

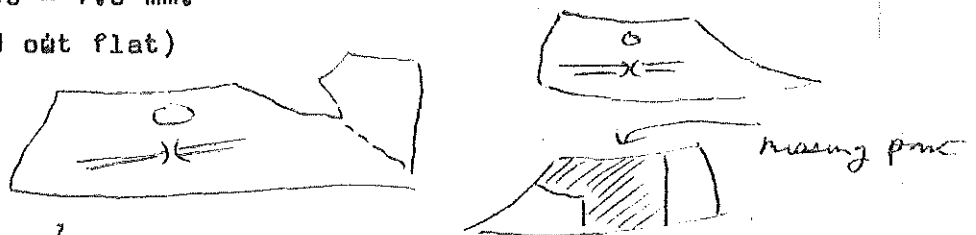
round the right side and back to form the outside (right) quarter and part of the inside quarter (left). The missing section would have been roughly rectangular in shape with a protruding top front edge to match the opposite side and butt seamed to the left vamp wing and front end of the inside quarter. The ^{vamp} ~~map~~ part has a central cut with no stitch holes but ^{above} ~~xxxxxxx~~ this cut on the right side where the vamp becomes the quarter, edge/flesh stitch holes remain, stitch length c.5.5mm., with scalloping, which also continues along the top edge of the quarter, possibly where a binding was added. The left side of the throat cut turns horizontally and then downwards where the missing section was added. Here the stitch holes are c. 5.0 mm apart and there is no scalloping; this is where the missing side section was ~~added~~ butt seamed to it. A similar seam was made to join the insert to the front end of the inside quarter, the edge/flesh holes here having a separation of c. 4.5mm.

The bottom edge (lasting margin) is intact, sharply turned inwards and carrying grain/flesh stitch holes, c. 5.0mm. apart where it was joined to the sole by the turnshoe construction. Fine pleats remain at the toe end.

The outside quarter still carries a tie-thong inserted through a pair of slots; a hole above them may originally have been for a higher thong.

Length of upper opened out: c.280mm.; height of quarter (including lasting margin): c.100mm.; length of tie-thong: c.250mm.; width of thong: 6.0 - 7.0 mm.

(Draw opened out flat)



(d) Upper of a low boot; left foot (?) turnshoe construction, very deteriorated. As for (a) and (c) there appears to one section now missing; otherwise the upper is in one piece which when cut and folded correctly gives the required shape. The missing section would have been roughly diamond shaped and presumably would complete the inside quarter of the shoe (see (a)). Some holes in the outside quarter may indicate where a tie-thong was inserted. The adjoining edges have the usual edge/flesh butted seams with holes c. 5.0mm. apart; the bottom edge

(lasting margin) is still turned in and has the holes for the upper/sole seam, 5.0 - 7.0 mm. apart. The section still retains its curve round the back of the heel seat.

The top edge of the quarter is unusual in that it is folded inwards by c. 6.0mm. and carries grain/flesh stitch holes (very small slots and stitch impressions), stitch length c. 8.0mm. This simple folded and stitch edge is not common in shoes of this period.

This upper, like (a) and (c), is a good example of an economy pattern. Judicious cutting of the leather and subsequent folding and stitching^{enabled} the top of the shoe to be made almost in one piece and without the waste which occurs when separate upper sections are cut. Previous examples have been noted at York (see

Overall length: c.290mm.

(Draw flat and folded)



(e) Turnshoe sole, right foot; worn into ~~a~~ holes at inside ~~toe~~ toe, tread and seat. Rather unusually there is more wear at the inside seat corner than at the outside; perhaps the wearer had fallen arches! There is the usual edge/flesh seam all round, stitch length 7.0 - 8.5mm. The extreme back is turned upwards and inwards and shows very little abrasive wear as does the area immediately in front. This suggests that the back of the sole was pulled upwards by the upper and did not press on the ground. There is also some indication of a similar effect at the toe-end. This might have been a deliberate feature as in a modern "Sahara" sandal or just the effect of a very flexible sole on a shoe too big for the wearer.

The shape, a fairly rounded toe and very wide waist and seat, suggests the 11th century.

Length (toe to folded back edge): c.250mm.; width at forepart: 100mm., width at waist: 80mm., width at seat: c.83mm. Ignoring shrinkage its size corresponds to about size 6, adults, in modern sizes

(Draw flesh up)

(f) Seat and waist of a turnshoe sole, possibly left foot;

(Draw with (e)) very deteriorated. Similar features to (e) and may be its fellow

(Durham Castle - Leather - contd.)

(750214
- ctd.)

Also a quantity of cutting scrap and fragments of shoes. Some of the scrap has the characteristic triangular shape with one or more of the sides concave; modern shoe factories produce exactly similar scrap - the "unavoidable waste" occurring between patterns placed as close as possible during cutting. There is also evidence of parts of old shoes being "cannibalised" to make new ones. Several upper sections still retain their turned-in lasting margins with grain/flesh stitch holes. There are also some thongs, presumably used for shoe ties (see (c) above). One of these, now delaminated into two parts, is c.275mm. long, 4-5mm. wide for most of its length but increasing to 10mm. at one end, presumably to prevent its pulling through the slots in the upper.

