

Dún Aonghasa clay moulds and crucibles catalogues [92E102]

Clay mould catalogue (F. O'Carroll). [Appendix 1.9 in Vol. 3]

Axehead

No. 1

Valve (a)

1813	244	Part of neck and body to tip of blade. Matrix for loop present. Area of neck abraded but same pattern as 1955 discernible. Fits with 1955. Contact face broad, horizontal to plane of matrix, slight irregularities.	L.62mm; W.39mm; T.11mm
1955	244	Fragment of mouth, neck and upper body. Impression of mouth and neck sharp, mouth has broad rim with decoration (broad band flanked by a pair of grooves and ridges) beneath. Contact face broad, slightly abraded, originally slightly uneven. The rim would have been protruding.	L.56mm; W.36mm; T.9-11mm
2147	244	Fragment of blade area including cutting edge. Contact face slopes down from matrix to edge of mould. Has an inner curved edge which marks the cutting-edge.	L.38mm; W.28mm; T.12mm

Valve (b)

594	232	Five pieces fitted together to form part of the body, blade and cutting edge. Surface has been abraded, especially at edges of individual pieces, but in places parts of original survive. Cutting edge formed by curving edge of contact face, which sloped down from matrix to edge of mould. Very thick skin of outer wrap remains.	L.41mm; W.39mm; T.10mm
1606	239	Small piece, slight dished surface with curved edge of contact face marking cutting edge. Not as reduced as 594 and consequently less grey in colour; nonetheless it is possible that both fitted together at one time. Full thickness of outer wrap present.	L.24.5mm; W.22mm; T.8.5mm
1646	239	Part of body, no diagnostic features. Similar in appearance to 1606, may be part of this valve.	L.26mm; W.18mm; T.10mm
1926	244	Part of mouth, neck body and loop. Has a flat seat for gate at top of mouth. Neck decoration well preserved, same as 1955 and 1813. Contact face has slight irregularities. Some of outer wrap present.	L.35mm; W.36mm; T.16-10mm

Axehead No.2

Valve (a)

717	56	Small fragment of mid-section of body, no features, surface slightly dished. Outer wrap present.	L.20mm; W.23mm; T.9mm
-----	----	--	-----------------------------

915	203	Part of neck, body and blade tip, mouth missing. Decoration at neck now consists of two grooves with two narrow ridges flanking them and a third separating them. The upper part of the neck may have been further decorated, possibly in a pattern similar to axehead No.1. The surviving contact face is broad, generally flat and roughly horizontal to the matrix; there are some irregularities and a slight raised lip at one edge indicates that this was probably an upper valve piece. No outer wrap present.	L.45mm; W.45mm (overall); W.22mm (matrix); T.13mm
1458	239	Part of blade area and cutting edge. Contact face intact, except for one corner. The cutting edge is formed by the raised curved edge of the contact face, which slopes down to the edge of the mould. A small abraded piece of the outer wrap survives. Joins with pieces 915 and 717.	L.31mm; W.35mm; T.7mm

Possible valve (b)

776	32	Small, very abraded blade fragment. The surviving part of the contact face slopes down from the matrix to the edge of the mould. There appears to have been a finer surface layer applied to the matrix but this is now very eroded. Part of outer wrap survives and lips over edge.	L.28mm; W.28mm; T.11mm
853	202	Part of neck and body, with portion of one contact face. A horizontal groove crosses the neck; this is now abraded and may originally have consisted of a number of grooves and ridges. If this was the case then this is likely to have been part of the opposite valve for 915; if the original decoration consisted of a single groove then this valve probably belongs to a third decorated axehead. The contact face is broad; and irregular indentation occurs but is too small to be a loop. The fragment has three layers, a thin outer wrap, an inner wad that is compact but coarser than usual, and a fine surface layer. The same layering is evidence on piece 776, but the surface of 853 is better preserved.	L.34mm; W.30mm; T.15mm
1470	239	Long narrow piece that includes part of the cutting edge and body. The contact face survives only at the cutting edge. This has a slight step and then slopes down to the edge of the mould. A thin outer wrap survives over most of the fragment, but it is possible that there was an additional layer outside this originally. The piece fits with 776 and like the latter and 853, has a three layer make-up. The presence of a step on the blade contact faces of this piece and piece 1458 makes it less likely that the two valves described here as axehead 2 are from the same mould. The other possibility is that this is the opposite valve for axehead No. 3, though they are both abraded and now not a good fit.	L.49mm; W.25mm; T.11mm

Axehead No. 3

Valve (a)

599 and 633	32	Fragment join up giving the almost complete valve of an axehead. The mouth is incomplete and one blade-tip is missing. The contact faces are horizontal to the axis of the mould and are now irregular. Surface abraded and very rough; the outer wrap is coarse and incomplete. Marks of a binding strip are visible on the upper portion of 663.	L.81mm; W.54mm; T.15mm
-------------	----	--	------------------------------

Possible valve (b)

670b	32	Fragment with slightly undulating surface. In form it resembles part of a mould for a spearhead blade but does not fit either with the blade shape or the fabric type of the identified spearhead moulds. Both the inner wad and the outer wrap are present.	L.25mm; W.22mm; T.13mm
864	208	Small fragment with possible remains of a contact face on one side. Outer wrap present.	L.20mm; W.17mm; T.12mm
867	208	Small featureless fragment with smooth flat surface. Outer wrap present.	L.18mm; W.12mm; T.11mm
884	208	Small fragment with smooth and slightly concave surface. Outer wrap present.	L.17mm; W.24mm; T.1mm
895	208	Featureless fragment with flat surface, no outer wrap.	L.20mm; W.21mm; T.10mm

Miscellaneous

1645	239	Four featureless fragments are registered to this number but only one has any surviving surface. Outer wrap present. The fabric is similar to that in axehead number 1 and valve (a) of axehead number 2. No grey reduced layer.	L.19mm; W.14mm; T.9mm
------	-----	--	-----------------------------

Spearhead Type 1

Valve (a)

110	26	One blade wing and most of midrib of plain spearhead with flat wings and rounded midrib. Narrow contact face, flat. Sectioned for fabric analysis (R. Unitt, Vol. 3, Appendix 1.6, section No. 3).	L.33mm; W.44mm; T.17mm
239	10	Part of one valve for a socket with the junction with the blade area visible at one end. One contact face surviving and it expands to accommodate the expansions for the blade wing. The concave surface of the socket matrix is well preserved but the angle between the socket and blade is eroded.	L.50mm; W.33mm; T.21mm

240a/b	43	Two pieces, part of the midrib and one blade wing, survive on 240a. The surface is markedly abraded at the edge of the wing and the raised contact face that should have been present does not survive. Three layers of clay are visible, but the final outer wrap of blade wing; appears to be missing. Joins to piece 244i and possibly to piece 1386a. The second fragment 240b is very small and undiagnostic.	L.10.5mm; W.33mm; T.17mm; W. of blade wing; 14mm; W. of midrib. 7mm
244i	10	Part of blade wing and midrib from close to the tip where both the blade and the midrib are contracting. Raised contact face along blade edge. Joins with preceding piece.	L.22mm; W.28mm; T.17mm
761	32	Part of the blade wing. No trace of the midrib remains. Three layers of clay present.	L.29mm; W.16.5mm; T.15mm
1384	43	Abraded part of one blade wing. Side of midrib present and three layers of clay visible.	L.33mm; W.26mm; T.12mm
1386a	43	Part of midrib and one blade wing from close to the point of the spearhead. A raised contact face survives along the edge of the wing. Three or possibly four layers of clay can be distinguished in cross-section.	L.32.5mm; W.33mm; T.17mm
1386b	43	Part of socket. The fragment is very weathered but part of a broad contact face is preserved on one edge.	L.23mm; W.24mm; T.13mm
1386c	43	Very abraded piece, possibly part of one blade wing and the side of the midrib. Only central layer of clay survives and there are no original surfaces evident.	L.22mm; W.24mm; T.13mm
1386d	43	Scrap, very light and with a porous texture. The fabric may have had a vegetable temper which has burnt out. Possibly not part of a mould but waste clay intended for use as grog.	
1386e	43	Small featureless scrap.	

