

AN EARLY ROMAN BURIAL IN VELSEN I

J.-M.A.W. Morel & A.V.A.J. Bosman

I THE CONTEXT (J.-M.A.W. Morel)

The early Roman site at Velsen I (North Holland) has thus far yielded 28 wells.¹ Human remains have been found in a number of these wells, in particular those dating to the final phase of occupation (Period 2b, Fig. 1A; c. 25-30 AD), and may perhaps be related to the events accompanying the Frisian rebellion of 28 AD.² Only one well contained an in any way complete skeleton, and this burial, together with its dagger and the associated finds, forms the subject of the present paper.

The fully clothed body of a man over 1.90m tall had been sunk into well II, one of a cluster of wells in the NW of the fortified area, which were were for the most part excavated by the AWN (Netherlands Association of Amateur Archaeologists) in 1977.³ The high water table precluded the drawing of an accurate section in situ, but the detailed excavation protocol enabled a drawing-board reconstruction to be made (Fig. 1B).⁴

The well shaft first appeared as an oval patch (1.50 x 1.65m) at -2.11m NAP (Dutch Ordnance Datum), with remnants of an iron barrel hoop appearing 15 cm below. The top of a second, this time complete, wooden barrel was exposed at -2.51m NAP. This barrel was 0.96m in diameter and 1.98m high, and fitted into a third, somewhat smaller barrel which extended down to -5.76m NAP. These barrels were extracted complete: some of the staves bore stamps (unpublished). Of the 11 wood samples analysed, 10 were of spruce (*Picea abies*) and one of silver fir (*Abies alba*).⁵

The fill of the upper complete barrel consisted of sand, clay, stone, charcoal and domestic rubbish (see tables). A wooden post 1.50 m long stood diagonally in the barrel fill.⁶ The most remarkable discovery occurred at the junction of the two wooden barrels, where the complete skeleton of a Roman soldier '...lay on his back....with flexed knees and his head rolled forward on his chest...'⁷ Associated with the body was the remains of his clothing and some of his equipment, including the dagger with its silver inlaid sheath which will be described in greater detail below.⁸ The skeleton has already been published in considerable detail.⁹ On top of the corpse was deposited almost 20kg of assorted stones, 60kg of broken up quernstones and a large quantity of pottery and domestic refuse. The lowermost barrel was filled with clean sand, containing fragments of an iron bound bucket.

The remnants of an iron barrel hoop 15 cm above the top of the preserved barrel points to the presence of yet a third barrel. The hoop dimensions suggest it must have been equal to the underlying barrel, so about 2m high. This would imply that the top of the third barrel would have reached to around -0.53m NAP. Presumably a rectangular wooden revetment would have been constructed on top of the barrel stack, together with the well-head mechanism and perhaps a roof.

The soldier was presumably the victim of some violent act. His burial in a well is certainly unusual, and could have been carried out either by his comrades or by some enemy. Burial by the enemy seems unlikely since the silver dagger would surely have been looted. Despite its abnormality, burial by the Romans themselves would seem the most likely explanation. Since a corpse would never be deposited in a well within a fort under normal circumstances, the implication is that exceptional conditions prevailed and that the body should be seen in association with the numerous human remains in the harbour, which also seem to belong to the final phase of occupation. This burial must therefore have taken place at the very end of the occupation of Velsen I, which might be related to the Frisian rebellion of 28AD, as mentioned above.¹⁰

II THE WELL CONTENTS (A.V.A.J. Bosman)

All the material from the well was collected by the AWN in 50cm spits, measured from the top of the first, preserved, barrel (i.e. -2.51m NAP, fig. 1B, measurements NAP to the left, collection spits to the right) and was kept in these groups during storage. The author undertook a thorough reexamination of all the material, including the sieve residues. This resulted in the discovery of two of the missing bones of the skeleton (the coccyx and a carpal bone), as well as several of the missing portions of the dagger and its sheath, amongst them the antler/bone top piece. The appearance of these fragments increases the probability that the entire clothed corpse, together with a complete dagger and its fittings were deposited in the well.

The finds, which have already been treated in a more general fashion by E.L. Schimmer (see above), can be divided into three categories:

1. Those items entering the well during the period of its use as a source of water.
2. The soldier's corpse and its associations.
3. The material used to cover the corpse and to block the well shaft.

A small group of finds from outside the barrels is connected with the construction of the well shaft, but unfortunately contains no datable items.

Category 1

Finds in this group for the most part come from the second barrel and the lower 50cm of the first. It may be assumed that if the well was used for the purposes of water supply, it would have been kept clean while in use. Any noisome objects will only have been introduced at the closing of the shaft. The only item belonging to the period of use might, therefore be the riveted iron hoop and hook of a bucket, along with two scraps of sheet iron, though these may also have worked down from the main fill. The large numbers of shells from between the barrels probably belong to the construction of the well, acting as a water filter. A fragment of worked wood may be a pulley, belonging, with the bucket, to the well-head tackle: this may have been thrown in on demolition, in which case these finds belong strictly to the third category. However, it is difficult to isolate any finds specifically

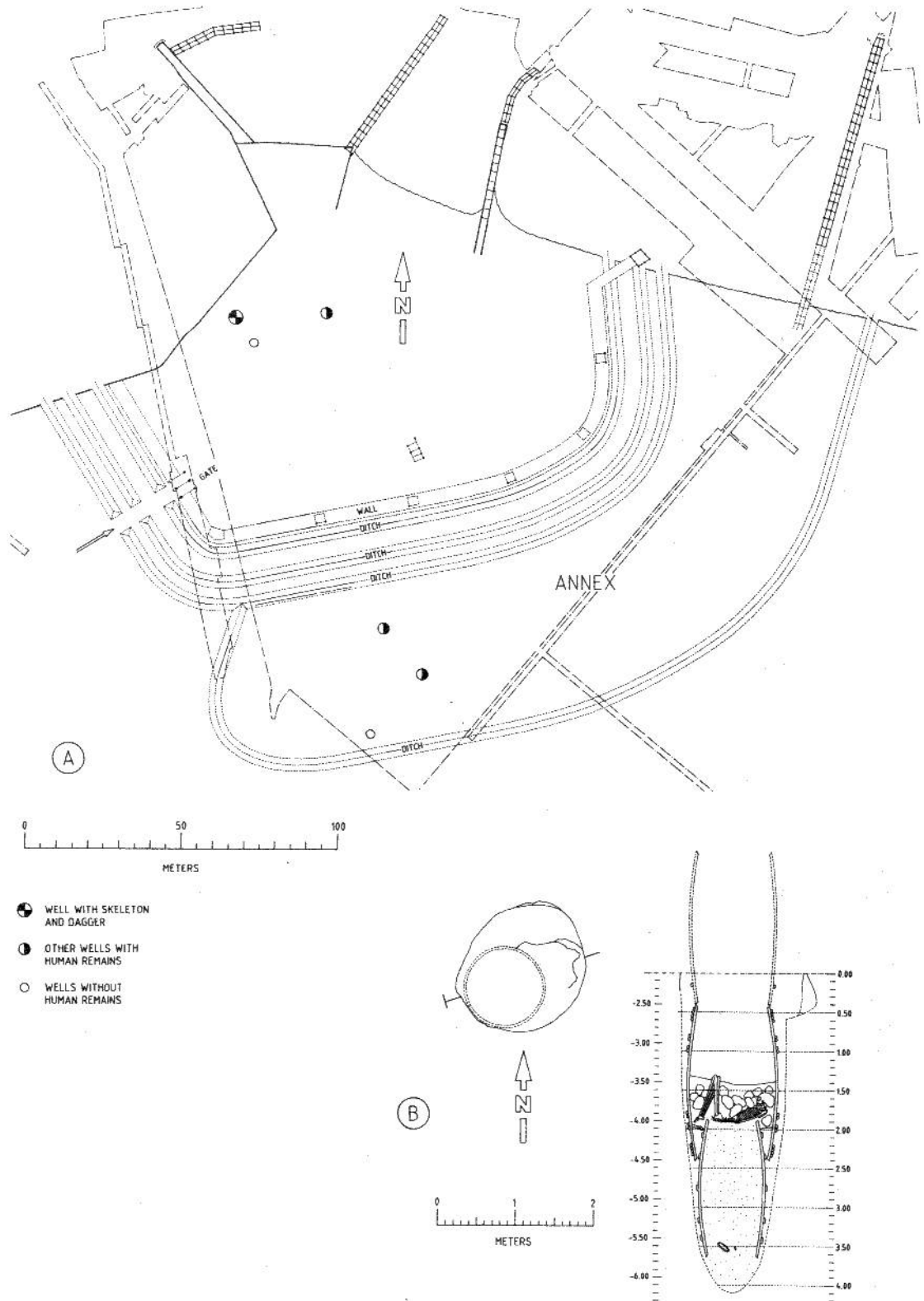


Fig.1A: The Roman fort at Velsen showing position of wells
1B: schematic section of the well (measurements NAP to left, to right in excavated levels)

connected to the period of use, since objects under or just above the skeleton could have worked downwards from the blocking.

