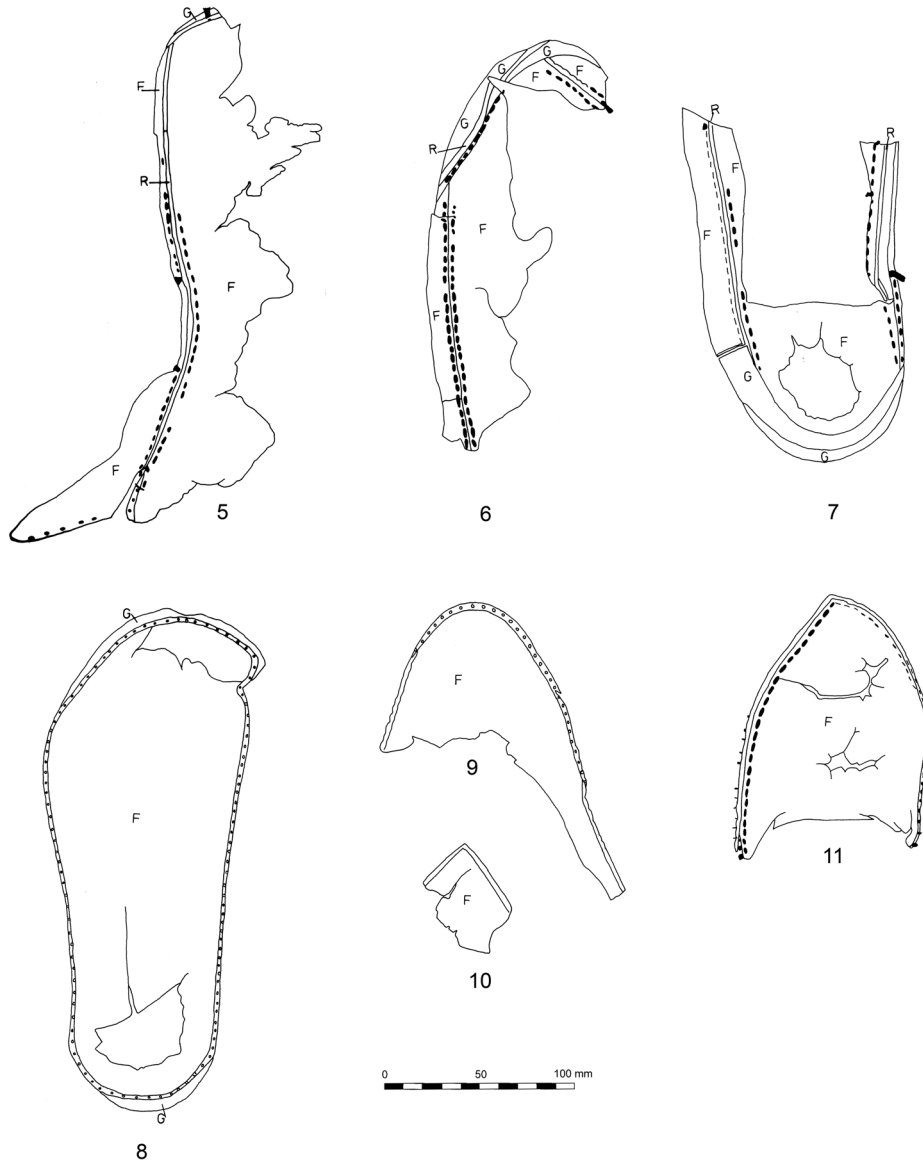
Fragment with two right angles and three straight sides, probably originally square or rectangular. Fourth edge now torn. Traces of tunnel-stitching along two edges. Worn and delaminated. Maximum dimensions 78 × 60 × 1.5mm.