Valve (b)

244b	10	Very weathered, possibly from the blade area, all of the inner fine layer removed.	L.21mm; W.25mm; T.16mm
244c	10	Both blade wings and tip of midrib present. Raised contact faces at both edges.	L.32mm; W.29mm; T.12mm
244f	10	Part of one blade wing with side of midrib. Very abraded, but the remains of a raised contact face occur along the blade edge.	L.34mm; W.29mm; T.12mm
244h	10	Part of blade wing and midrib. From near the base of the blade where the blade is expanding and the midrib is contracting. Raised contact face along the edge of the wing.	L.23mm; W.25mm; T.18mm
244j	10	Possible piece of a blade wing, severely abraded, traces of midrib and socket.	L.29mm; W.20mm; T.10mm

1380	51	Part of one blade wing and midrib. From close to the base of the blade as the blade wing is expanding and the midrib is contracting. Abraded remains of a contact face are preserved on the blade edge. Three layers of clay visible.	L.19mm; W.35mm; T.18mm
------	----	---	------------------------------

Spearhead 1; catalogue of pieces not assignable to individual valves

244a	10	Abraded part of socket mouth. Step to seat a gate present.	L.22mm; W.25mm; T.16mm
244d	10	Fragment of socket, one contact face surviving.	L.25mm; W.24mm; T.13mm
244e	10	Fragment of socket, one contact face surviving.	L.16mm; W.22mm; T.10mm
244g	10	Five pieces join to form part of the socket matrix. One contact face survives, this may not have been set horizontal to the axis of the socket.	L.59mm; W.42mm; T.15mm
244k	10	Socket fragment, contact face present.	L.19mm; W.19mm; T.16mm
352	43	Socket fragment with remains of what may be part of a contact face. The latter is set at an angle and may be the continuation of the line of the blade immediately above the junction of the blade and socket. It does not join with piece 965 below, but may have fitted a small way above it. The outer wrap does not survive.	L.39mm; W.31mm; T.11mm
761a	32	Part of a socket. Less than half of the width of the valve remains, one contact face, damaged. Three layers of clay visible.	L.54mm; W.37mm; T.16mm
761b	32	Small midrib fragment, probably from near the point. No trace of blade wing. Three layers of clay visible.	W.7mm (surviving)
761c	32	Scrap of outer wrap with well defined groove, 1mm wide, made by binding thong.	W.1mm (groove)
965	43	Socket fragment from junction of the socket and the blade wing. The latter is set into the broad flat contact face with its edge forming a short oblique line. The overall width of the fragment is expanding at this point to accommodate the blade. Three layers visible.	L.28mm; W.24.5mm; T.11.5mm
1627	36	Fragment with a very small part of a matrix remaining; this is curved across the long axis and thus may be part of a socket or midrib piece. Assigned to spearhead 1 on fabric type.	L.25mm; W.21mm; T.11mm
1805a	244	Very abraded but portion of the blade wing and midrib can be identified. There are no surviving edges; two layers of clay visible in section.	L.19mm; W.24mm; T.10mm
2308	232	Part of blade wing and midrib from lower section of blade. Very weathered; three layers of clay are visible.	L.14mm; W.24mm; T.11mm

Spearhead type 2

92E102:135 is a collection of twenty-four pieces and several tiny scraps of clay mould. Some belong to sword and pin moulds, but at least four are from the type 2 spearhead. Three more fragments with no surviving or clearly identifiable matrix could be assigned to this group on the basis of fabric type.

Spearhead type 2

135a	10	Three pieces that join together to form part of the midrib and one blade wing. The surface is very abraded and there are only faint traces of the rib and groove in the angle between midrib and blade. This piece is from the junction between the socket and the beginning of the blade and the line of the base of the blade is visible. Parts of an outer layer survive.	L.51mm; W.30mm; T.11mm
135b	10	Two pieces that join together to make up part of the midrib and both blade wings. No outer edges survive. Two layers visible.	L.64mm; W.37mm; T.12mm
135c	10	Fragment with a curving groove on one face. However, the surfaces are so abraded it is not clear whether this face was part of the matrix or the lower layers of the mould. The groove has the appearance of a loop, such as the fine string loops on later basal-looped spearheads, but this feature is not consistent with the other details of the spearhead. Two layers visible.	L.30mm; W.14mm; T.9mm
162a	10	Very abraded piece with none of the original surface remaining. However, the impression of a midrib, one blade wing and part of the other can be identified. The piece comes from close to the point of the spearhead.	L.16mm; W.27mm; T.10mm
162b	10	Similar to piece 162a, possibly the point of the spearhead. Very abraded. Two layers of clay visible.	L.16mm; W.27mm; T.10mm
162c	10	Featureless scrap.	
162d	10	Part of midrib and one blade wing; the wing is expanding and the midrib is contracting indicating that the piece comes from near the base of the blade. A groove with a faint rib on either side runs between the midrib and the blade wing. The blade is curved with a line defining the bevelled edge. The piece appears to join with 794a but the broken edges of each are very abraded.	L.34mm; W.31mm; T.14mm
164	10	Possible socket fragment. Fabric similar to spearhead 2.	L.17mm; W.13mm; T.10.5mm
211	41	Part of the blade wing. Two layers are visible. The surface is slightly concave but is rough and the fine inner layer is clearly missing.	L.10mm; W.14mm; T.7.5mm