Category 2

These finds are concentrated around 1.50m. The complete male skeleton has already been described (see above). Amongst the bones lay the dagger, its sheath, 8 belt plates, two of which bear suspension discs and another the buckle. An antler (?) plate with three rivets was recently recognised as part of the grip, and a silver stud belonging to the sheath has also emerged. The man's clothing is represented by one

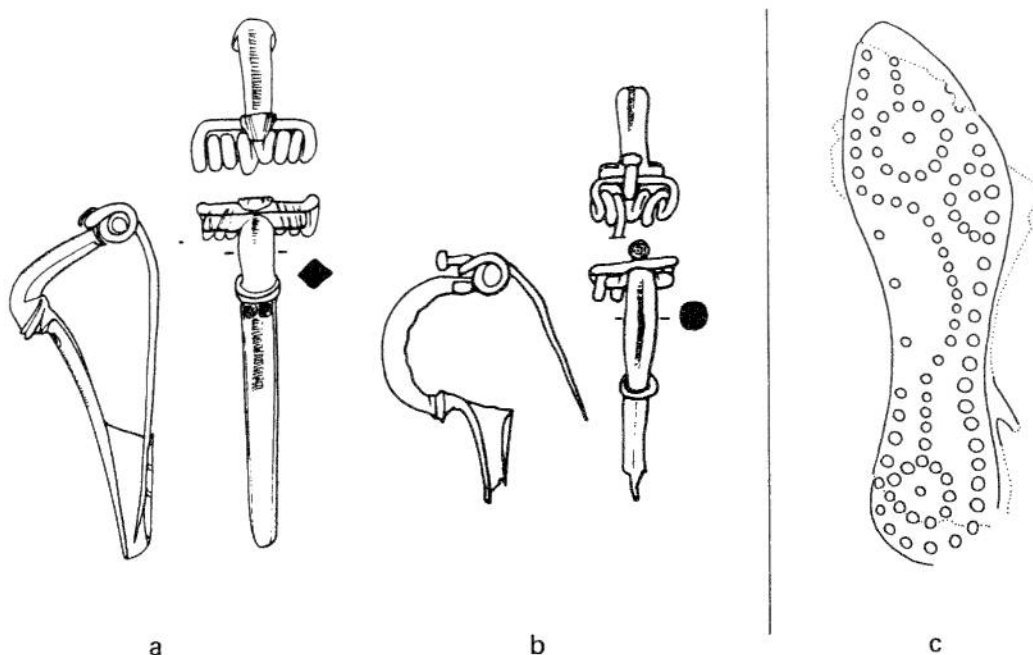


Fig.2a,b: Fibulae (scale 2:3);
c: complete shoe sole (scale 1:3)

nailed shoe,¹¹ 21 nails of its decayed counterpart and a bronze bow brooch,¹² the presence of which imply that the corpse was fully clothed (Fig. 2a, c). No textile remains and the leather is in poor condition. The man's iron signet ring has a yellowish-green glass paste setting carrying the depiction of a male head in profile, looking right and wearing a crested helmet (Fig. 3).¹³ This is probably a representation of Mars, or a warrior/hero such as Alexander, both particularly appropriate in the military context. Close to the skeleton was the only complete vessel to be found in the well, a small, native pot, which is probably to be regarded as a burial gift (Fig. 4K).

Category 3

The corpse was covered by a massive load of pebbles, daub from buildings and the fragments of two querns, totalling some 78kg. In addition, domestic refuse, containing food remains, pottery, charcoal and wood was also used to fill up the shaft. Large sherds, such as those from amphorae and dolia seem to have been preferred, though none is complete. One sherd of a jug fits to a rim fragment excavated in the harbour at the head of the side jetty of the Western Pier. Of some significance is the fact that 70% of the pottery is scorched, much of the wood is charred and bone is partially calcinated.

Since the well shaft was obviously filled in a single, rapid operation, presumably at the end of the occupation of Velsen I, the objects listed in the tables form a relatively tightly dated association. The AQUITAN stamp is regarded by Glasbergen & van Lith as one of the later types, since it also occurs at Velsen II and Valkenburg.¹⁴ The mere fact of putting a whole group of wells out of use by the introduction of a corpse into one of them, must indicate the end of activity on the site. This terminus ante quem is of considerable importance for the dating of several other categories of finds, such as the relief decorated colour coated vessels and the native pottery.

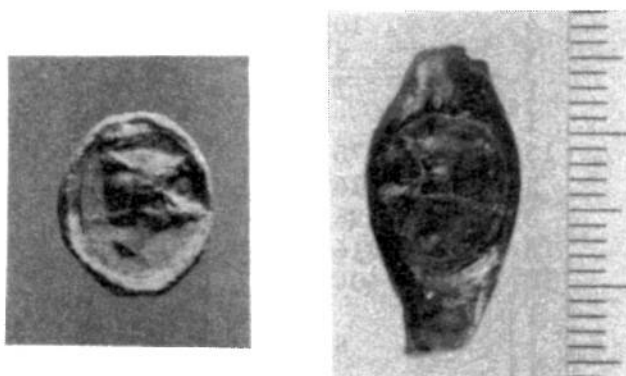


Fig.3

TABLE I Contents of the well shaft

Object type	number (frags)	weight (gr)	comment
<u>Depth 0-50 cm</u>			
Samian	2	12	dish
	2		bowl. All Samian is South Gaullish
	4		splinters
Terra Nigra	1		Howerda 27c
White wares ¹	1	220	Stuart 146 Fig. 4J
	1		flagon Fig. 4E
	23		
Coarse Amphora ²	2	6	
	3	98	Dressel 20?
Dolium	3	33	Stuart 147
Native ³	47	665	Fig. G, N
Daub	40	984	
Shot	1		baked clay
Bead	1		green glass
Iron	3	34	plate with 4 holes, 2 frags.
Bronze	1		stylus
	1		plate with rivet
Slag	3	33	metal (lead?) slag
Stone ⁴	19	964	
Bone	3		Calvarium, manibula, phalanx 3; cow
	1		mandibula; sheep/goat
	39		long bones not ident.
Shellfish	1	12	mussel (<u>Mytilus edulis</u>)

Object type	number (frags)	weight (gr)	comment
	1		oyster (<u>Ostrea edulis</u>)
Hazelnut	4		fragments
Charcoal	54	19	
Total weight (in gr)		4153	
<u>Depth 50-100 cm</u>			
Samian	4	10	South Gaullish
Terra Nigra	3	4	Holwerda 27c
Colour coated	1	3	Hofheim 22
White wares	1		2-strand flagon handle
	15	276	
Coarse	3	16	Stuart 201A
Amphora	3	196	Dressel 20?
Native	16	316	Fig. 4L, M
Daub	10	404	
Iron	1		nail
	1	8	dagger sheath frag?
Lead	1		spindle?
	4	1046	large dribbles, water hardened
Slag	1	57	lead slag mixed with charcoal
Stone	2	1105	
Bone	2		scapula, metatarsus; cow
	1		phalanx; sheep/goat
	1	385	tooth; pig
	40		fragments
Worked wood	2		Bungs, one with burnt mark
	2		construction wood, partially burnt
Charcoal	11	20	
Shellfish	3		mussel
	1		oyster
	1		<u>Polinices poliamis</u>
Total weight (in gr)		3846	
<u>Depth 100-150 cm</u>			
Samian	1		dish stamped AUVITAN ⁵
	1	45	D. 29
	1		D. 16
	2	6	bowl
White wares	3	190	Hofheim 57?
Amphora	1	12	
Daub	4	2684	includes decorated fragment, cf. Crummy 1977, 78-79
Stone	73	59813	quernstones
	2	654	
Bone	-		Human skeleton, see discussion