750214

(g) One roughly trapezoidal section, 122mm. x 67mm. x 93mm. x 52mm., has edge/flesh stitch holes all round but those on the longest edge are coarse and scalloped suggesting that this was the top edge and that the section was an insert from an otherwise one-piece upper (see (a), (c) and (d) above); It does not appear to belong to (a), (c) or (d) however.

750215

(a) Turnshoe sole and repair clump, right foot. The sole is worn into a hole at toe and seat and is very wide in proportion to the length with a rounded toe. Usual edge/flesh stitch holes all round, c. 5.0mm. separation, which is rather small for a shoe of this size. A foot impression remains with a ridge between the end and ball of the big toe and another ridge behind the ends of the smaller toes. The clump, intended to cover the holes in the worn sole, fits exactly over the forepart of the sole to which it has been attached by overstitching round the clump itself and tunnel stitching on the sole surface. The stitch length is c. 15mm. and there is marked scalloping where the thread has pulled into the edge.

(Draw with clump by the side)



Length (sole): c.290mm.; width at forepart: 128mm., waist:87mm.; seat (between edges of flesh side, now turned in): 85mm.; About size 8½ (adults) in modern sizes (ignoring shrinkage)

750215

(b) Turnshoe sole, right foot. Although slightly thinner at forepart and seat than elsewhere there are no actual wear holes. Usual edge/flesh seam, stitch length 5.0mm. (see (a)). Again the sole is broad in proportion to the length. A cut across the toe end may possibly indicate where it was intended to remove the worn tip and replace it, or it may be fortuitous. Length: 270mm; width at tread: 113mm.; at waist: 80mm.; at seat: 91mm. About size 7 (adults) in modern sizes.

(Draw flesh up)

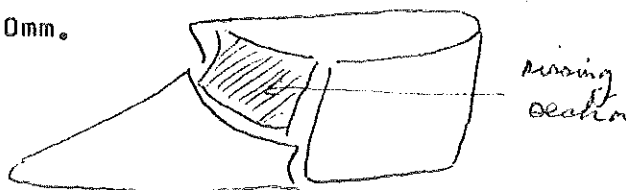
750215

(c) Upper of right-foot turnshoe. An "economy" pattern in one piece except for a small section (now missing) on the inside (left) quarter which was apparently inserted at the top above the shallow inside quarter area of the main section. It appears that this low inside quarter actually met the inside vamp wing and was butt seamed to it; both edges have fine edge/flesh stitch holes at 3.0mm. separation. The bottom edge (lasting margin) has deteriorated considerably and only remains identifiable at one place (inside joint) where there are upper/sole stitch holes 7.5mm. apart. At the back of the heel there is even more deterioration indicating that this is indeed the heel end.

The vamp throat rises to a peak on the right side forming the front corner of the right quarter; the left side is curved and carries edge/flesh holes where it was seamed to the front end of the inside quarter and inserted top section. Holes along the top edge are scalloped and have a stitch length of 5.0mm indicating that a binding was attached but towards and round the back these have now worn away.

Overall length when flattened: 390mm.

(Draw flattened and also folded)



750215

(d) Long rectangular piece of leather; could be part of a shoe or part of a garment. One long edge is scalloped slightly with edge/flesh stitch holes, c. 5.0mm. apart; the opposite edge is deteriorated but some stitch holes remain on a turned-in part at one place, stitch length c. 6.0mm.; this may be the lasting margin of an upper. One of the ends also has edge/flesh stitch holes, c. 5.5mm. apart and has a cut inwards c. 25mm. long and edge/flesh holes each side c. 6.0 mm. stitch length. The opposite end is a cut one with no stitch holes and c. 30mm. from it there is a crease or tuck, flesh inwards,

(750215(d)
contd.)

and stitch holes, grain to grain, 4.5mm. stitch length. Perhaps this was a decorative feature or it may have been put in to reduce the length of the section. There is also the remains of an edge/flesh seam, c.4.5mm. stitch length, at the lower end of this tuck and at right-angles to it.

This section may have been the back part of a shoe upper - two quarters continuing round the back of the foot.

Length: 320mm.; width; c.82mm.

(Draw both sides showing detail of tuck)

750215

(e) Trapezium shaped piece of leather, possibly an ankle boot leg. The top (if it is the top) edge is folded inwards, 5.0 - 7.0mm. and the edge is overstitched to the flesh side, the holes remaining with a stitch length of 8.0mm. The opposite (lower?) edge is rather deteriorated but has been turned in and has stitch holes 6.0 - 7.0mm. apart; this could be the lasting margin of an upper. With the section placed as indicated above, grain uppermost, the right-hand edge goes down at right angles for c.60mm. with an edge/flesh seam, 3.5mm. stitch length, and then slopes backwards in a now torn curve to the (?) lasting margin. The other end is vertical, 120mm. long with an edge/flesh seam its whole length, stitch length c. 5.0mm. There is a lenticular hole c. 5.0mm. x 2.0mm. near to this edge but this may have no significance. The whole section resembles a right side low boot leg (or quarter) but this is not certain; it might even be part of of a continuous section passing round the back of the foot, the long vertical edge being where it was joined to another front section. The general deterioration towards the assumed lower edge is typical of a worn boot or shoe.

Length at top: c.250mm.; at bottom: 155mm.; height (or width: 115mm.