212	41	Part of the midrib, no blade wings survive. The surface is very abraded. Three layers of clay visible.	L.33mm; W.21mm; T.12mm
229a	10	Two fragments that join to form what appears to be part of a socket with a step at the junction of the matrix and the contact face. The remainder of the contact face has broken away; the piece is from the area of the socket that had a raised band along the side. Two layers of clay visible.	L.37mm; W.20mm; T.14mm
229b	10	Possibly from the very narrow lower part of the blade. The surface is heavily and unevenly abraded. As in piece 229a, two layers of clay are evidence.	L.22mm; W.20mm; T.13mm
233	9	Part of midrib and one blade wing; the wing is expanding and the midrib is contracting indicating that the piece comes from near the base of the blade. A groove with a faint rib on either side runs between the midrib and the blade wing. The blade is curved.	L.29.5mm; W.21mm; T.14mm
348	10	Part of the socket. Inner fine layer missing, one broad flat contact face survives. Three layers of clay evident.	L.16mm; W.26mm; T.14mm
420	43	Part of a shallow midrib and one blade wing. The surface is abraded but the remains of a groove are visible in the junction between the blade and midrib. Two layers present.	L.19mm; W.19mm; T.9mm
421	43	Part of the side of the midrib and one blade wing. The surface is abraded but lines delineating the edge of the blade, and the groove located at the junction between the blade and the midrib, are present. Three layers of clay visible.	L.19mm; W.19mm; T.13.5mm
422a	41	Consists of three pieces joined together to form the greater part of the midrib and a small part of one blade wing.	L.42mm; W.31mm; T.10mm
422b	41	Part of one blade wing and midrib. The blade wing is narrow and the midrib is shallow; the piece may therefore come from closer to the point than 422a. Two layers visible.	L.38mm; W.21.5mm; T.15mm
422c	41	A large piece of outer wrap that sits onto the back giving three layers. The surface of the piece is abraded but traces of the groove/rib along the midrib are visible. Both midrib and blade are narrowing along the length indicating that the fragment is from the upper part of the blade.	L.41.4mm; W.33mm; T.22.5mm (total)
427	43	Part of socket with one broad, flat contact face preserved. Probable diameter 26mm. Four layers visible but the innermost is very abraded.	L.23.5mm; W.22mm; T.11mm
554a	43	Part of one blade wing and midrib. Very abraded, fine inner layer missing. Two layers remain.	L.20mm; W.22mm; T.12mm
630	S/H	Part of socket of midrib probably of type 2 spearhead. Inner layer grey, outer beige.	L.28mm; W.24mm; T.9mm
646	41	Possible socket fragment from type 2 spearhead socket; very abraded. The piece is either from a socket with a broad contact face or from the midrib/blade wing area.	L.22mm; W.20mm; T.13mm

750	56	Point of spearhead with midrib, both blade wings and one contact face. Surface abraded so not all the detail survives. Midrib pronounced, blade wings set at an angle and contact face probably horizontal to axis of matrix. Three layers visible.	L.29mm; W.33mm; T.11.5mm
794	33	Very abraded part of midrib and one blade wing. Faint traces of the rib/groove arrangement along the midrib. The inner skin of the outer wrap has two sharply cut parallel grooves across it; a third parallel groove is evident near the break and two additional grooves run diagonally across the long axis of the piece.	L.34mm; W.24mm; T.17mm
1033	217	Abraded, possibly burnt part of the blade wing with a groove dividing it from the midrib. The matrix shows a flat plane with one broken edge; there is a narrow, shallow step on the other side below this level. Two layers visible.	L.22mm; W.16.5mm; T.9mm
1057	41	Part of one blade wing with a groove or step at the junction with the midrib - the latter is now missing. A raised line that demarcates either the bevelled edge or the contact face divides the blade area. The blade is narrowing and the groove or step is contracting in width; the piece is therefore from the base of the blade where the rib running along the midrib would still be quite pronounced.	L.18mm; W.27mm; T.13.5mm
1141	219	Very abraded piece; traces of a raised line may be the bevelled edge of the blade or the beginning of the midrib. Two layers remain; the fragment is assigned to spearhead 1 on the basis of fabric type and the presence of a grey-coloured inner layer.	L.16.5mm; W.18mm; T.9.5mm
1290	203	Abraded part of the midrib and blade wing close to the tip of the blade. A groove, 1mm wide, divides the two. The bevelled edge of the blade wing may be discernible but the surface is too abraded to be certain. Three layers visible. This fragment possibly joined to piece 1421 (featureless outer wrap fragment) at one time but the breaks are too weathered now to refit.	L.18.5mm; W.17mm; T.9mm
1444	43	Abraded part of one blade wing and possibly the beginning of the side of the midrib. Some of the fine inner layer remains and there is a contact face at the edge of the blade. Three layers are visible. May join with the following piece 1471.	L.14mm; W.21mm; T.13mm
1471	239	Part of the midrib and one blade wing from close to the point. A groove 1mm wide separates the two. No bevel edge is visible on the blade surface, but the latter is abraded. Two layers visible.	L.24mm; W.22mm; T.9mm
1880	244	Part of a socket valve with a step for a pouring gate. The socket wall slopes outwards gently from the base of the step, narrowing the diameter of the mould. The base of the fragment is complete as if this sat on top of the actual opening the upper part is broken - presumably the pouring cup was broken off. Assigned to spearhead 2 on the basis of fabric type.	L.19mm; W.30mm; T.11mm

Miscellaneous spearhead fragments

715	95	Two flat horizontal planes separated by a step. May relate to piece 1779. Two layers visible.	L.18mm; W.18mm; T.12mm
-----	----	---	------------------------------

1779a	244	Part of the midrib and one blade but with only a small portion of the junction of the two surviving. There is no clear trace of a groove or rib, possibly because the feature has been weathered away. Alternatively the piece may belong to a third spearhead. The remains of the blade wing indicate that it was flat, perhaps slightly convex, but this does not match the Spearhead 1 blade. Three layers visible.	L.55mm; W.37mm; T.12mm
1779b	244	Part of one blade wing. Three layers visible.	L.25mm; W.21mm; T.17mm
1779c	244	Piece with no surviving matrix but shape and fabric indicate that it is part of a blade wing of this group.	L.25mm; W.23mm; T.17mm
2113	244	Part of blade wing, flat with a defining line at the edge of the bevel. No remains of the midrib, but the overall thickness of the mould is increasing at the point where it would have been. Appears similar to piece 1779a.	L.22mm; W.27mm; T.13.5mm

Possible spearhead fragments

135a-d	10	Small undiagnostic scraps that appear to be part of the socket or midrib of an object. No blade wings evident but the pieces may be from spearhead 2.	L.19mm; W.22mm; T.12mm
191	43	Small fragment with a dished surface, possibly part of the midrib of a spearhead. Three layers of clay present. Fabric Group 2.	L.13mm; W.17mm; T.13.5mm
192d	41	Part of a gate for a spearhead socket with a step and one intact face at base. Very weathered. Sixteen other scraps, one with a curve suggestive of socket or midrib. Fabric very weathered.	L.19mm; W.25mm; T.14mm
229c	10	Undiagnostic fragment but fabric suggests spearhead.	L.21mm; W.18mm; T.13mm
554b	43	Fragments that join with piece 430 (outer wrap). Inner layer is missing. Section suggests spearhead blade area. Three layers visible.	L.21mm; W.22mm; T.13mm
750	56	Three scraps made from fabric similar to spearhead.	L.32mm; W.31.5mm; T.13mm
790	70	Part of a socket, one contact face survives, all abraded. Curvature is fairly shallow, may be for a smaller piece. The surface is too weathered to be sure of the fabric type. Two layers of clay visible.	L.27mm; W.14mm; T.11mm
1463	239	Possible blade wing, no remains of midrib but piece is thickest at one side. Three layers visible.	L.22mm; W.18mm; T.12mm
1788	244	Possible blade fragment, surface abraded. Two or three layers visible.	L.20mm; W.19mm; T.11mm

Socket fragments of uncertain identification

Four or possibly five of these pieces could be socket fragments; while some may belong to the spearhead category, others may be from smaller items such as socketed gouges or chisels. 577 may be either a socket fragment or part of a crucible.