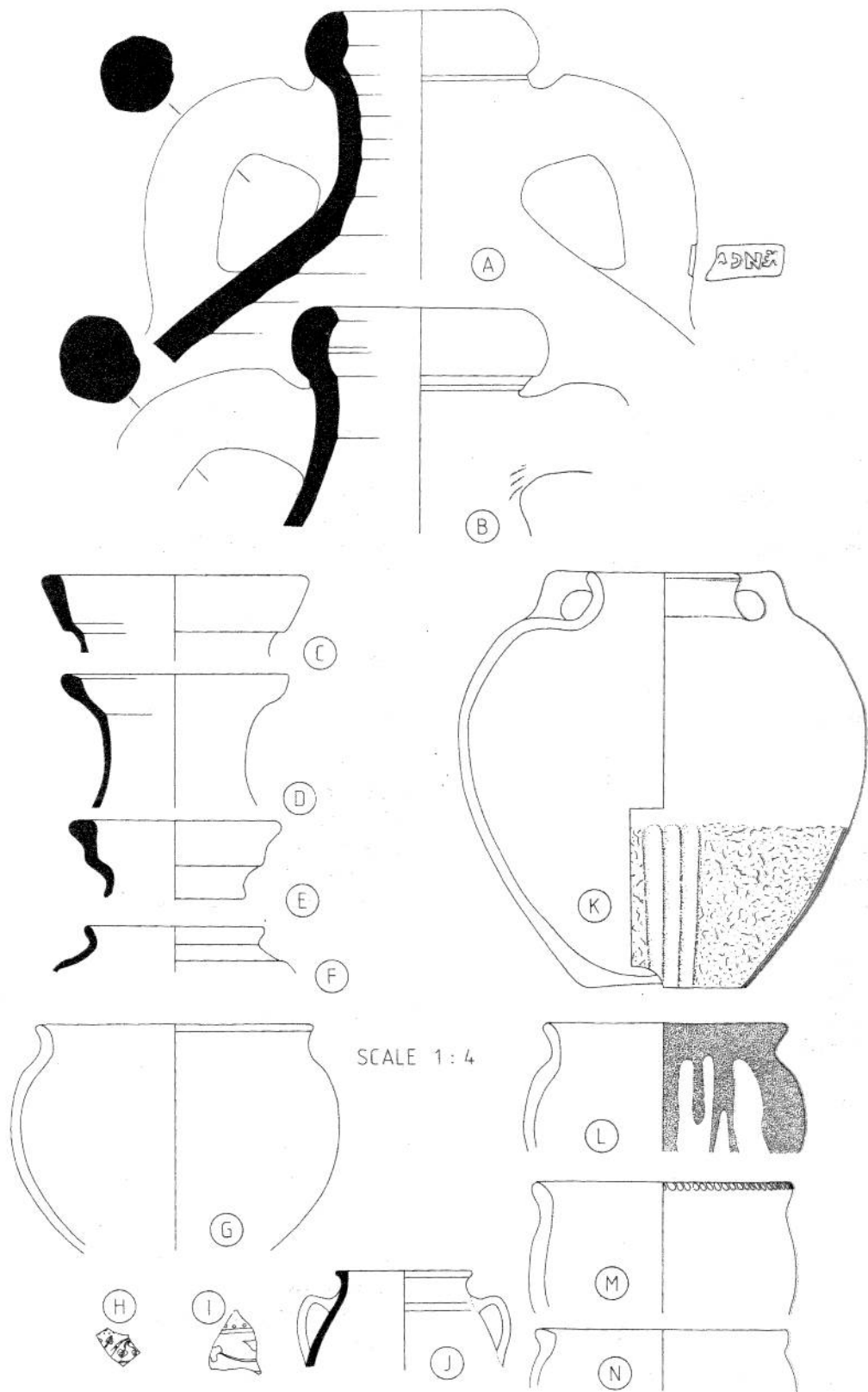


Fig.4: Pottery from the well (scale 1:4)

Object type	number (frags)	weight (gr)	comment
Worked wood	6	568	mandibula, scapula, vertebra, metatarsus; cow large mammal beam tip (10x3 cm) and plank (8x3 cm)
	4		
	2		

Total weight (in gr) 63972

Depth 150-200 cm

Samian	11	12	fragments of a bowl and dishes
Terra Nigra	21	20	Holwerda 27c, probably 2 individuals
'Belgic'	1	1	
Colour coated	2	2	Hofheim 22 Fig. 4H
Lamp	1	1	Loeschcke 1
White wares	3	650	rims of flagons Fig. 4C, D flaggon with graffito
	1		
Coarse	59	50	Stuart 201A Fig. 4F Stuart 204B Fig. 4I
	1		
	1		
Amphora and	16	4208	Dressel 20, including stamp VENC[graffito X, and 2 points Fig. 4A, B
	33		
Dolium	2	2	Haltern 66 Haltern 69
	1		
Pompeian red	1	3	Stuart 147 Haltern 75
Native	77	1941	single complete pot, Fig.4K
	3		
Daub	346	12150	
Ballista ball	1	270	clay
Metal hobnails,		137+	Dagger, belt, sheath, fibula, signet ring, see discussion
Stone	1	75	quern
Bone	29	726	natural pebbles
			Human remains
	6	529	mandibula, molar, femur 2 phalanxes; cow
	13	96	assorted bones sheep/goat
	7	124	calvarium, incisor, pelvis, mandibula
Worked wood	179	231	phalanx, tibia; pig
	8		assorted bone, some calcinated tent peg, pulley(?), block with nail, post
Charcoal	150	300	
Shellfish	3	360	cockle (<u>Cardium edule</u>) mussel oyster <u>Spisula subtruncata</u>
	3		
	7		
	121		

Object type	number (frags)	weight (gr)	comment
	1 } 4 } 9 }		<u>Mactra corallina cineria</u> <u>Polinices poliamis</u> whelk (<u>Buccinum undulatum</u>)
Leather	2		Fragmentary hobnailed boots
Insect cocoons	5		

Total weight (in gr) 21888

Depth 150-200, between the barrels

'Belgic'	2	10	
White ware	6	35	
Coarse	1	10	Stuart 201A
Native	2	75	
Daub	2	1290	
Iron	1	60	hook
	1		nail
Slag	1	6	metal slag
Stone	3	730	
Bone	2 } 1 } 4 }	80	phalanxes; cow metacarpus; sheep/goat fragments
Charcoal	7	35	
Shellfish	139 } 15 } 3 } 1 } 12 } 1 }	650	<u>Spisula subtruncata</u> oyster cockle <u>Donax vittatus</u> whelk <u>Polinices poliamis</u>

Total weight (in gr) 2981

Depth +200 cm (in second barrel)

White ware	2	5	
Native	1	5	
Daub	3	50	
Iron	2	1391	hoop + chain of the water bucket
	8		plates
	2		nails
Stone	3	120	
Bone	1	30	phalanx; cow
	2		
seeds	1		peach (<u>Prunus persica</u>)
	13		cherry (<u>Prunus avium</u>)
	2	21	olive
	40		hazelnuts, 14 of which gnawed by mice (Vons 1977)
Worked wood	1		bung
Shellfish	9		oyster

Object type	number (frags)	weight (gr)	comment
	1	656	mussel
	1		cockle
	10		whelk
	149		<u>Spisula subtruncata</u>
	1		<u>Macoma balthica</u>
	1		<u>Donax vittatus</u>
	1		<u>Polinices poliamis</u>
Total weight (in gr)		2278	

Outside the barrels

White ware	2	19	
Amphora	1	36	Haltern 70
Native	1	60	
Iron	3	20	nails in a corroded lump
Bronze	1	18	fibula Fig. 2b
Stone	4	226	
Bone	8	90	assorted fragments
Total weight (in gr)		469	

Note 1 This rim and handle fragment fits to a rim fragment from the harbour, near the western pier.

Note 2 Amphorae from Velsen are under study by B. Goudzwaard, as an undergraduate thesis, IPP.

Note 3 All native ware is organic tempered. Native pottery from Velsen is under study by A. Bosman, as an undergraduate thesis, IPP.

Note 4 Natural stone from Velsen I for the most part originates from the right-hand tributaries of the Middle Rhine region, cf. Vons & Bosman, 1988, note 34

Note 5 cf. Glasbergen & van Lith 1977, no. 44,45

III THE VELSEN DAGGER. (J.-M.A.W. Morel)

The set is composed of three separate items: A) the dagger, B) the sheath, C) the belt fittings.

A. The Dagger (Fig. 9A)¹⁵

The dagger is incomplete, lacking much of its shoulder and the tang, though the top of the antler/bone grip is preserved as are two other rivets.

A1. The blade (surviving length 23.05, width 6.3 cm, originally 23.5 x 6.3 cm, thickness 0.23 cm, at rib 0.38 cm). The cutting edge is slightly chipped and the surface is lightly pitted by corrosion. The blade has a central midrib, the back and front placed slightly out of alignment, with lines of silver damascening of the core visible along both sides.