Other fragments include part of the toe end of a vamp (f), slightly rounded with grain/flesh holes in a turned-in lasting margin, stitch length 7.0mm. Also other pieces of upper and possibly sole

750215

(g) A quantity of small fragments including cutting scrap and pieces of thonging; also some pieces of shoe upper with edge/flesh stitching holes. The cutting scrap is very angular and in some cases seems to have been produced by re-using old material

750215

(h) Folded binding from the top edge of a shoe upper, now in three pieces but with a total length of c.610mm. and c.7.0mm wide.

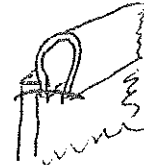
750215 (h)
contd.)

The strip is folded lengthwise and has been scalloped along the open edges by the over stitching, 5.0-6.0mm. stitch length.

There is some horizontal striation, probably for decoration (as at York). Although many excavated upper quarters have a scalloped and holed top edge, the actual binding itself does not occur as commonly, probably because of its fragile nature.

It would appear that this specimen was attached to its upper on one side of the top edge and not actually over the edge itself (see: "Textbook of Footwear Manufacture" ed. J. H. Thornton, 3rd edition, 1964, Fig. 73, p.172)

(Draw to show scallops and striations)



750216

(a) Turnshoe sole, left foot; very large with a pointed toe but almost parallel sides as distinct from the later (15th cent.) curved and narrow waisted soles. Worn away at the extreme toe, tread, outside joint and centre of seat. The seat wear is unusual in that the corners are more or less the same; normally there is more wear at the outside corner (then as now). The sole has the usual edge/flesh seam all round, 3.5-4.0mm. stitch length, which is very fine for a shoe of this size. The present length (wet) of this sole is c.305mm. which corresponds to about size 11 (adults) in modern sizes. It is very rare to find an early shoe as large as this. Width at tread: 97mm.; at waist: 73mm.; at seat: 75mm.

(Draw flesh up)

750216

(b) Turnshoe sole, right foot; rounded toes with a marked outward flare at outside joint; wide waist. The ~~the~~ end is worn away and there is a hole on the heel seat. Usual edge/flesh marginal seam, stitch length 6.0mm. The margin shows the impression of the upper lasting margin including creases at some places.

Present length: c.230mm.; maximum width at forepart: 110mm. Corresponds to c. size 3 (adults) in modern sizes.

(Draw flesh up)

750216

(c) Turnshoe sole, right foot; small with a rounded toe and more or less parallel sides. The ~~the~~ is worn thin but not completely away; the heel seat is worn away at the front right side but very little at the extreme back. Usual edge/flesh marginal stitch holes, stitch length 4.0mm.

Length: 175mm; width at tread: 73mm.; at seat: 60mm.

(Draw flesh up) Corresponds to c. size 8½ (children's) in modern sizes.

750216

(d) Turnshoe sole, left foot; very deteriorated, particularly at inside toe and tread and outside heel seat. Rounded toe shape and wide waist with more or less parallel sides. Usual edge/flesh marginal stitch holes, variable stitch length c.6.0-8.0mm (finer at toe end than in waist).

Length: c.250mm.; width at ~~head~~: 105mm.; at seat 83mm.

Corresponds to c. size 3½ (adults) in modern sizes.

(Draw flesh up)

750216

(e) Boot upper, one piece left foot. This specimen shows very clearly how a single piece of leather could by ingenious cutting and subsequent folding and stitching be converted into a boot upper (the diagram shows the shapes before and after folding). Assuming that the vamp/quarter seam is on the inside of the foot (the normal position) the present specimen consists of the vamp which has its left-side wing extended to become the outside and inside quarter of the boot (a low one) by extending round the back of the foot. The front of the inside quarter is then stitched to the right-side vamp wing having been cut to fit the edge here which goes upwards and then forwards to the vamp throat. The throat itself is opened up to a slightly concave edge c. 35mm. wide.

The top edge of the quarter originally carried an edge binding (see 750215 (h) above) and shows scallops on the inner side formed by edge/flesh stitch holes, 3.5 - 4.0 mm. stitch length. The vamp wing and quarter edges have edge/flesh seams, stitch length 3.5mm. but as this was not an overstitched seam there is no scalloping. There is no stitching round the throat and top fronts of the quarters.

The bottom edge (lasting margin) of the specimen is complete and carries an edge/flesh sole stitching seam (turnshoe construction) with holes c.4.0-4.5mm. stitch length (3.5mm. at the toe end). On the flesh side (inside at the back where the heel seat of the sole would fit there is the clear impression of a small crescent-shaped heel stiffener, c.110mm. long x 32mm. high. The top edge of the impression has stitch holes in pairs, 2.5mm. between the two in a pair and 8.0mm. between pairs. These were made when the top of the stiffener was "whipped" to secure it to the flesh side of the upper and is the earliest recorded example of this practice. Roman^o-British shoes often have stiffeners (see Hardknott report) but these were not stitched in along the top edge. Tudor shoes normally had their stiffeners "whipped" along the top edge (see "Excavated Shoes" seminar report)

(Durham Castle - leather - contd.)

(750216e
ctd.)

Two horizontal slots in the inside quarter near the lasting margin may be functional, e.g. for a tie thong.

Overall length of specimen: c.420mm.; maximum width (across vamp wings): c.180mm.; height of quarters (at back): 84mm.