Socket fragments of uncertain identification

577	43	Very abraded piece, probably part of a socket or crucible. Two layers visible.	L.21mm; W.19mm; T.12mm
657	41	Possibly part of a socket. However, the piece could equally be from the wrapping of the junction of two valves, as the fabric is more like that of an outer wrap and the shape of the piece is more curved than usual. No contact faces present.	L.18mm; W.21mm; T.16mm

875	202	Part of a socket. Well preserved, one contact face remains and there is a slight constriction in the line of the inner edge. The fabric is similar to spearhead type 2, but it may have been for casting a smaller piece such as a gouge or socketed punch.	L.26mm; W.23mm; T.10mm
1078	41	Thin fragment, broken in four, and made from fine fabric; grey in colour with pale surfaces. Remains of what appears to be the gate step are present at one end. One contact face survives. Could possibly be the inner layer of the socket of spearhead type 2.	L.32mm; W.33mm; T.10mm (max).
1943	244	Two refitted pieces; possibly part of a socket similar to 1078 above. One contact face remains intact. The curvature is shallow and only the fine inner layer survives.	L.22mm; W.12mm; T.7mm
2395	239	Part of a socket, possibly of a spearhead as it seems to belong to Fabric Group 2, but could also have been for a smaller implement.	L.24mm; W.15mm; T.9mm
2583	279	Consists of a collection of small sherds, two of which are definitely socket pieces, could equally be gouge. Paste is very fine.	L.18mm; W.21mm; T.19mm

Swords

135/236	10, 21	One piece from the group registered as 135 fits with 236 to form a long piece of the blade matrix. This is dished in cross-section and a crack running along the centre has split the fragment. The contact face is abraded and worn away on one side; the bevelled edge of the blade may be discernible. Outer wrap preserved. Six further fragments in the group are abraded, but can be assigned to the sword mould category on the basis of fabric.	L.60mm; W.43mm (mould), 32mm (matrix); T.14mm
157	10	Abraded fragment with small area of relatively smooth, dished matrix surface preserved. This, and the profile of the mould, suggests the piece is from a sword blade.	L.23mm; W.33mm; T.16mm
194	41	Fragment with longitudinal central crack. Both contact faces survive but are abraded. These indicate that the blade was narrowing at this point, either towards the butt or the point. The outer skin(s) of the outer wrap have partly eroded away revealing a crisply outlined groove made by a binding thong. The mould was therefore bound before the full outer wrap was applied.	L.26mm; W.42mm (matrix 25mm); T.12mm
235	10	Small piece retaining the impression of about half the width of the blade. One contact face survives but is eroded. Outer wrap partly preserved.	L.14mm; W.23mm; T.12mm
247	6	Matrix with dished surface and converging contact faces. This piece is from quite close to the point of the sword. Both contact faces look as though they may have been horizontal. The fragment is abraded; one layer of the outer wrap remains but there may have been additional skins.	L.39mm; W.35mm (mould), W.25mm- 13mm (matrix); T.10mm

355	41	Piece with dished surface and converging contact faces. The contact face is intact on one side only but its line is visible on the other edge. This fragment is from slightly nearer to the point than 235; the two pieces do not refit but clearly come from near adjacent parts of the mould. Both probably formed part of the opposite valve to 247. Two layers survive, but there was probably a third outer wrap.	L.37mm; W.31mm (mould); W.25mm (max. width of matrix); T.18mm
358a/b	10	Two pieces that join together. The surface is abraded and has a shallow linear groove, possibly marking one side of the butt. The fact that the groove is set at an angle across the fragment would further support the identification. The fabric is similar to the other sword mould pieces. Part of outer wrap present.	L.40mm; W.19mm; T.10mm; Groove; L.23mm; W.3mm
553	32	Piece representing half of mould width. The matrix surface is dished; one contact face present but eroded. Outer wrap does not survive.	L.24mm; W.22mm; T.12mm
813	32	Piece with contact face. This has a curving edge and inverted shallow v-shaped profile. The remainder of the abraded matrix surface is slightly dished. Part of outer wrap present.	L.33mm; W.26mm; T.9mm; W. of matrix. 11mm
1798	244	Collection of five fragments. No definite matrix survives but on the basis of general shape and fabric the pieces appear to be part of a sword mould.	
2088	247	Discoloured, possibly burnt piece with an accretion on the smooth surface. It appears to be part of mould for a sword blade but no contact face survives. No outer wrap present.	L.18mm; W.25mm; T.12mm

Knives

442	41	Two pieces that fit together; the matrix is dished and is most probably part of a knife blade. There are faint remains of a contact face on one side. The surviving part of the outer wrap is brick red in colour.	L.19mm; W.25mm (mould); W.21mm (matrix); T.7mm
584	43	Very small fragment, possibly from the tang of a knife. Part of a contact face survives and slopes upwards from the matrix to the edge. The matrix is flat, but so little remains there are no features. The presence of a step, flat matrix and the angle of the contact face make it possible that this is a piece from a matching valve for either of the foregoing two pieces.	L.15mm; W.15mm (mould); W.2.5mm (matrix); T.7mm

619	32	Blade fragment with dished cross-section and well-preserved surface. Both contact faces are present but incomplete on one side. As these are also slightly dished, this is most probably an upper valve piece. Outer wrap present.	L.19mm; W.26mm (mould); W.18mm (matrix); T.8mm
746	202	Piece with tang and shoulder of blade. The top of the tang is complete and the edge rounded. The outer wrap does not quite extend to the top and projects slightly, as if to make a seat for a pouring gate. A groove runs down the centre of the matrix, starting halfway down the tang and extending on to the blade. Both contact faces slope down from the matrix edge to the mould edge, although this is less pronounced on one side. The matrix, like that of 1246, is dished in cross-section. These two factors, in particular the angle of the contact faces, make it unlikely that 746 and 1246 come from matching valves. The matrix on the latter is also slightly wider.	L.45mm; W.24mm (mould); W.9mm (matrix at tang); T.9mm
1235	219	Knife blade. Part of one contact face only. Approximately half of the width of the matrix is present. Slight undulating, may be close to shoulder/tang. Outer wrap present.	L.20mm; W.14mm; T.8mm
1246	219	Piece with tang and traces of shoulder of blade. The matrix is abraded but a central groove runs the length of the fragment. The contact faces slope from the edge of the matrix down to a slight step down on the sides of the mould. The lower part of one edge is damaged but the outturn for the shoulder of the blade can be identified on the other. Outer wrap present.	L.32mm; W.20mm (mould); 11mm (matrix); T.5mm
1338	255	Worn and abraded piece with narrow central groove, flat surfaces on either side of it and edges possibly indicating beginnings of contact faces. The latter have now disappeared. It is possible that the piece is from the tang/upper blade area. Outer wrap does not survive.	L.25mm; W.21.5mm; T.7.5mm
1455	43	Piece with one contact face surviving. The matrix is slightly abraded and the outer wrap does not survive.	L.18mm; W.14mm; T.5mm
1465	239	Knife point. The matrix shows the end of the blade narrowing to a rounded tip. The surface is weathered and not as fine as on the previous fragments. The matrix is off-centre on the mould so that one contact face is quite narrow. Both contact faces slope downwards slightly from matrix edge to mould edge. A thin layer of the outer wrap remains and this presumably was originally enveloped by another layer.	L.35mm (mould); L.25mm (matrix); W.25mm (mould), W.14mm (matrix); T.9mm