A2. The tang. No trace now remains of the tang or the grip, though the fragmentary top plate does suggest that it may all once have been present in the well. The bone/antler plate (3.96 x 1.28 x 0.43/53 cm) has three silver rivets placed somewhat asymmetrically. A groove around the edge of the plate is almost entirely worn away on one side; this is presumably the back, where the dagger rubbed against the wearer.

A3, A4. Two loose silver rivets with clenched shafts probably belong to the grip (length 1.83 cm, diameter of heads 0.58 cm, of shafts 0.15 cm)

B. The Sheath (Fig. 9B)¹⁶

Of the sheath there remains 1) the major part of the front plate with its four suspension loops, 2) a small fragment of the rounded terminal and 3) a large silver disc, also probably from the terminal.

B1. The iron sheath plate is still 20.05 cm long and about 0.18 cm thick. The front is decorated with silver, red and yellow enamel and niello, probably applied in that order.¹⁷ On Fig. 9, light stippling indicates yellow enamel, darker stippling red enamel. The decoration is edged by a broad silver band, and is divided into the usual four zones, the upper more or less rectangular, the lowest, triangular. A fifth zone is formed by the round terminal.

Zone 1 is damaged along the top, but a line of niello set with minute silver oak leaves is still discernable. The central motif is a temple with four steps indicated in alternating niello, red and yellow enamel. The pediment is composed of red enamel with silver lines, crowned by a semicircular ornament, and is supported by three fluted columns of red and yellow enamel. Triangles of silver and red enamel with a red frontage topped by a silver stud fill the area above the pediment while the background is formed of differently hatched fields of niello. Fillets of red enamel are set in the upper corners.

The central motif of zone 2 is formed by a segmented rosette of alternating red and yellow enamel with a silver stud at the centre.

This is surrounded by a wreath of minute oak leaves of alternating red and yellow enamel set in niello and outlined with silver with tie ribbons below. L-shaped fillets of red enamel with silver round-headed nails fill the corners and are linked top and bottom by a niello strip containing yellow and silver dots. Diagonal hatching fills the remaining spaces.

Zone 3 is similar in lay out, with a rosette with diamond shaped petals radiating from a silver nail, inlaid with enamel, outlined by a broad silver band and surrounded by hatching. L-shaped fillets with silver nails are again set in the corners, all linked by a niello strip with silver and yellow dots. Two narrow silver lines fill the space above and below the design.

Zone 4 is divided by a thin silver strip into a more or less rectangular upper part and a triangular lower section. The upper section has a complex design of silver studs, red enamel peltae, yellow enamel 'thunder bolts' and a heart shaped pendant. Irregular and complex silver hatching fills the spaces all round. The lower section is filled by two lozenges of red enamel with a central line of niello ending in a silver stud. L-shaped fillets with silver nails are set in the corners and the background is filled with silver hatching.

Suspension loops are mounted at the sides of zones 1 and 3. That at the lower left is incomplete, the curled ends of the one at the top left are broken off, while that at the top right is bent backwards and is cemented by corrosion. The upper loops are entirely of iron with an octagonal section, the lower loops are entirely of silver with a round section. The iron hinges of the loops are attached to the back of a rectangular protrusion from the sheath and are covered by a narrow plate with simple tooling, the upper of iron (2.45 x 0.55 x 0.07 cm), the lower of silver (2.6/2.8 x 0.6 x 0.062 cm). The attachments to the sheath were also covered by lightly profiled plates, this time all of silver (3.75 x 0.95 cm, top; 3.45 x 1.00 cm, lower). Each cover-plate is fixed by three silver rivets (diam. 0.58 cm), between which are punched circles, two of which were mis-struck.

The entire sheath is edged with round-headed silver rivets. Between the suspension loops and the lower right hand side these are 0.36 cm in diameter and are well spaced, while elsewhere the studs are smaller (0.30 cm) and more closely set. The heads used in the decorative fields have a diameter of 0.28 cm, except for the two upper ones in zone 2 which are 0.36 cm.

B2. Only a small segment of the circular zone 5 remains. This is a corroded lump c. 2.5 cm long with 7 studs similar to those edging the sheath. The central motif of this zone is formed by a silver disc (B3) with punched openings which are edged by narrow grooves, suggestive of an 8 petalled rosette. The edges of the openings are curled over to the back. A silver rivet (length 1.70, diameter 0.61 cm) is inserted into the centre of the disc. The front surface of both the disc and the rivet looks like fine sandpaper and seems to have been deliberately roughened.

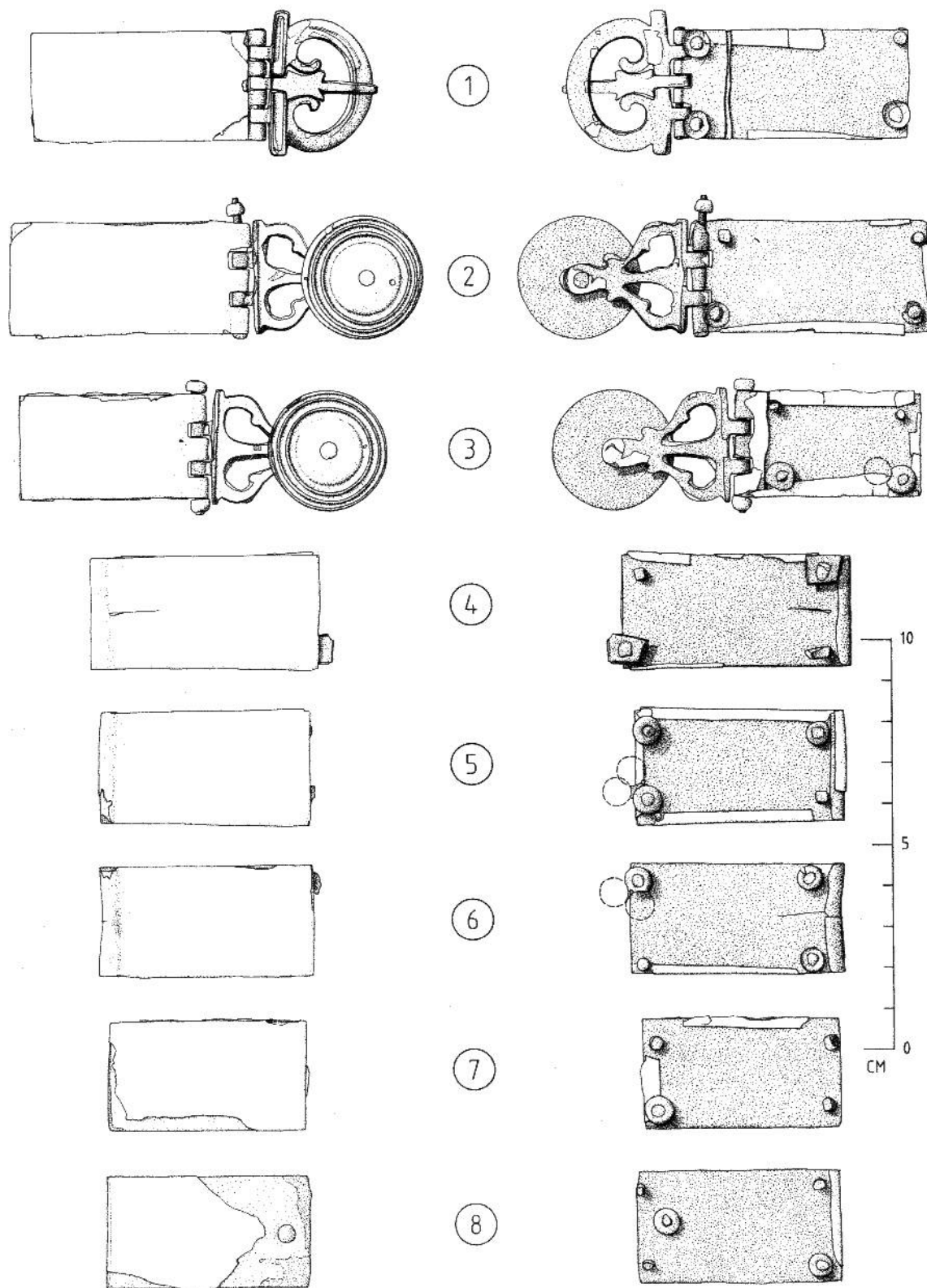


Fig.5: Belt plates, front and back

C. The Belt Fittings (Figs 5-6)

Only the metal elements of the belt are preserved: a buckle plate (1), two plates with suspension discs (2-3) and 5 individual belt plates (4-8). The plates are cast from yellow coloured copper alloy with a rough surface finish. The buckle, and the suspension discs still bear traces of worn silver-plating, as does the front surface of all of the belt plates where this is visible. In addition individually the plates are all covered by a thin sheet of silver foil which is simply wrapped round the front (Fig. 5: silver unshaded, copper alloy shaded). All the plates are provided with four stubby attachment points at the back, cast in one with the plate itself. Circular washers punched out of thin sheet metal (diameter c. 0.68 cm, thickness 0.022 cm) held the leather backing.