This specimen, which is in excellent condition all over, is a "classic" example of the mediaeval one-piece upper; it does not even require an insert to complete the "wrap round" quarters. The principle seems to have died out by the 14th century.

(Draw folded and flat)

750216

(f) Boot upper, one piece, right foot. Similar to (e) but a small insert (now missing) was required to complete the upper. In this specimen the right vamp wing is continued round the back of the foot forming the quarters and meets the left vamp wing to which it is seamed, presumably on the inside of the foot making this a right foot upper. One hitherto unrecorded feature of early shoes occurs in this specimen; the front edge of the inside quarter is not the actual edge of the leather which in fact is folded back on itself for a considerable distance - 53mm. at the top and 78mm. at the bottom - and then stitched down to the flesh side by an overseam, stitch length 7.5mm. The actual folded edge itself has been stitched to the left vamp wing (grain/grain to edge/flesh), stitch length 4.0mm.



This folded back portion forms a lining from the inside quarter seam to the back of the shoe only but why it was done is a mystery; there is no corresponding piece on the outside quarter.

The missing insert, top left of the instep, would have been roughly rectangular in shape, butt seamed to the vamp and front of inside quarter, where there is a right angled bend. The seams here are edge/flesh with a 4.5mm. stitch length.

Two slots in the outside quarter are where an instep tie thong was inserted.

The lasting margin is almost intact, still turned in and carrying edge/flesh stitching holes (for attaching to the sole by the turnshoe construction) varying from c.4.5mm. to 6.5mm. stitch length. There are no signs of top banding.

Overall length (opened out completely): c.410mm.

(Draw flat and folded; also inside view to show the turned-in lining part)

Width end folded in: 330mm.
Width across vamp (max.): 185mm.
Height of folded edge of quarter: 132mm.

750216

(g) Shoe or low boot upper, right foot. Similar to (e) and (f), one piece except for a small insert now missing. Two very distinctive features of this upper are the pointed toe and two parallel incised lines, 3.0mm. apart, down the centre of the vamp from throat to toe point; this central decoration is seen in mediaeval manuscripts. Another important feature is the instep tie thongs, still in their pairs of slots in each quarter and knotted on the inside. The vamp/quarter butted seam has the usual edge/flesh stitch holes, stitch length 4.5mm. (these actually may be grain/flesh holes as in a modern closed seam; in thin leather with a sharply turned edge it is often difficult to tell one type of seam from the other.) The top edge of the quarter has the stitch holes at c. 5.0mm. stitch length where the top-band was attached. The bottom edge (lasting margin) is well defined and has holes at 5.0mm. stitch length. Overall length: c.350mm; width across vamp: 170mm; height of quarter: c.100mm.

(Draw folded and flat)

750216

(h) Two pieces of top-edge binding (or collar). Similar to 750215(h)(above); folded with scalloped adjoining edges and horizontal striations. Delaminated in places. The longer piece is c.370mm. x 10mm. (as folded)

750216

(i) A quantity of shoe fragments including parts of uppers, soles, thongs and also between-section cutting scrap. About 30 pieces in all

750216

(j) Turnshoe sole, right foot; toe end missing; broad at forepart and no very marked waist. Usual edge/flesh seam, c.6.0mm. stitch length. The back of the seat is turned up, presumably pulled by the upper. Present length: c.230mm.; width at forepart: 100mm.; at seat: 66mm.

(Draw to show turned up seat) ?

750216

(k) Turnshoe sole, right foot (?); very deteriorated, toe end missing, also part of tread; hole at seat. A hole at the outside waist may be where a thong was inserted to effect a repair (upper to sole). There is also a row of holes (four remain) across the front end of the waist, probably where a clump repair sole was added. Usual edge/flesh marginal seam, c.4.5mm. stitch length. Overall length: 180mm.

(Draw flesh up to show holes)

(Durham Castle - leather - contd.)

- 750216 (l) (?) Turnshoe sole, right foot. Although the shape of this fragmentary section is that of a sole, it is very thin and the margin is turned in with grain/flesh stitch holes, 5.0-5.5mm. stitch length. It is probably a lamina of the original sole, flesh side, the grain layer having now gone except for a fragment at the toe end. The seat end has disappeared.
Length: c.245mm.; width at waist: 85mm.
-
- 750216 (m) Part of inside quarter and back of a low boot upper.
Top edge: the inside part and front edge are in good condition but the back (where it passed round the back of the foot) is very deteriorated. Slightly scalloped with edge/flesh holes c. 6.0mm. stitch length where a top-band (collar) was attached (see above)
Front edge: very well defined with edge/flesh holes c. 3.0mm. stitch length where it was butt seamed to the vamp.
Bottom edge: the lasting margin, still turned inwards and carrying grain/flesh holes, c.5.5mm. stitch length where it was stitched to the sole. There is a hole near the front end; this may be accidental or may be connected with a repair (see (k) above); it is too low for an instep tie.
Length (bottom edge): 160mm.; height (with lasting margin flattened): 107mm.
(Draw flesh up to show seams)
-
- 750216 (n) Folded top-edge binding or collar; in three pieces:
(i) 360mm. x 11mm., (ii) 255mm. x 14mm., (iii) 190mm. x 8.0mm. (widths as folded). All have their adjoining edges scalloped by the original stitches with stitch lengths: (i) 5.5mm., (ii) 4.5mm., (iii) 5.0mm. None of the pieces have the horizontal striations noted in (h) above.
-
- 750216 (o) A quantity (about 14 pieces) of fragments including parts of uppers, soles and cutting scap.
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- 750216 (a) Roughly rectangular fragment of leather with one corner extended into a long point. Although there is some superficial resemblance to a shoe upper quarter the absence of an apparent edge seam and a very irregular curved edge suggest that it is part of the margin of the hide from which sections were cut. A hole in one corner may be where a nail or peg was inserted to stretch out the hide or skin during tanning and finishing processes.
(Draw from up)
Maximum diagonal length: 275mm.