1641	239	Small fragment, possibly representing the blade point. The matrix has a flat surface and possibly converging sides. Both contact faces slope down from matrix edge to mould edge. Outer wrap present.	L.14mm (mould), L.12mm (matrix); W.19mm (mould), W.7mm (matrix); T.10mm; D. of matrix; 5mm
1658	239	Piece with abraded concave surface. These are faint traces of one contact face; this appears to slope down from the matrix to the mould edge. Only a skim of the outer wrap remains attached to the inner wad.	L.22mm; W.21mm; T.6mm
1792	244	Knife blade including point section, made up now of four fragments that refit; a fifth fragment probably also forms part of the same piece. The mould has a rounded point and the matrix here is set off-centre. Both contact faces are abraded but slope upwards slightly from the matrix edge to the mould edge. Outer wrap present. The piece looks as if it should be the opposite valve for 1465 above, but they do not fit very well together. This may be due to abrasion of the contact faces. Dimensions of largest fragment with point.	L.39mm; L.32mm (matrix); W.29mm (mould); W.17mm (matrix); T.10mm

Fragments of uncertain identification

1665	239	There are several pieces assigned this number but a matrix is preserved on only one example; most of the remainder are scraps. All are made from the same fabric, probably Fabric Group 1. The piece with the matrix has a rounded top or rim which possibly be a seat for a gate. The matrix itself is damaged; it is flat on one long side and has an upturn on the other. Outer wrap present. Tang ?	L.21mm; W.16mm; T.8.5mm
1707	95	One contact face remains. This is sloping downwards from the matrix towards the outer part. The matrix is long and flat and there would have been an allowance for a thickness of 2-3mm against the contact face. The other side is broken, only a tiny part of the upturn for the opposite contact face remains. No outer wrap. Fabric Group 1.	L.22mm; W.14mm; T.6mm

Pin heads

None of the pin head moulds are complete. All belong to Fabric Group I.

Ball-headed pins

Pin 1

Upper valve

135g	10	Abraded portion of shank, although the cross-section becomes more rounded rather than triangular from one end to the other. This piece appears to refit with 1490. Outer wrap present. Groove for shank, 4mm wide and 2mm deep.	L.29mm; W.25mm; T.14mm
618	32	Piece of upper valve, as in the previous piece, the cross-section is rounded but relatively deep. Fabric as for 1490 and 135 above. The groove for the shank widens at one end; this may result from weathering but could also be an expansion to meet with a pouring gate. The contact faces are weathered. A narrow sharp groove on the back is an impression of a binding strip. Groove for shank: 4mm wide and 2mm deep.	L.38mm; W.23mm; T.13mm
1490	239	Abraded part of the upper valve of a mould for a pin with a plain, ball-shaped head. The contact faces are wide and flat. The matrix for the head consists of a depression, 19mm wide by 12mm long and 5mm deep. Two small depressions that occur in the angles between the shank and head may be keying devices. The matrix for the shank is shallowest (5mm wide by 1.3mm deep) at this point. Apart from the presence of a few larger quartz inclusions in the fabric it conforms to Fabric Group 1. Only a thin skin of the outer wrap survives; this is made from similar fabric but is looser in structure.	L.54mm; W.25mm; T.16mm

Lower valve

454	41	This is a lower valve piece with one end shaped either to act as a pouring funnel, or as a seat for a gate. The funnel feature is asymmetrically set around the opening for the pin shank and is incomplete. The fragment cannot be matched with any other group and is probably part of the lower valve of the preceding pieces. The contact faces are flat and abraded. Fabric Group 1, no large grains visible. Groove for shank, 4mm wide and 2mm deep.	L.30mm; W.23mm; T.9mm
-----	----	---	-----------------------------

Pin 2

661	32	Abraded piece, not complete across the width but probably from a lower valve. The groove for the shank can be traced along one surface and runs to an oval shaped depression, 10.5mm by 5mm and 3mm deep. The groove possibly continues on the other side of this depression. Fabric is compact, probably Group 1. Outer wrap crumbly. This may be a similar pinhead to 1490 or perhaps it was of more complex form. Groove for shank 5mm wide and at least 1mm deep.	L.32mm; W.24.5mm; T.13mm
-----	----	---	--------------------------------

Disc-headed pins

Pin 3

111	10	Piece with part of central hollow, 4,5mm in diameter, remaining. An interval of 5mm separates the hollow from a surrounding groove 1mm deep. Part of a concave contact face, 5mm wide, remains. Original diameter of pin head <i>ca.</i> 15mm.	L.14mm; W.19mm; T.5mm
-----	----	--	-----------------------------

Pin 4

637	32	Approximately half the diameter of this pinhead survives. A single outer groove encloses a blank, but steeply sloping, inner area with a central depression. This would have given a pinhead that sloped down from a central boss to an outer ridge, <i>ca.</i> 20mm in overall diameter. Contact face slightly convex. Outer wrap present.	L.27mm x 20mm; T.8mm; D.of boss; 4mm
-----	----	---	---

Pin 5

811	95	This piece is distorted as if it had been burnt after discard. Classification as a pinhead is based on the triangular profile of the mould and the presence of a small central depression that may have been for a boss. Outer layer survives and the underside comes to a point along the central axis.	L.18mm; W.12mm; T.7mm
-----	----	--	-----------------------------

Pin 6

1377	32	This piece is also very abraded but a tiny (3mm in diameter by 1mm deep) central depression remains. The original contact faces have disappeared; the remainder of surface is eroded and the outer wrap does not survive. The piece is triangular in profile, similar to 811 above.	L.20mm; W.19mm; T.17.5mm
------	----	---	--------------------------------

Pin 7

1456	43	Piece with half of the central hollow (5mm in diameter by 3mm deep) preserved. This is surrounded by a convex ring bordered by a sharply cut groove. A concave, slightly sloping contact face surrounds the groove. Outer wrap, 4mm thick, present but broken at edge of contact face. Original diameter of head <i>ca.</i> 16mm.	L.25mm; W.17mm; T.9mm
------	----	---	-----------------------------

Pin Shank Groups

This is represented by shank pieces only; parts of two matching valves are present. All the pieces were recovered from the edge of the large hearth in the northern part of Cutting 1.