C1. Buckle and plate (2.69 x 5.33) with three circular washers remaining, hollow side out. The silver foil cover is worn through at the three corners, revealing the similarly worn silver plating of the front of the plate. The plate hinge is formed by a thin copper sheet folded double and sawn open. It is attached over the folded edge of the silver foil by two of the four attachment points at the back. Traces of

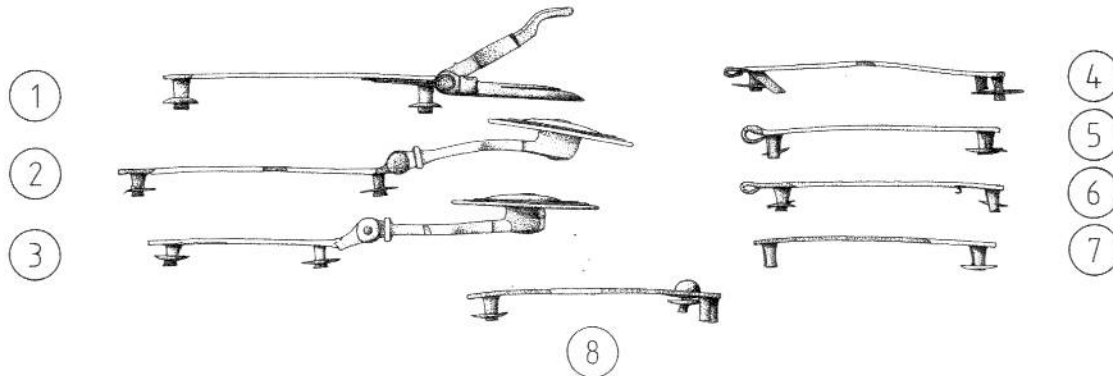


Fig.6: Belt plates, sections

silver plating remain in a groove around the buckle loop as well as in other recessed areas and at the back. The top of both the loop and the tongue are worn smooth. Both are joined to the hinge plate by means of a plain copper pin without stops at either end.

C2. Plate with suspension disc (2.77 x 5.81 cm). Two washers remain at the back, hollow side out. The hinge is formed by cutting into the plate and folding the resulting tongues back. The thin (0.01 cm) silver foil on the front covers only part of the hinge and is worn away from the top left corner as well as from the top and bottom edges. The coarsely cast belt hook is slightly out of true. Only the front has been filed smooth and silver plated. The apparent 'silvering' of the junction of the hook to the suspension disc is probably solder. The disc is of copper alloy (diameter 3.03 cm), silver plated at the front only. The plate is joined to the disc by an iron pin with roughly fashioned silver stops at each end. That at the top is so worn that the iron pin protrudes above it.

C3. Plate with suspension disc (2.55 x 4.62 x 0.07 cm). Two of the

washers remain, hollow side inwards. A bite out of the edge of one of these shows how closely together the washers were punched out of the metal sheet (indicated on Fig. 5). The hinge is differently constructed to C2: here the entire end of the plate is bent back and sawn out. The original length of the plate would have been 5.86 cm. The silver foil (0.014 cm) is extremely worn at the top and bottom edges, revealing the underlying silver plating. Both the silver plating and the foil extend over the full length of folded part. The belt hook and disc are the same as C2, made in the same mould, though with slight differences caused by the finishing process.

C4. Plate (2.77 x 5.68 cm) bent back along one of the short sides. Two washers remain at the back. These are not round like the others, but have been clipped out of copper sheet 0.048 cm thick. The silver foil is a mere 0.008 cm thick, and is severely worn along the top and the folded edge. Near the folded edge is an old crack in the metal of both the plate and the foil.

C5. Belt plate (2.80 x 5.21 cm) bent back along one of the short sides, with three washers still remaining, hollow sides inwards. The metal of one washer was incompletely severed, leaving a stub with the negatives of two adjoining washers (indicated on Fig. 5). Silver foil 0.008 cm thick covers the front of the whole plate in such a way that it is clear that the edge was bent after the application of the foil. The foil is worn at the corners, revealing the underlying silver plate at the front.

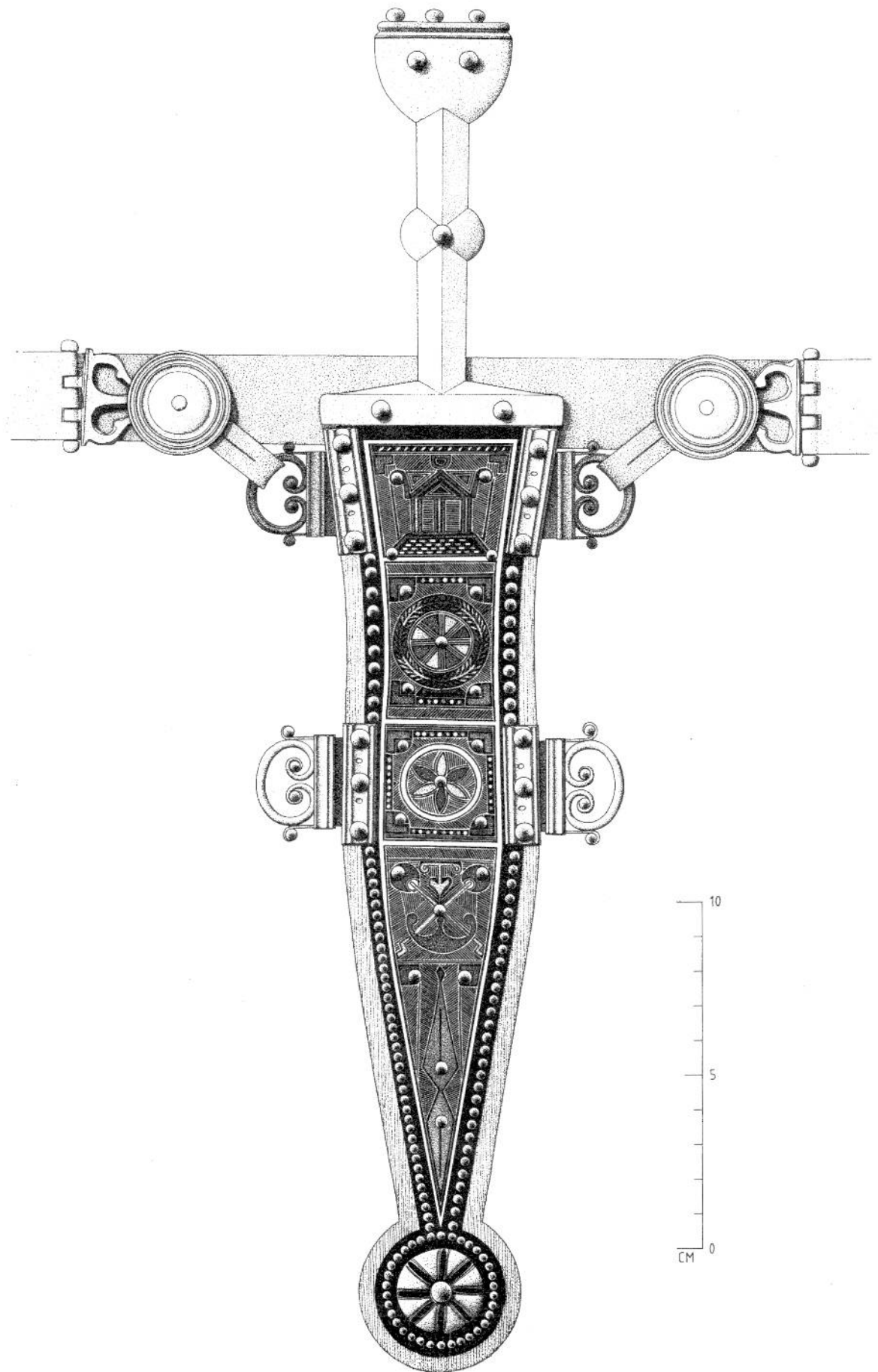
C6. Belt plate (2.77 x 5.26 x 0.066 cm) bent back along one of the short sides. This edge is slightly warped and is, like C4, cracked, though the foil is unaffected. Three washers remain at the back, two with the hollow side inwards, the other with the domed side in. The position of two adjoining washers is visible in the edge of one of them (indicated on Fig. 5). The silver foil is the same thickness as on C5, but unlike it is not folded over the bent edge. The foil is worn along all edges.