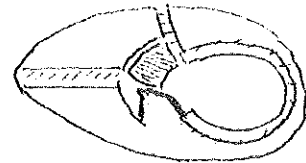
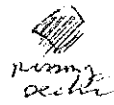
750217

(b) Upper of a one-piece shoe (or low boot), left foot. It is the same economy, wrap-round, pattern previously noted with a join on the inside where the end of the wrap-round quarter meets the vamp wing, the adjoining edges being joined by a butt seam, the edge/flesh stitch holes remaining, stitch length 3.5-4.0mm.

The top edge is scalloped with stitch holes, c. 6.0mm. apart, where top band was attached. The bottom edge (lasting margin) is deteriorated at some places but where it remains it is still turned in and has grain/flesh holes, c. 5.5mm. stitch length. Although the back and inside quarter are deteriorated the vamp is in better condition and shows:

- (i) a pair of parallel incisions from centre of throat to toe c.3.0mm. apart; between them there appears to be a row of small slanting cuts c. 1.0mm. long (see above);
- (ii) the throat itself is cut in a somewhat flattened L-shape with butted seam stitch holes along adjoining edges, 3.0mm. apart; this indicates the position of a now missing small rectangular insert required to complete the upper.

(Draw as shown)



The shoe toe would have been pointed.

Overall length - toe-end to end of quarter (when opened out): 345mm.;
width across vamp: 150mm.

750217

(c) Fragment of turnshoe sole forepart, possibly left foot; very ~~deteriorated~~ deteriorated and delaminated. The remaining edge/flesh seam has stitch holes at 6.5mm. separation. Length: 150⁵mm.; width: 82mm.

750217

(d) Waist portion of turnshoe sole, probably right foot since there is a slanting row of holes with a thong in situ across the fore-end, the left side end (flesh up) being nearer the toe than the right indicating that repair clump was added. Such clumps are shorter in length at the inside edge than at the outside and in this case the inward curve along the left edge would mark the waist of the shoe (as in a modern shoe). This in itself is not ~~is not~~ sufficient evidence since soles from this site have more or less parallel sides except where there is an outward flare at the little toe region. There are *the usual* edge/flesh marginal holes, somewhat variable in stith length but c.5.5mm.

Length: 159mm.; width (waist): 78mm.

Note: the use of thonging to attach a repair clump across the waist is unusual; later mediaeval ones usually have nails here

(Draw flesh up to show holes and thong)

750217 (e) Folded edge binding (or collar); similar to c. 315mm. long x 13mm. wide (as folded). Adjoining edges scalloped with stitch holes 3.5-4.0mm. separation (fine compared with previous ones described).

750217 (f) Various fragments (c.24) of shoe uppers, thongs, straps and cutting scrap (triangular), all indicating the site of a shoemaker's shop.

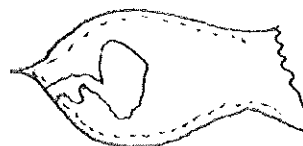
750218 (a) Various shoe parts - uppers and soles, strips, cutting scrap.
(a) Shoe (or low boot) upper of a left foot turnshoe of the usual "economy" pattern previously described which originally had an L-shaped insert on the inside (right side), now missing. The top edge has the scallops and holes of the seam which attached the top-band, stitch length 5.5mm. The end of the inside (right) vamp wing and the end of the inside quarter both have the edge/flesh holes for the butted seam which originally joined them to the missing insert, stitch length 4.5mm. The turned-in lasting margin remains at most places with holes at 4.5mm. separation. A hole in the outside quarter may be where a lacing thong was inserted.

Overall length when flattened - toe to top corner of quarter: 280mm.

(Draw flattened)

750218 (b) Turnshoe sole, right foot; deteriorated and delaminated; seat portion now missing. Although this specimen is in very poor condition it appears to show a very interesting shape - a short point at the toe, ^{and narrower} broad forepart, well-defined curved/waist, (presumably) broad seat. The marginal edge/flesh turnshoe seam holes remain in most places, stitch length c. 5.0mm., but where the grain layers (underneath when worn on the foot) have disappeared through delamination, the holes appear on both sides. Present length, toe - torn waist: c.210mm.; width across forepart: 100mm.; across waist: 70mm.

(Draw seam up to show toe and waist shape.



750218 Various shoe parts - soles, thongs, also a strap and some cutting scrap.
(a) Turnshoe sole; left foot; forepart and part of waist; rounded toe and the usual edge/flesh marginal seam, stitch length 3.0-3.5mm. Length: 180mm.; width 85mm.