Group 1

Upper valve

2626	297a	Triangular in section. Fits to 2651. Groove is 4mm wide and 1mm deep. Contact faces flat then tilts upwards, this forms a lip over the side of the lower valve. Traces of the outer wrap remain. The fragment narrows from the end which refits with 2651, but	L.17mm; W.16mm; T.14.5mm
------	------	--	--------------------------------

		the sides are abraded.	
2645	297a	Triangular in section, splays notably along length. Part of the outer wrap survives. The piece is discoloured and appears slightly warped at the wider end; it was probably burnt after discard. Groove for shank: 4 to 5mm wide by <2mm deep.	L.35mm; W.26-38mm; T.16mm
2651	297a	Triangular in section. Refits with piece 2626. The matrix is quite shallow. The contact faces are slightly uneven, but matched by those on the lower valve piece. Very little outer wrap survives. Groove for shank: 39mm - 42mm wide by 1mm deep.	L.47mm; W.24mm; T.17mm
2658	297a	This piece is discoloured in a similar manner to 2645 and may also have been burnt. Triangular in cross-section. The fragment widens slightly from one end to the other, but it is difficult to say by how much as the sides are abraded. The profile also becomes rounded. These two factors distinguish it from the rest of the upper valve pieces. However, the fact that, like the latter, the flat, narrow contact faces are higher on one side than the other makes it more likely that this was also part of the upper valve. No outer wrap survives. Impressions of a binding strip occur on the back but are damaged. Groove for shank: 4mm wide and 1mm deep.	L.38mm; W.23mm; T.14mm

Lower valve

2623	297a	Two pieces that match the upper valve; the mould tapers from 39mm wide at one end to 20mm at the other. It is semi-circular in cross-section and over half of the matrix for the pin groove is present. The contact faces are flat, becoming rounded at sides. No outer wrap present. A semi-spherical depression located slightly off-centre on the back of the piece at its wider end is probably a key for the outer wrap. Grey reduction layer in centre. This piece fits perfectly to the upper valve pieces. Groove for shank: 4mm - 5mm wide; 3.5mm - 4mm deep.	L.69mm; W.39mm; T.14mm
2677	200	Small fragment, probably from lower valve and made of similar fabric to the remaining pieces of this pin; the width of the inner wad is also similar to the foregoing. The surviving part of the matrix is 9mm long by 4mm wide but the contact faces are too eroded to establish the depth. Traces of outer wrap remains.	L.16mm; W.18mm; T.10mm

Pin Shank Group 2

The pieces representing this pin form a less coherent group than either of the above. Classification as a group is based on the shape and size of the mould pieces, as well as on the form of the matrices. The fabric is similar to Pins 1 and 2 (i.e. Fabric Group 1) but the temper does not include any noticeably large grains.

Group 2

Upper valve

2613	297a	The mould piece is semi-circular in cross-section but it is possible that it is part of an upper valve. Based on the find spot, it could be part of pin 2, but the form appears to be different. The piece is abraded, with flat contact faces that were probably higher at the mould edges; it may be from close to the point of the shank. Outer wrap present and contains temper grains 1mm in size. Groove of shank: 3mm wide, narrowing to 2mm; depth > 1mm.	L.24mm; W.16mm; T.9mm
2587	71	Two refitted pieces of triangular cross-section. On one fragment both mould and matrix widen and the latter also deepens. No outer wrap. Weathered, texture appears coarser than in pin 2 but this is probably due to poorer preservation. Groove for shank: 4mm wide and 1mm deep.	(A); L.37mm; W.29mm; T.12mm. (B); L.23mm; W.23mm; T.21mm

Lower valve

1468	239	Matrix is well preserved but contact faces are abraded. Contact faces sloped down from edge of matrix to mould edges. Inner wad is quite thick (9mm) in comparison to other pieces. Outer wrap thin, partly missing. Groove for shank: 4mm wide by 3mm deep.	L.15mm; W.16mm; T.12mm
2252	270	The matrix is off-centre in the mould. One of the contact faces appears to be higher at one end, but this may be due to abrasion. Outer wrap present, but broken away to expose intact inner wad. Groove for shank: 4mm wide by 1mm deep.	L.25mm; W.23mm; T.9mm
2260	270	The matrix also slightly off-centre in this mould fragment. The contact faces slope up from the edges of the matrix and then fall away to the sides of the mould. One of the contact edges is relatively broad while the second is more irregular. Outer wrap intact. Groove for shank: 4mm wide by 2mm deep.	L.24mm; W.22mm; T.10mm
2302	244	Abraded piece, especially at one end where the contact faces and matrix are worn down. The contact faces are flat and slope away slightly from the edges of the matrix. Outer wrap present. Groove for shank: 4mm wide by 2mm deep.	L.21mm; W.22mm; T.9mm
2487	200	Outer wrap missing and base is flat. The mould and the matrix both taper in width along the length. The piece seems to be a point as, although the end is not closed, there is no apparent break. The contact faces are flat and narrow. Groove for shank: 3mm-2.5mm wide and 1.5mm deep.	L.31mm; W.13-8.5mm; T.12mm
2616	297A	Piece with more than half the width of the shank matrix surviving. The contact faces are rounded and probably sloped up from the matrix edges and back down to the sides of the mould. Outer wrap present, broken in places revealing inner wad < 10mm thick. Groove for shank: 4mm wide and 2.5mm deep.	L.32mm; W.20.5mm; T.18.5mm

Pin Shank Group 3

The fabric of these fragments is much coarser than in the previous pieces. It is similar to that used to make the sword moulds (Fabric Group 2). The pin groove is also larger, casting a shank of between 5mm and 6mm in diameter. Only three pieces, all belonging to an upper valve, have been recovered. All were recovered from different layers but come from the same area in Cutting 1.

Group 3

Upper valve

346	10	Weathered, contact faces slope upwards from groove edge then back to mould edges. Outer wrap missing. Groove for shank: 5.5mm wide and 4mm deep.	L.39mm; W.27mm; T.15mm
1666	239	Piece with deep wall marked groove set slightly askew in mould. Contact faces similar to 346 above. Outer wrap present in patches and includes temper grains <1mm. The inner wad has a triangular profile. Groove for shank: 6mm wide and 3mm deep.	L.55mm; W.27mm; T.17mm
1823	244	Piece joins with 1666. Inner wad has triangular cross-section whilst that of the outer wrap is more rounded. Groove well marked; contact faces as in 1666. Outer wrap fabric is coarse with grains <2m visible. Groove for shank: 5mm wide and 2mm deep.	L.30mm; W.32mm; T.21mm

Miscellaneous pin shank fragments

The following pieces do not form a group but are pieces that do not appear to belong to the previous pin shank groups.

Miscellaneous pin shank fragments

184	41	Very abraded scrap with possible groove in surface. Outer wrap eroded. Fabric Group I.	L.12mm; W.14mm; T.8.5mm
837	202	Part of lower valve. The base of the groove is well preserved but the sides and contact faces are abraded. Fabric Group I. Outer wrap coarse, may belong to pin 2, but the inner wad is not as thick. Groove for shank: <i>ca.</i> 4-5mm wide by 2mm deep.	L.24.5mm; W.25mm; T.12.5mm
1469	239	Lower valve with shallow groove flanked by broad contact faces that slope up slightly towards mould edges. Outer wrap intact and rises above edges of inner wad. Fabric Group I. Groove for shank: 4.5mm wide and 1mm deep.	L.32mm; W.27mm; T.11mm

Bracelets

Upper valves

406a	43	Two refitted pieces; the line of breakage ran along the line of the groove. Only the outer edge of the matrix and the outer contact face are intact. The latter is dished and <i>ca.</i> 5mm wide. Part of	L.29mm; W.19mm; T.7mm
------	----	--	-----------------------------

		outer wrap remains.	
415	43	Very worn piece with half of the matrix and one dished contact face surviving.	L.25mm; W.15mm; T.12mm
1021	41	Small abraded fragment. The outer half of the matrix survives as a step, but the inner edge has broken away. Outer contact face and part of outer wrap present.	L.11mm; W.13mm; T.9mm
1473	239	Fragment in three parts all of which are abraded. Two pieces join along the line of the groove. The third piece is larger with a matrix 2.5mm wide. It has a flat contact face with a slight lip at the edge where the outer wrap meets it.	L. 25mm; W.14mm; T.8mm (larger piece).
1664	239	Piece with half the matrix and part of the outer contact face present; the latter is concave in profile. The groove measures <i>ca.</i> 25mm wide by 13mm deep. Part of outer wrap survives. Probably part of the same valve as 1473.	L.22mm; W.14mm; T.8mm
2143	244	Possibly a small fragment from an upper valve. One surface is flat or dished. Part of another surface slopes away from it to a broken edge; it is not clear if there was an opposite face to this sloped surface.	L.11mm; W.12mm; T.9mm