► **[97] Find no. 183: Miscellaneous fragment (not illustrated)**

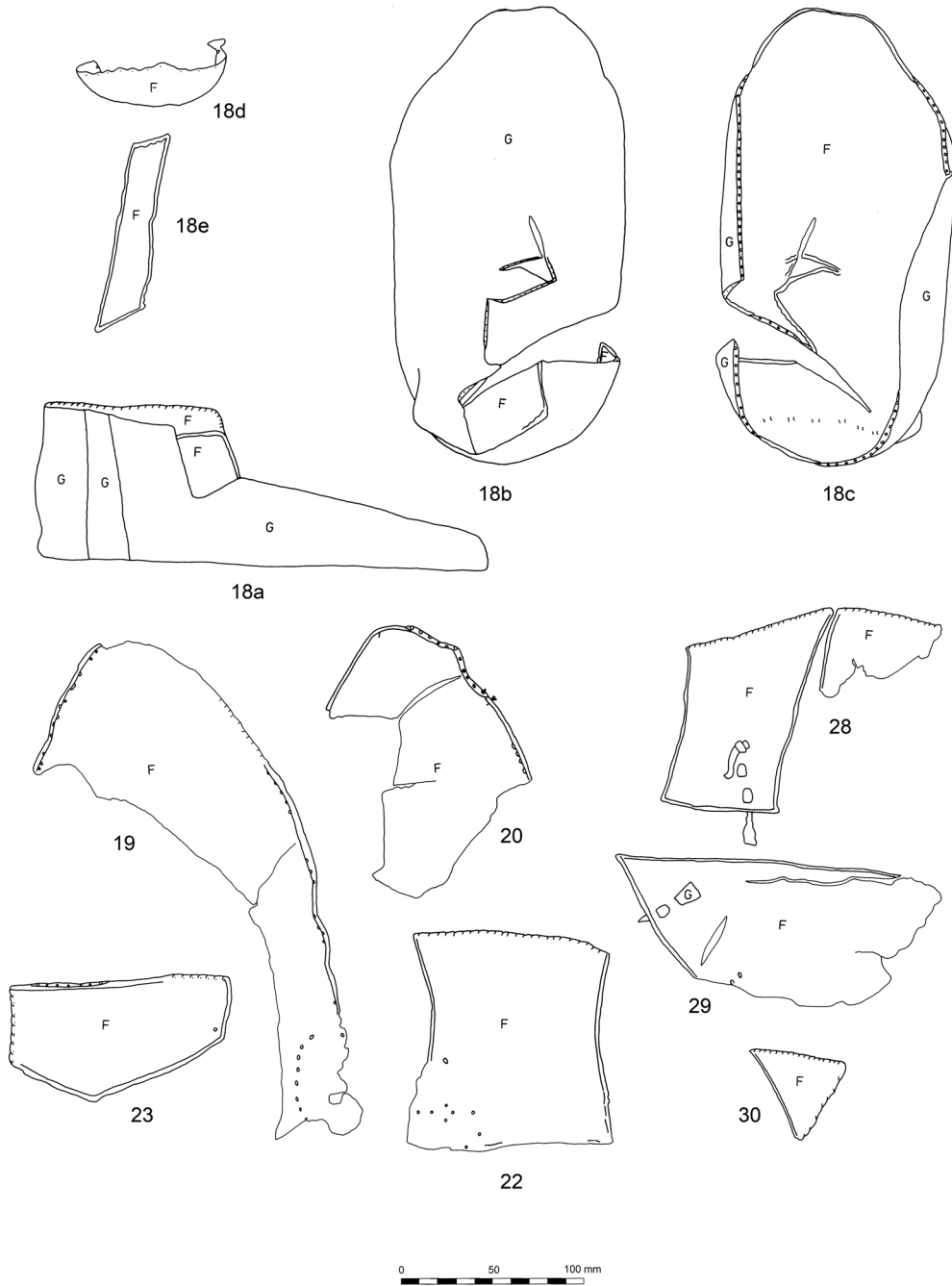
Irregularly shaped, with trace of an oversewn edge. All other edges cut. Very worn and delaminated. Maximum dimensions 75 × 72mm.



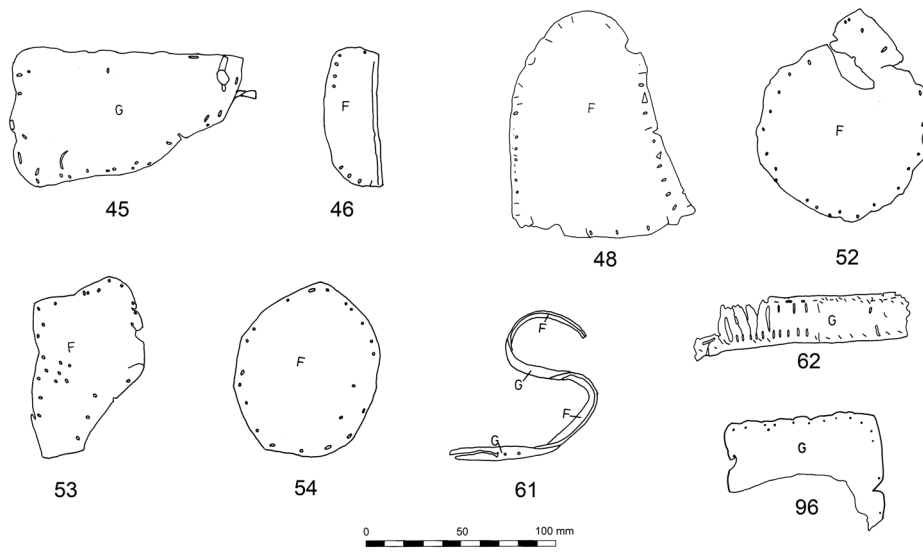
**Illus 12** Complete shoe (Cat no. 1), soles and upper fragments (Cat nos 2-4)



Illus 13 Sole (Cat no. 8), sole fragments (Cat nos 5-7, 9-11)



Illus 14 Uppers and fragments (Cat nos 18-20, 22-3, 28-30)



**Illus 15** Uppers: clump soles and upper repair patches (Cat nos 45–6), clump soles (Cat nos 48, 52–4), thong? (Cat no. 61), strap (Cat no. 62), miscellaneous fragment (Cat no. 96)