750219

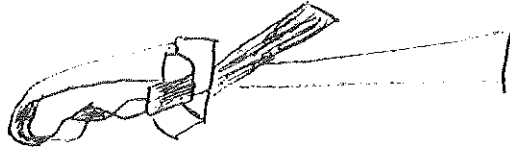
(b) Part of shoe upper quarters from which another section has been cut. The remaining part appears to be the lower outside area of the right foot quarter extending round the back of the foot to the inside where it was butt seamed to another section with stitches 3.5mm. long. The lasting margin remains turned in and well defined with grain/flesh stitch holes, 6.0-7.0mm. stitch length. The top edge is cut and at one place shows an over-cut. Length c.200mm.

(Draw)

750219

(c) Knotted thong. Tapered thong c. 270mm. long the thin end of which is turned back and knotted round the main section to form a running loop.

(Draw)



750219

(d) Piece of belt, collar or strap, one end cut and the other torn. 130mm. x 25mm. (was this cut as one inch originally?).

A row of grain/flesh stitch holes down each edge, c. 5.0mm. separation, are set in 3.5mm from the edge. These holes finish c. 22m. from the cut end and the strap is very slightly wider at this end

750234

A quantity of fragments including a piece of unused leather, shoe fragments, cutting scrap and some twenty pieces of thong (one knotted).

(a) Leather. This is diamond shaped with diagonals 315mm. x 245mm. x 1.5mm. thick. Although ~~no~~ adjoining edges appear ~~to~~ be cut the others may be the original edges of the skin suggesting that this piece is a corner section, possibly the right shank. There is a small hole near one of the cut edges.

(Note: this piece has a fairly well-defined grain pattern and it should be possible to identify the animal)

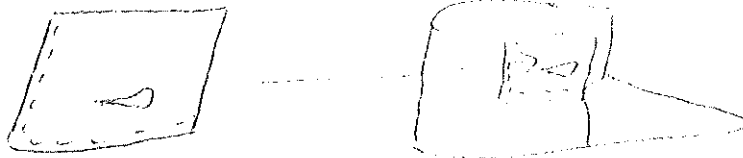
750234

(b) Section of boot upper, roughly rectangular, 85mm. x 75mm. Two adjoining edges have fine . . . grain/flesh stitch holes, 3.5mm. stitch length, where presumably they were joined to the remainder of the upper assuming that the section is an insert from an "economy" upper.

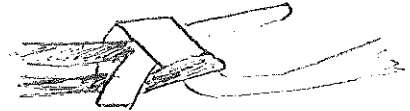
The other ^{edges} are plain cut with no stitching. There is a hole with slot, c. 15mm. long, parallel to one stitched edge and also another slot without a hole about 20mm. away from the first and 10mm.

long. Presumably the first is where a lace or even a button went through confirming the suggestion that this piece came from the the top front of a boot or shoe quarter, right side. The front of the hole (opposite to the slot) still shows wrinkling caused by the tension of the tie in use.

(draw)

750234 (c) Knotted thong; presumably from a shoe.

(draw)



750234 (d) One of the other strips is 420mm. long and has a greatest width of 7.0mm. One edge is roughly cut but the other is moulded and carries edge/flesh stitch holes, 5.0mm. stitch length, suggesting it was originally the lasting margin of an upper, the remainder of the upper having been cut away and used again. It is possible that this strip could have been used as a thong but its variation in width and its roughness would have made this difficult.

750234 (e) Leather "spike", 55mm. long and with a rectangular head, 7.0mm. x 3.0mm. Although this resembles a curved nail or spike, this resemblance may be quite fortuitous and its use and origin are unknown.

752041 Cutting scrap; many examples of the typical triangular pieces with concave sides forming the "unavoidable waste" between shoe sections during the cutting up of a skin. Also pieces of thonging.

(a) One section, now delaminated into two layers, is folded down one edge and the cut edges and the two halves match exactly suggesting that possibly the leather was folded and two upper sections cut out at the same time.

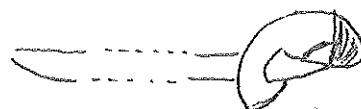
(Draw)



750242 Cutting scrap and thongs (c.36 pieces in all). Some of the scrap is from skins and some from re-used shoes; several triangular pieces (see 750241 above).

(a) One piece of thonging is slotted through itself at one end to prevent its pulling through the hole or slot in the quarter through which it would have been inserted. The other end is tapered. Length (as knotted): 340mm.

(Draw)



(Durham Castle & leather - contd.)

- 750243 A quantity of cutting scrap, strips, thongs (narrow and wide, short and long); also one piece of top-edge binding (a)
- (a) Top-edge binding (or collar), 210mm. long and c.7.0mm. wide as folded; it has the adjoining edges slightly scalloped with stitch holes, c. 3.5mm. stitch length, where it was joined to the quarters. One side, presumably the one which faced outwards) has ^{cur} parallel cuts lengthways c. 3,5mm. apart (variable), presumably for decoration (see above).
- (b) A leather strip, 170mm. long and pointed at each end, split or cut centrally between grain and flesh sides for about two-thirds of its length. Purpose unknown,
- (c) Small piece of bone.
- (d) Small piece of wood.