Lower valves

90	10	Very weathered piece; the edges of the matrix are worn and not intact at any point. The groove was at least 2.5mm wide and 1.5mm deep. The contact faces slope down from the edges of the matrix. Outer wrap occurs only in patches.	L.49.5mm; W.17.5mm; T.10mm
406b	43	Small fragment with abraded contact faces that slope down from the edges of matrix. Groove measures 3.5mm wide by 1mm deep. The piece has been cut diagonally at one end across the groove and contact faces. Outer wrap present on base.	L.16mm; W.17.5mm; T.10mm
610	43	Piece with intact matrix of rounded 'v' profile. Groove is 3.5mm wide by 2mm deep. Contact faces slope down from matrix edges. The outer edge of the mould is flat while the inner edge is rounded. Part of the outer wrap remains.	L.33.5mm; W.18mm; T.11mm
1026	41	Small and abraded fragment probably from lower valve. Remains of a small groove with slight curvature evident and part of the contact face survives on one side. Outer wrap evidenced only by thin skin of clay.	L.15mm; W.13.5mm; T.8.5mm
1056	216	Abraded piece, probably from lower valve. Traces of a curved groove evident. Contact faces and outer wrap not preserved.	L.12mm; W.15mm; T.6mm
1223	219	Fragment with inner part of matrix and contact face present; the latter is slightly dished. The outer wrap lips up over the surviving contact face. The groove is <i>ca.</i> 2.5mm wide by 2mm deep.	L.18mm; W.16mm; T.9mm

1371	41	Abraded fragment with outer edge and part of inner edge of curving groove present. The matrix is 2.5mm wide and at least 1mm deep. The slightly convex outer contact face slopes down to the outer edge of mould; the latter is flat and no outer wrap is evident.	L.22mm; W.17mm; T.9mm
1619	239	Piece broken along the line of the matrix so that only the inner edge of the groove and the inner contact face survive. Traces of outer wrap remain.	L.17mm; W.10mm; T.8mm
1631	239	Piece with relatively well-preserved matrix. The curved groove is 3.3mm wide by 1.3mm deep and flanked by contact faces that slope down to the edges of the mould. Both contact faces are slightly convex. The outer wrap survives across the base.	L.29mm; W.21mm; T.12mm
1790	244	Small abraded scrap with only a trace of a curving groove. The contact faces are also abraded. The inner is missing about half its width and all its surface; the complete width of the outer is present but most of its surface has gone. Traces of outer wrap present. Enough survives to show this was a lower valve.	L.15mm; W.14.5mm; T.8.5mm
1800	244	Three scraps that join. Break line runs along the base of the groove. The groove is <i>ca.</i> 3mm wide by <i>ca.</i> 2mm deep. The flat, slightly convex contact face slopes from the matrix edges down to mould edges. The latter are narrow and rounded. Outer wrap missing.	L.14mm; W.17mm; T.7mm

Gate moulds

433	41	Short gate, step on base. Rim intact for short length, outer wrap fabric.	L.23mm; W.18mm; T.15mm
438	41	Bulbous lump of clay, vitrified. The concave interior is stepped.	L.20mm; W.22mm; T.17mm
593	32	Rim and step at base present. A longitudinal groove runs from the rim to midway on reverse face. On contact face is present suggesting a two-piece gate.	
831	202	Small step at base. Rim is intact and there is a noticeable curve.	L.21mm; W.18mm; T.8.5mm
863	202	Rim and base are intact. Seating depression or feature on base. Coarse fabric.	L.30mm; W.41.5mm; T.14mm
874	202	Only a very small piece of the rim remains; the base is also incomplete. This is the largest of the surviving gate moulds. It was formed of two parts, an inner solid plug of coarse clay and an outer wrap moulded around it to form the rim.	L.39mm; W.38mm; T.22mm
1017	41	Rim missing; the step at the base is intact and the wall is curved.	L.25mm; W.23mm; T.12.5mm

1046	41	Fragment that was part of a large gate. Traces of a seating step evident so it may be part of 874 above.	L.14mm; W.31.5mm; T.12.5mm
1409	217	Weathered piece, broadly similar in shape to the above gates but lacking a curved interior. This may be due to abrasion and the inner face has also been heat damaged. There is a concavity as opposed to a step on the base. Rim does not survive.	L.19mm; W.28mm; T.16mm
1811	244	Find rim, curve suggests a reasonably large piece. Internal face is gently convex. Surface is abraded.	L.23mm; W.24mm; T.9.5mm
2095	88	Small fine gate, interior abraded, no step; the rim is damaged but visible. Colour and fabric similar to 2643.	L.19mm; W.17mm; T.6mm
2643	277a	Very fine rim, slender wall, narrow. Step or seat is well preserved. Gentle curvature. The fabric and find spot suggest that it may have been part of a pin mould.	L.19mm; W.21mm; T.10mm (base); T.2mm (rim)
3061	255	Consists of three layers, or central one with outer layer lapped over top, forming rim. Probably a pouring gate. Fine fabric and some cracking at the rim may suggest that it was a small crucible fragment.	L.20mm; W.20mm; T.10mm
3065	253	Probably a gate type piece. Not necessarily separately made from mould but detached-in breakage after casting. Very similar to other gate pieces. Distinct 'inner core' and outer later pulled up to rim now damaged. This fragment has finished edges and shallow inner curvature and could possibly be the end of a mould for a large pointed object such as a sword or spear.	L.26mm; W.37mm; T.21mm

Cores

627	32	Weathered piece belonging to Fabric Group 2. The fragment comes to a point but is flat rather than curved on one face.	L.18mm; W.12mm; T.9mm
1494	239	Lump of clay, possibly Fabric Group 1. The outer face is curved and retains part of a smooth surface. The interior has a layered appearance, as of a clay rolled up into a ball.	L.22mm; W.20mm; T.17mm
1625	36	Very small fragment with one smooth curved surface; broken across remainder. Possibly a socket core for a small and cylindrical object.	L.9mm; W.13mm; T.7mm
2415	279	Possibly a core or gate fragment now broken into several pieces. The largest has a curved outer surface; its inner surface is either broken or abraded but small lumps of clay adhering to it suggest that it was damaged by other means. The presence of two layers and a possible contact face could indicate that the piece was part of a gate or socket rather than a core. Fabric Group 1.	L.20mm; W.26mm; T.14mm

2770	1212	Fragment of outer wrap. Fine fabric. Smoothish surface-slightly curved. May be a core for a socketed axehead as it appears wider than deep.	L.22mm; W.17mm; T.11mm
2883	1222	Possible core fragment of medium coarse oxidised fabric. Roughly triangular in shape, and rectangular in section. Appears to be broken only at one end. Tapers. May be from a socketed axehead as it seems too wide for a spearhead or gouge. Could equally be the tip of the outer wrap of a sword or spearhead mould.	L.31mm; W.22mm; T.16mm