C7. Belt plate (2.74 x 4.91 x 0.09 cm). This plate is rather thicker than the others and its silver foil is also comparatively thick (0.016 cm). The foil is particularly severely worn at the front where the underlying silver plate is clearly visible. This plate is the only one not to be bent back along one edge.

C8. Belt plate (2.75 x 5.01 cm). This is the only plate where an additional silver plated, dome headed rivet (diam. 0.5 cm) is struck into the front. Much of the silver foil of the front is worn away, revealing a considerable amount of the underlying silver plating, which is also heavily worn at the edges. The extra rivet may have served to fix the tongue of the belt strap.

IV THE RECONSTRUCTION OF THE DAGGER (Fig. 7)

Although no trace of the tang were found, it may be assumed that this was flat, as is usual in early daggers,¹⁸ with an expanded flange at the centre and at the top.¹⁹ The two loose rivets (A3 and A4) probably belong to the handle plates, the measurement between the head



and the clenched end suggesting a thickness of 1.29 cm. If parallels are anything to go by, there would have been two rivets on the shoulder, one in the central flange and two more at the top.²⁰ Since no trace of the handle plates survives, it may be assumed that these were of wood, though metal or bone remain a possibility.

The actual sheath has disappeared entirely. Only the decorated iron cover plate and suspension loops remain, but these are in such good condition that a reconstruction of the entire construction may be offered (Fig. 7). The remarkably fine and detailed work is particularly in evidence in the silver, yellow, red and black oak leaf wreath. This sheath must have been a valuable possession, not least because of the large number of silver rivets and the pair of silver suspension loops. The metal plate would have been mounted on a wood and leather sheath. Despite the fine appearance, the basic construction is fairly simple (Fig. 8).

Bearing in mind that the upper pair of suspension loops are made of iron throughout, while the lower pair are entirely of silver, the construction of all four is identical. The loops are made in two sections (Fig 8A). Firstly, an octagonal iron, or round silver, bar (1) was curled into shape around a dome headed stud (2, 3). Secondly, the ends of a flat bar (4) (iron, 0.122 cm thick; silver, 0.086 cm) were curled around a stud (5, 6) and the bar was angled to take the first element. These, together with a hinge-cylinder (7) were soldered together (Fig. 8B). A ribbed plate (8) was soldered over the front of the cylinder, as is clearly visible at one of the broken loops at the back (Fig. 9, lower right). These eight pieces form a single component, of either silver or iron throughout (B). An iron pin (9) attaches the loop to the hinge plate (10), which is formed of an iron sheet folded double and cut to shape (Fig. 8C). The hinged loops would not have been attached directly to the metal sheath plate (13, see Fig. 9, section a-a¹), but would be clamped between the two sides of the wooden sheath itself (11, 12, Fig. 8D). This would have to be recessed to allow for the hinge (Fig. 8F). A ribbed silver plate (14) rivetted to the decorated front plate with three silver studs (15-17), covers the position of the loop attachments and clenches the components of the sheath together. As the loop hinge (10) is only secured by a single rivet, some upward and downward movement of the suspension loops is possible (Fig. 8E)

Daggers were worn on the left side, hung, not from the sword belt, but from a separate belt. This is shown on several of the First Century military tombstones, which also reveal that only the upper suspension loops served a practical purpose. This may explain why the upper loops at Velsen are made of (hard) iron, with (soft) silver below.²¹ The suspension on leather loops is reconstructed on Fig. 7. As the hooks are hinged to the belt plates, the dagger sheath was not held tightly to the body, but would give slightly with the wearer's movements.

The belt fittings would be mounted on a leather belt, held in place by the washers. The space between the plate and the washers suggests a leather thickness of c. 3-4 mm. The severe wear on the top and bottom edges of the plates indicates that the belt could have been no wider than the plates since the leather would otherwise have protected the metal from scuffing.

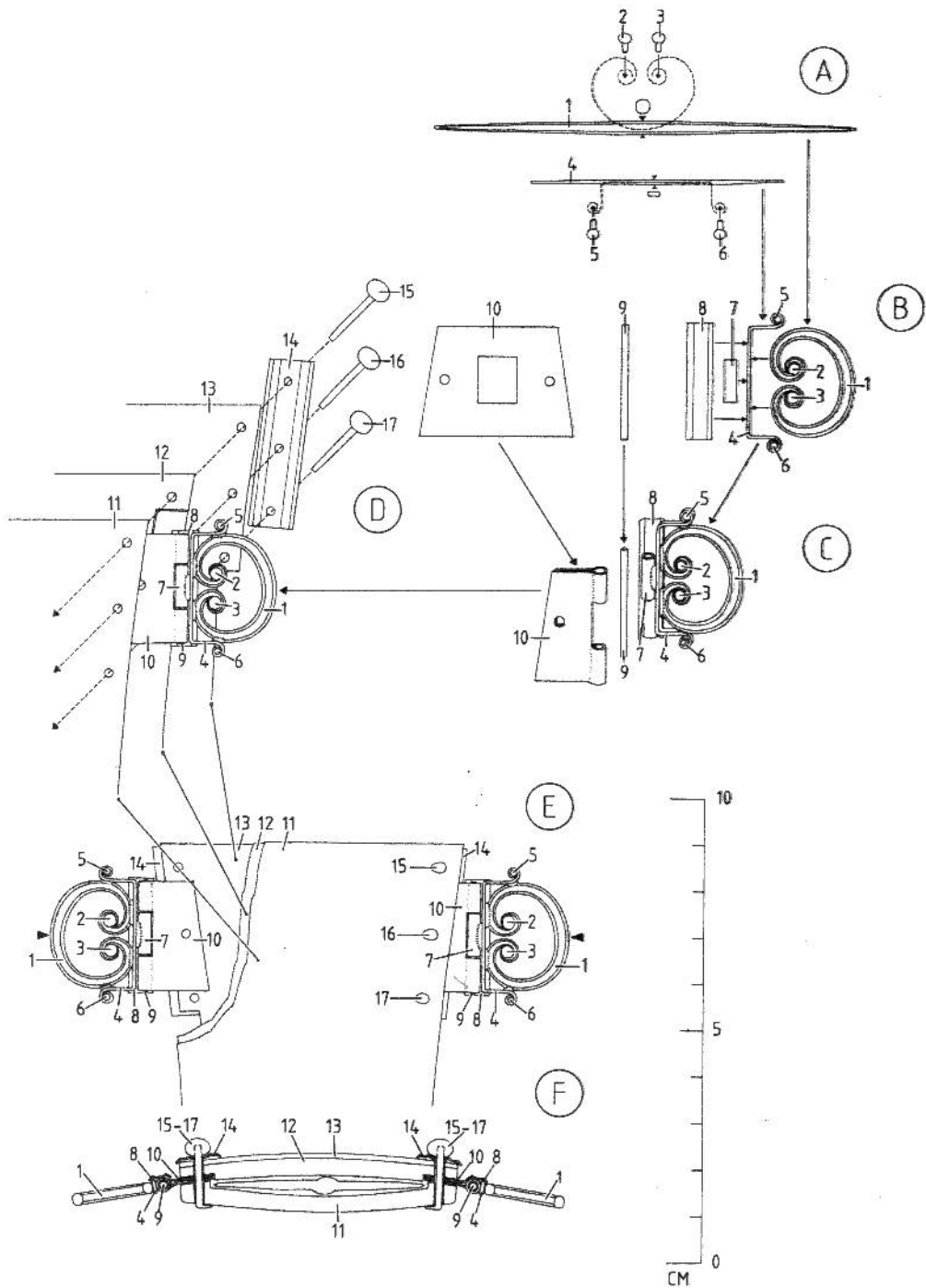


Fig.8: Construction diagram of the sheath

If all the components of the belt have indeed been recovered, the arrangement may be proposed as follows. The two suspension loops, with a space between for the dagger, fall on the left hip together with plate C8, which was probably placed with the additional rivet towards the perforated tongue of the leather belt. On the right, the buckle plate and four other plates would run to just over the hip, leaving the back of the belt uncovered.