- 750244 A quantity of cutting scrap, much of it small triangular pieces as previously noted, but also strips and thongs of various sizes.
- (a) Possibly a lasting margin removed from an upper (see above) the remainder of the upper having been re-used for some other purpose. It is 220mm. long and up to c. 16mm. wide; one end is torn but the other has stitch holes c. 2,5mm. stitch length presumably where it (and the remainder of its upper section) was seamed to another section). One long edge has edge/flesh stitch holes, 5.5mm. stitch length, and is turned in so presumably this is where the upper was stitched to the sole (turnshoe construction). The opposite long edge is cut for removal of the remainder of the upper as already stated.

- 752045 A quantity of cutting scrap including the usual triangular intersectional pieces, strips, thongs and some large irregular pieces. Some of the pieces are folded but have matching cut and curved edges edges suggesting that the leather was folded before cutting (see 752044 above).
- (a) A roughly rectangular piece, c. 120mm. x 115mm. (maximum dimensions) x 4.0mm. thick has four cut edges with edge/flesh stitch holes along two opposite ones, stitch length c. 5.5mm. One of these edges has a slight curvature and is more worn than the the others so it is possible that this section is the waist portion of a very large turnshoe sole, possibly right foot.

(Draw seam up)

- (b) A fragment from the edge of a skin from which sections have been cut; shows the rough skin edge and two cut edges, one straight and one curved as from a heel seat.

(Draw)

750246 A quantity of cutting scrap of the usual shapes and pieces of thonging, some very narrow. None with special features.

750247 A quantity of cutting scrap. mostly small triangular sections; a few strips, thongs and possibly some skin edges.

750248 A quantity of cutting scrap, strips and thongs, and shoe pieces, (a) a thin oval section c. 100mm. x 9.5mm. with a scalloped edge and stitch holes, all round c. 12mm. stitch length but very variable. *(grain/flesh)* Appears to have been used as a repair patch but where is not very obvious.

750249 Shoe upper, right foot (?), turnshoe construction; very deteriorated but is of the wrap-round type already described. There is one section missing from the inside (left) and a top-band was originally stitched to the top edge of the quarters, a row of edge/flesh stitch holes remaining here, stitch length 3.0mm. There are also traces of the butted edge/flesh seam, stitch length c. 3.5mm., where the end of the outside quarter, having passed round the back of the foot, met the inside quarter (it is just possible that the two quarters actually met at the centre of the back as in a modern shoe but this would be very unusual for this period.

The lasting margin has almost entirely disappeared but a few very deteriorated pieces enclosed with the main specimen may be part of it.

Length when flattened: c 320mm.

(Draw flattened)

750250 Three small leather fragments. One appears to be the toe-end of a shoe upper with turned-in lasting margin and grain/flesh stitch holes, stitch length c. 5.0mm. The others could be sole laminae, also with stitch holes at c. 5.0mm. separation.

750251 A quantity of cutting scrap. mostly triangular, and thongs, some with broad ends.

750252 A small quantity of cutting scrap including the usual triangular pieces and thonging as well as shoe pieces.

750253 A small quantity of cutting scrap of the usual shapes and thongs.

750254 as 750253

750255

as 750253

750256 A five-sided piece of leather with edge/flesh stitch holes along two adjoining sides, 2.5-3.0mm. stitch length; also two parallel slots c. 7.0mm. long and about 13.0mm. apart. As there is also a small piece of tapered thong with this specimen it would appear to be part of a shoe quarter, possibly an insert already mentioned in connection with the otherwise single-piece wrap-round uppers. Length: 80mm., width: 60mm.

(Draw)

750257 A small quantity of fragments including cutting scrap and thonging.

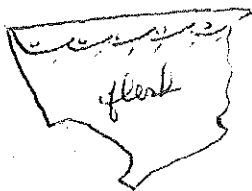
750258 A quantity of scrap leather including the usual triangular cutting scrap and some thonging. One large piece, possibly goat or sheep skin, has a protruding tongue with stitch holes (stitch length c.3.0mm.) round it and a central cut with a smaller one parallel to it; at least two edges of the piece are cut ones. The present shape suggests it may be part of a glove but if the main slot mentioned is intentional then this theory would be difficult to uphold.

Diagonal dimensions: 215mm. x 155mm.

(Draw)



750259 A quantity of scrap including triangular sections, pieces of thonging, some roundings from other sections which presumably were reused and also some large irregular pieces some of which have folded and (originally) stitched edges as (a).



(a) An irregular fragment with two parallel cut edges joining a folded edge at an angle of about 80° and about 65mm. apart along this edge. The fold is c.7.0mm. wide and this edge has been scalloped by over stitching, 8.0mm. stitch length, taken into the flesh side of the main section but not showing on the grain side.

(Draw)

750266 A roughly semicircular piece of leather, diameter 230mm. and perpendicular radius 128mm. It has fine edge/flesh stitch holes all round, stitch length c. 3.0mm. The grain pattern suggests it could be goat skin. It does not appear to be part of a shoe and its purpose is unknown.

(Draw flesh up to show seam)

750261

A quantity of leather scrap including the usual triangular pieces, some delaminated, strips and thongs; also some edges of the original skin and two large sections with stitch holes along one or more edges.