Catalogue of crucibles (F. O'Carroll) [Appendix 1.11 in Vol. 3]

Crucible 1

55	14	Small, incomplete cup-shaped crucible that is deeper than it is wider. A large proportion of the rim, and part of one side, are missing. The wall thickens from rim to base from 2mm on one side and 4mm on the other to 9.5mm at the base. The crucible has an external projection (<14mm wide by 10mm thick) halfway up the shallower back wall.	Int. D.27mm; D.24-37mm
----	----	--	---------------------------

Crucible 2

1489	239	Small fragment of a side wall, thickening towards the base. Two layers visible, but may be three present.	L.21mm; W.18.5mm; T.7mm
1634	239	Small fragment, possibly from close to the base as the wall thickens at one edge. Interior grey, probably affected by heat. Three layers visible.	L.20mm; W.17mm; T.8mm
1736a/b	244	Rim/body wall piece (a) and small rim fragment (b) similar in thickness and form to crucible 1. Piece (b) is broken at the point where the wall thickens above the base; three layers of clay are visible. The rim is narrow and rounded, 2mm thick. Rimsherd (b) is very fine and small.	L.32mm; W.32mm; T.6mm (lower end)
1807	244	Fragment of lower part of side. Interior looks affected by heat. Two or possibly three layers visible.	L.19mm; W.14mm; T.6mm

Crucible 3

266	14	Base-angle fragment. The surface is abraded and the clay layers are separating.	L.28mm; W.27mm; T.18mm
-----	----	---	------------------------------

414	94	Rimsherd with worn groove underneath. The inner face is grey and slightly cracked due to heat. There is an extra layer of clay at one corner and this has probably spalled off the remainder of the surface. Three layers visible.	L.13mm; W.20.5mm; T.12mm
423	94	Small projection probably similar to that visible on piece 345a. If so, it must have been applied to the rim area to facilitate a grip by a tongs. The projection seems too small to have acted as a handle like that on Crucible 1 (55). Grey in colour and slightly cindery in texture.	L.17mm; W.16mm; T.7mm
476	56	Rim and body sherd. The wall is thinner than the other Crucible 4 pieces but, as the wall thickness varies across the height, the fragment is still likely to belong to this group. One side of the inner face curves sharply as if close to a spout and there is metal residue evident on the rim. Appears to join with 1659, but as the latter is abraded this is not certain.	L.29.5mm; W.22mm; T.14mm
757	202	Rimsherd with smooth groove on lower side. Smooth outer layer and one or more inner layers visible. Joins with 1915.	L.25mm; W.18mm; T.14mm
824	32	Rimsherd with a step or remains of a groove on the underside. The curvature of the outer and inner faces is not typical, being more sharply incurved on the inside.	L.24mm; W.18.5mm; T.13.5mm
1477	239	Rimsherd with eroding surface layers. May be part of 824.	L.23mm; W.24.5mm; T.14mm
1603	239	Rimsherd with slight curvature. The piece is broken irregularly and it is not clear whether the rim was applied or integral to the original manufacture of the crucible. The fabric is fine and homogenous, no layers can be distinguished but the clay seems more compacted at the surfaces.	L.18mm; W.16mm; T.12mm
1915	41	Rimsherd, very weathered. A worn step or groove on the underside suggests the rim was built up in layers or is a secondary repair. Joins with 757.	L.21mm; W.22mm; T.12mm

Crucible 3a

345a	10	Rimsherd with a protrusion at one point. The interior layers have broken off. There is metal residue on the rim surface in red patches (see Salter, this report). Joins with 506.	L.22.5mm; W.34.5mm; T.10mm; L. of protrusion 7mm
445	41	Rimsherd with longitudinal cracks. The under surface is smooth, and the piece appears to be either a later addition to a crucible, which subsequently became detached, or alternatively, part of a rim that was built up in stages by drawing up thin skins of clay.	L.7mm; W.28mm; T.10mm
506	56	Rimsherd. Inner face missing, probably due to heat. Small red blotches on the rim are corroded metal residues. Joins with 345a.	L.20mm; W.14mm; T.9mm

Crucible 4

169	10	Rim and body sherd; a raised part on the inside of one edge may be all that remains of the rim proper. The surviving rim portion is cracked and affected by heat. At least three layers of clay visible.	L.34mm; W.22mm; T.17mm
1432	22	Rim and body wall made up of two refitted sherds. A sharper than normal curve suggests the piece may be from close to the spout. Metal residues evident on the rim. The inner surface below the rim is uneven possibly as a result of flaking. Three layers visible.	L.47mm; W.47.5mm; T.18.5mm
1659	239	Very abraded rimsherd with cracks running down the rim. Slight internal curvature visible. Seems to join to 1432 and 476. Two layers remaining.	L.24mm; W.22mm; T.12mm
1787	244	Part of the side wall with a tiny part of the rim intact; inner face is damaged at this point. Joins with 1791 and 1817 and the inner curvature of the whole piece suggest an oval or sub-triangular form. Three layers visible.	L.33mm; W.28mm; T.12.5mm
1791	244	Rim and body sherd. Rim is grey, probably the effect of heat. Pieces have broken off from the interior. Three layers visible. Joins with 1817.	L.45mm; W.32mm; T.16mm
1817	S/H	Bodysherd with curvature on both axes, probably broken above base proper. Three layers visible. Joins with 1791.	L.18mm; W.33mm; T.17mm

Crucible 5

99	26	Very abraded spout fragment. Rim and wall are curved, especially internally. At least three layers visible. Joins with rimsherd 470.	L.41mm; W.30mm; T.13.5mm
260	14/26	Large part of a shallow broad crucible. Consists of three pieces joined together to form part of the rim and base. The rim has longitudinal cracks and has been affected by heat. It varies in thickness and the surface also seems more worn in one part. At least four layers are visible in section and re-lining of the interior, or parts of it, seems to have occurred. Thin-section, No. 5 (R. Unitt, Vol. 3, Appendix 1.6).	H.31mm; W.54mm; T. of base 15mm; T. of rim 7mm
470	56	Rimsherd with cracked surface and possibly re-lined. In section, a layer of clay 4mm thick is applied over a lower, similarly pointed piece and may be a new rim applied on a worn one. Joins with 99.	L.26.5mm; W.40mm; T.15.5mm
749	56	Lump with smooth leached surface and broken, heat-damaged underside. Appears to be part of a protrusion similar to that on the rim of Crucible 3.	L.26mm; W.18mm; T.10mm
1160	217	Basesherd. Slightly thicker on one side with a gentle curvature visible in section. The base is roughly similar to piece 260. The fabric is fairly homogenous with over three layers visible.	L.27mm; W.35mm; T.18mm

1851	244	Very abraded rimsherd with remains of step on the underside. Fabric is sandy with a fairly rich quartz temper.	L.22mm; W.18mm; T.16mm
------	-----	---	------------------------------

Miscellaneous rim fragments

1607	239	Rim fragment from a crucible.	L.14mm; W.12mm; T.9mm
2477	26	Rim fragment from a crucible.	L.22mm; W.16mm; T.11mm