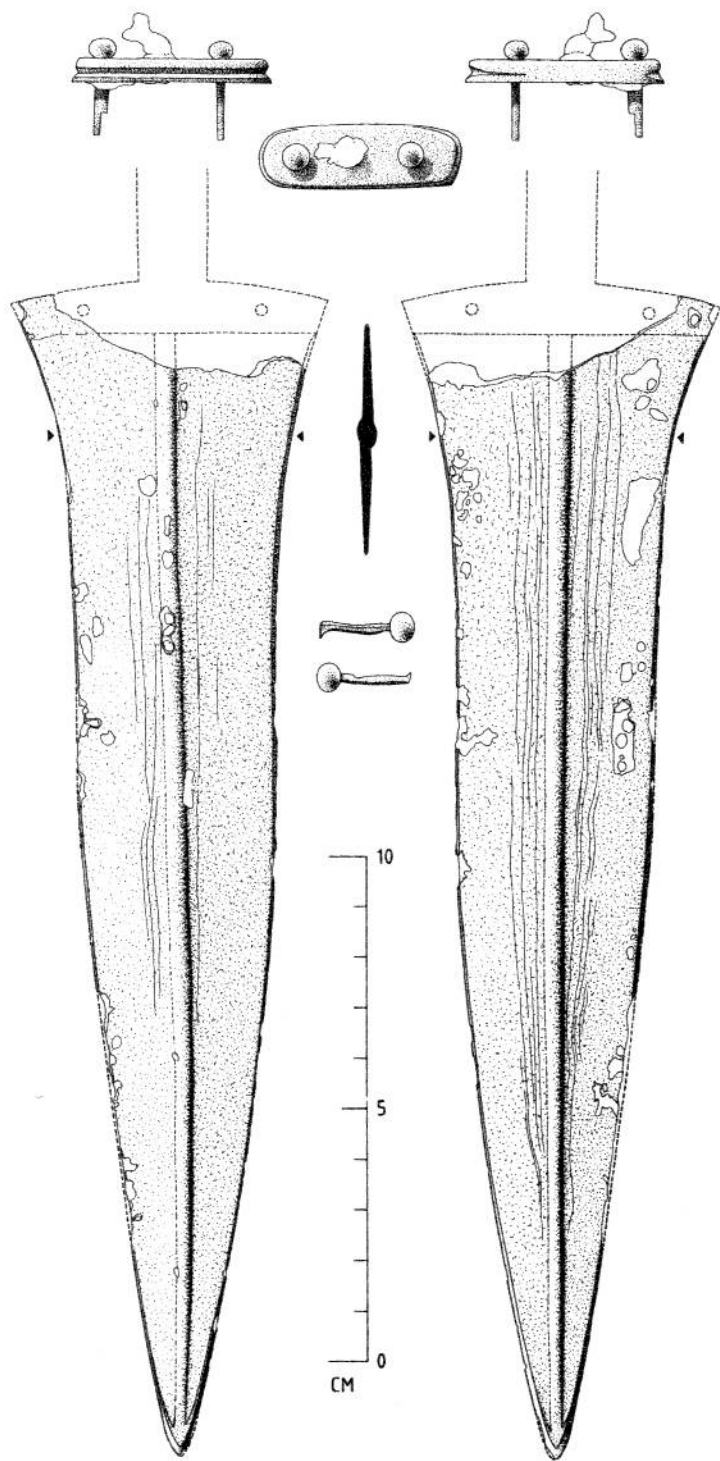


Fig. 9A: (Above) dagger blade
B: (Right) sheath

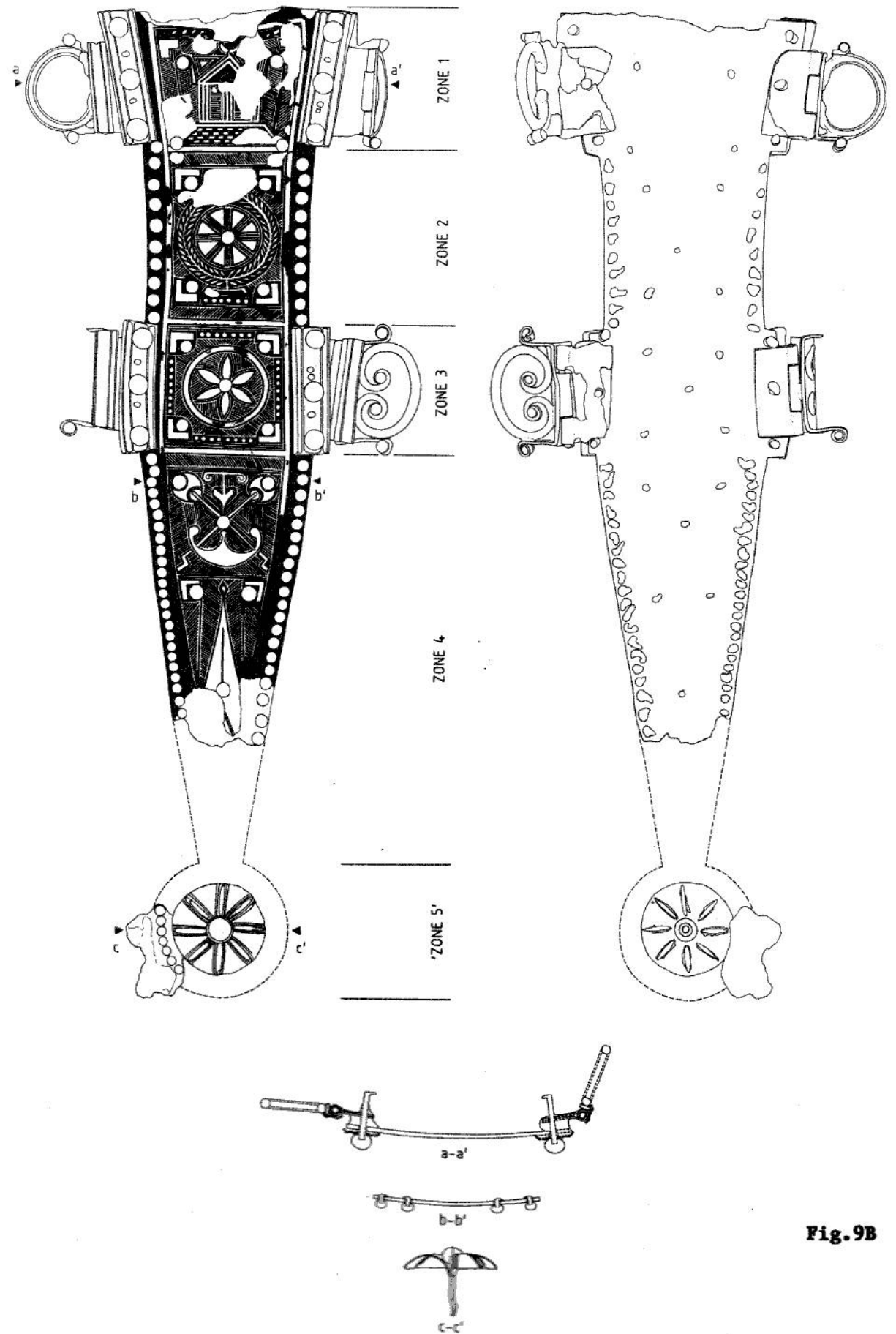


Fig. 9B

V USE AND DATING OF THE DAGGER

Whether daggers and their sheaths were issued as a standard item of equipment to every legionary is a matter of debate. Certain authorities regard the daggers with inlaid sheath plates as a regular item of equipment,²² while others would only consider the undecorated sheaths as such.²³ The dagger from Velsen I may be able to shed some light on the subject. If the dagger and belt were issued centrally, one would assume that matching sets would be involved. At Velsen, however, this is by no means the case. The sheath plate is beautifully finished and the softer metal elements such as the silver studs show hardly any signs of wear. This item would, therefore, seem to have been relatively 'new' at the time of loss. In sharp contrast are the belt fittings which are severely worn, especially along the edges and on the buckle. In addition, the silver foil is a later embellishment. At the outset, the belt fittings were plated on the front only, as is still visible where the overlying foil has worn off. Furthermore, it is clear that the belt plates had undergone extensive repairs and alterations as is particularly obvious on two of the plates (Fig. 5.4 and 5.8) and from the differing constructions used in the hinge attachments of both of the suspension plates and of the buckle. In short, the belt gives the impression of an ill-assorted collection of salvaged bits and pieces fitted together on a single strap. The bending back of one of the short ends of three of the four belt plates could have been done to adjust their length. In its final form, the belt would seem to have consisted of assorted old pieces which were rather amateuristically brightened up by folding silver foil around the plates and the discs. The scrappy composition and the crude finish stand in marked contrast to the splendid sheath, and can only mean that the two were only brought together at a later stage. This would argue against an 'officially' issued set. I therefore share Webster's view that the decorated sheaths were individual additions to the ordinary, plain equipment issue.²⁴ Even today, professional soldiers especially possess an irresistible urge to individualise the impersonal appearance of the uniform issue by the addition of all kinds of personal details.