(a) Long roughly triangular section with two of the sides forming a continuous edge carrying edge/flesh stitch holes the whole length, stitch length c. 4.5mm.; the other edge is torn. This section does not appear to be part of a shoe.

Maximum length: 280mm.; maximum width: 90mm.

(Draw flesh up to show seam)

(b) A roughly rectangular piece of leather bifurcated at one end. The three straight edges appear to be cut but there is some doubt about the bifurcated one. The longest straight edge has edge/flesh stitch holes, stitch length c. 3.0mm. The original use of this section is unknown. Maximum length: 280mm.; width: 110mm.

(c) Edge of skin from which sections have been cut. It has holes where the skin was "toggled" (stretched out) during drying.

TO ADD TO REPORT
2085

19

70262

A quantity of cutting scrap with the usual inter-section triangular pieces, thongs and other fragments.

750263 A small quantity of cuttings, including some from the edges of skins, thongs and possibly a piece of edge binding with scalloped edge and stitch holes, 8.0mm. separation.

750264 Pieces of thonging. Two c. 210mm. long x 6.0mm. wide and broadening into a triangular section, c. 35mm. wide at one end are probably laminae of the same strip, possibly a tie thong.

750265 Two small fragments, no significant features.

750266 Shoe (or low boot) upper, one-piece but the toe-end is now missing. The pattern is symmetrical about the central axis and the quarters were joined at the centre of the back with an edge/flesh seam, stitch length 3.0mm. The vamp throat is circular and is now creased. The toe-end of the vamp is missing there now being a torn edge slanting across at about 30° to the central axis. The direction of this and the increased wear on the right side of the specimen suggests that it may have been from a right foot shoe. A pair of slots on each side of the vamp/quarter junction are where the instep tie was inserted. These slots are at an angle to each other ^{rather} ~~rather~~ than parallel as is more usual and the section between them still stands up above the rest showing where the tie passed through.

The lasting margin remains in better condition on the left side, again an indication of a right shoe, and carries edge/flesh stitch holes, stitch length 4.5mm. At the seat end of each quarter, however, there is a second row of stitch holes, grain/flesh, forming a crescent-shaped curve from the margin; it more or less coincides with a sharp fold in the leather here suggesting that the shoe was too small for the foot and that the heel pressed over the end of the sole. When a seat repair was added, the addition was stitched to the angle rather than the edge of the upper.

A crescent-shaped piece of leather also remaining fits over this area of the quarter and the various stitch holes coincide.

Note: it is possible that the back-seam was just off-centre to the left.

Length of upper: torn toe - back: 180mm.; height of back edge (flattened): c.100mm.

(Draw flat and folded)



alternative positions of back-seam.

Other fragments with this specimen may be part of the missing sole. Some thonging may be part of the tie from the shoe. There is also one teat from a skin.

750267 Various fragments including triangular cutting scrap, thongs, strips and sole laminae. The sole laminae ^{are} very thin and appear to belong to each other. The marginal edge/flesh seam (turnshoe construction) is visible in the smaller laminae (grain), stitch length 4.0mm. In the other lamina (flesh) the holes penetrate completely. The toe-end is now cut across and has stitch holes c. 4.0mm. apart where a toe repair was added, one piece remaining. The seats are missing and apparently were cut away for a repair replacement. The flesh lamina has a cut edge with holes, 4.5mm. apart. The repair seat remains, now delaminated into two sections with stitch holes round showing where it was attached (a) to the old sole and (b) to the upper.

The shape and wear positions indicate a right foot.

Length (maximum) of flesh laminae of sole and seat: 230mm.

750268 Leather fragment, roughly triangular, 150mm. x 50mm. One long edge is scalloped with edge/flesh stitch holes c. 3.5mm. stitch length suggesting it was the top edge of a shoe upper quarter. The short edge has edge/flesh holes, 3.0mm. stitch length, but no scalloping suggesting it was butted and blind seamed to another section. The other long edge is torn. Also a small scrap, triangular, which fits roughly on to the first and has similar blind seam.

750269 Leather scrap, cuttings and thongs. One piece, c. 220mm. x 160mm. (diagonals) has some cut edges and others apparently natural so it may be the edge part of a skin. There is also some of the usual triangular "between sections" cutting scrap.

750270 (a) Turnshoe vamp; the throat may be cut but the ends of the wings have deteriorated and there are only slight traces of the edge/flesh seam which joined them on to their quarters. The lasting margin is well defined and moulded and carries grain/flesh holes, ~~s~~itch length 6.0mm. (very regular). The shape suggests a right foot.
(b) Forepart of a turnshoe sole; long with a square pointed toe. The right side (flesh up) is worn more than the left suggesting it

is part of a right-foot sole. It carries edge/flesh holes, stitch length 6.0mm. (very regular) and probably belongs to (a)

(c) An irregular piece of leather with fine edge/flesh holes, c.3.5mm. apart, along two opposite edges. A concave edge resembles a vampthroat but the seams are too fine for a turnshoe attachment, so it may not be a vamp.

(d) A strip c. 225mm. x 10mm. x 4.0mm. Iron rust at one end may indicate that a buckle was attached here.

(e) A thong, c. 470mm. x 3.0mm. x 3.0mm.

(f) Two fragments, one 6mm. x 3mm. and one 9.0mm. x 4.0mm.

J.H.T. 28.7.76