With due caution, we may suggest that the decorated daggers sheaths were an addition to the standard issue, perhaps even in the character of an officially sanctioned distinction - length of service or, in view of the widespread use of laurel and oak wreaths, for bravery - and to some extent comparable to modern medals. It may, furthermore, be significant that other than the dagger and fibula, no metal equipment accompanied this soldier. He was not buried in his uniform: helmet, sword and armour are absent. This emphasises the personal nature of the dagger, which might otherwise also have been withheld at burial. Incidentally, the simple nature of the belt fittings does not suggest that a very high ranking soldier was concerned.

In the specific case of the dagger from Velsen I, it may be concluded that the dagger and its sheath was added to a belt which had seen long service, but that it was itself not long in use before being deposited in the well. Given that the soldier was buried in the well around 28 AD, the slight wear of the dagger suggests a date of

manufacture of less than five years previously, while the extensive wear of the belt fittings may make a date of before 20 AD more appropriate. Scott regards the Velsen dagger as the earliest of his Type B.²⁵ It is then curious that it is this, the earliest dagger, which carries a temple on its sheath, a motif which Scott himself considers to be a 'late' characteristic.²⁶ His contribution to a previous Roman Military Equipment Research Seminar must, however, be regarded as a valuable stimulus to the complete publication and analysis of Roman daggers together with their fittings. It is to be hoped that in future we will see more of these items of equipment published by province and in greater depth and detail than has heretofore been the case.²⁷

NOTES

1. MOREL, 1986; 1988; MOREL & DE WEERD, 1980; 1981
2. Tacitus Ann. 4.72-74
3. SCHIMMER, 1979
4. Ibid, 109-113
5. Ibid, 111; identified by Dr. W.A. Casparie, Biologisch-Archeologisch Instituut, Rijksuniversiteit, Groningen
6. SCHIMMER, 1979, 111, but not included on the illustration.
7. Ibid
8. Ibid. fig 6, illustrated in colour in BLOEMERS, LOUWE KOOYMANS & SARFATY, 1981, 81.
9. CONSTANDSE-WESTERMANN, 1981; 1982. Two of the missing bones recently came to light. Neither author can agree with the identification of the skeleton as 'Frisian'. Not only is this inherently unlikely at this date, but in addition, no NW European Roman population was included in the comparative skeletal analysis
10. See also SCHIMMER, 1979, 113
11. VAN DRIEL-MURRAY, 1985, fig 13; 1986, 141, fig. 2
12. SCHIMMER, 1979, fig. 9; HAALBOS, 1984/85, fig. 30 no. 3
13. The ring has previously been described erroneously as 'bronze' (cf. ERDRICH, 1986, no. 3.024). For the gem see BOSMAN, forthcoming, no. 37 with further refs.
14. GLASBERGEN & VAN LITH, 1977, nos 44, 45
15. SCOTT, 1985, Appendix 1; cat. no. 9
16. Ibid, Appendix 2; cat. no. 41
17. YPEY, 1960-61, 337

18. SCOTT, 1985, 163-4
19. See for example, *ibid*, 1985, fig. 1, cat. nos 5, 48, 61; fig. 2, cat. no. 65
20. *Ibid*, Appendix 1, cat. no. 10; THOMAS 1971, Pl. 76,2. The well preserved hilt of a dagger from Vechten (YPEY 1960-61, fig 9) has been used as the basis for the reconstruction on Fig. 5
21. E.g. BAUCHHENESS, 1977, Taf. 27.1-2, 28.2, 29.1-2, 30.2
22. Recently SCOTT, 1985, 181, note 1
23. Recently WEBSTER, 1985, 214
24. *Ibid*, 214
25. SCOTT, 1985, 166
26. *ibid*, 176
27. All drawings are by J.-M.A.W. Morel. We would like to thank Dr. C. van Driel-Murray for the English translation, and F. Gijbels for the photographs.

BIBLIOGRAPHY

- BAUCHHENESS, G., 1977: Römische Grabmäler aus den Randgebieten des neuwieder Beckens, Festschrift Hand-Jürgen Hundt, Teil 2: Römerzeit. Jahrbuch des Römisch-germanischen Zentralmuseums Mainz 22, 18-95, Tafs. 27-37
- BISHOP, M.C. (ed), 1985: The Production and Distribution of Roman Military Equipment. Proceedings of the Second Roman Military Equipment Research Seminar BAR International Series 275 (Oxford 1985)
- BLOEMERS, J.H.F., L.P. LOUWE KOOYMANS & H. SARFATY, 1981: Verleden Land (Amsterdam 1981)
- BOSMAN, A.V.A.J., forthcoming: Romeinse gemmen uit Velsen (Vervolg 2), Westerheem (forthcoming)
- CONSTANDSE-WESTERMANN, T.S., 1981: Het skelet uit de Romeinse waterput te Velsen (N.-H.): een nadere beschouwing, Westerheem 30, 1981, 53-65
- CONSTANDSE-WESTERMANN, T.S., 1982: A skeleton found in a Roman well at Velsen (Province of North Holland, the Netherlands), Helinium 20, 1982, 134-169
- CRUMMY, Ph., 1977: Colchester: the Roman Fortress and the Development of the Colonia, Britannia 8, 1977, 65-105

- DRIEL-MURRAY, C. VAN, 1985: The production and supply of military leatherwork in the first and second centuries AD: a review of the archaeological evidence, in BISHOP, 1985, 43-81
- DRIEL-MURRAY, C. VAN, 1986: Shoes in perspective, Studien zu den Militärgrenzen Roms III. 13. Internationaler Limeskongress Aalen 1983, (Stuttgart 1986), 139-45
- ERDRICH, M., 1986: Die Metallfunde aus Velsen. Undergraduate thesis, IPP (Amsterdam 1986)
- GLASBERGEN, W. & VAN LITH, S.M.E. 1977: Italische und frühe südgalische Terra Sigillata aus Velsen (Provinz Nord-Holland), Rei Cretariae Romanae Fautorum Acta 17/18, 1977, 5-21
- HAALEBOS, J.K., 1984-5: Fibulae uit Maurik, Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden Supplement 65, 1984-5 (1986)
- MOREL, J.-M.A.W., 1986: The early Roman defended harbours at Velsen, North Holland, in Studien zu den Militärgrenzen Roms III. 13. Internationaler Limeskongress Aalen 1983. (Stuttgart 1986) 200-212
- MOREL, J.-M.A.W., 1988: De vroeg-Romeinse versterking te Velsen I, Fort en haven. (Thesis, Amsterdam 1988)
- MOREL, J.-M.A.W. & M.D. DE WEERD, 1980: Early Roman harbours at Velsen, in, W.S. Hanson & L.J.F. Keppie (eds): Roman Frontier Studies 1979: Papers presented to the 12th International Congress of Roman Frontier Studies (BAR International Series 71) (Oxford 1980) 475-494
- MOREL, J.-M.A.W. & M.D. DE WEERD, 1981: The early Roman harbour in Velsen, Netherlands, in B. Hobley (ed) Waterfront Archaeology in Britain and Northern Europe (Council for British Archaeology Research Report 41) (London 1981), 70-71
- SCHIMMER, J., 1979: De Romeinse waterputten te Velsen, Westerheem 28, 1979, 109-116
- SCOTT, I.R., 1985: First Century Military Daggers and the Manufacture and Supply of Weapons for the Roman Army, in BISHOP (ed) 1985, 160-213
- THOMAS, E.B., 1971: Helme, Schilde, Dolche. Studien über römisch-pannonische Waffenfunde (Amsterdam 1971)
- VONS, P., 1977: Muizen in de Romeinse tijd te Velsen, Westerheem 26, 1977, 278-9
- VONS, P., & BOSMAN, A.V.A.J., 1988: Inheemse boeren bezochten de verlaten Romeinse versterkingen Velsen I en II, Westerheem 37, 1988, 1-16
- WEBSTER, G., 1985: Decorated Dagger Scabbards Found in Britain, in BISHOP (ed) 1985, 214-219

YPEY, J., 1960-61: Drei römische Dolche mit tauschierten Scheiden aus niederländische Sammlungen, Berichten van de rijksdienst voor het Oudheidkundig Bodemonderzoek 10-11, 1960-61, 347-362