

BRONZE AGE METAL AND AMBER IN THE NETHERLANDS (II:2):
CATALOGUE OF THE PALSTAVES

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ABSTRACT: Catalogue of the bronze palstaves of the Middle and Late Bronze Age of the Netherlands, ordered by types. The palstaves are broadly divided into the types imported from northern, Central and western Europe and those characteristic of this region. Among the regional types, some are shown on the basis of distribution maps to have been current chiefly in the north of the Netherlands; others chiefly in the south; and some common to both areas.

KEYWORDS: Netherlands, Bronze Age (Middle and Late), palstaves, types, imports, regional production, distributions.

1. INTRODUCTION

In section I of this work (Butler, 1992) we presented a study of the more important graves and hoards of bronze and amber found in the Netherlands. Section II: 1 (Butler, 1995/1996) comprises a catalogue of its bronze flat axes, flanged axes and flanged stopridge axes. This present section (II:2) contains a catalogue of the bronze palstaves. The aim has been to make it as complete as possible, although there will inevitably be examples which we have missed. We have recorded 263 specimens.

The presentation is typological, taking distributional differences into account. Each type has been given a code name, which is intended to be mnemonic as well as descriptive, and also convenient for employment in a data base. We have chosen this system as having clear advantages above, for example, the use of type-names based on the find-spot of a single prototypical specimen, as has become customary in the *Prähistorische Bronzefunde* series and elsewhere. It should also be more convenient in use than type-names based on the main area of occurrence. For example, in the German literature type-names for palstaves flourish such as *Germanisch*, *Nordisch*, *Nordeuropäisch*, *Nordwestdeutsch*, *Liineburgisch*, *Osthannoversch*, etc. Where each of these types begins and where it ends, typologically and in distribution, tends to differ from author to author; and the picture becomes even more complicated when one must deal with their varied *Mischformen*.

It may also be suggested that type designations of the character 'Form CI2a' or 'Class 5, Group 2' do not lie easily in the memory, and can seldom be deciphered without a visit to the library. We therefore hope and trust that the code system here employed will – given a modest attempt at acclimatization on the part of the reader – prove to be more convenient than other systems of type designation. At any rate, it should function

optimally in a publication such as this one, where the code designations are coupled with the typologically grouped drawings and descriptions of the objects concerned, and with the applicable distribution maps.

The following ABC will explain the code as it is here employed: AX signifies an axe, AXP a palstave, AXPL a looped palstave (in Part II: 1 we have already used AXF for flat axe, AXI for low-flanged axe, AXR for high-flanged axe, AXS for stopridge axe). Further descriptive features or subdivisions are indicated by letters or punctuation characters added on the right:

A = arch-shaped plastic ornament on the sides; B = belted stopridge; C = 'crinoline' blade outline; F = flanges (raised edges) on the blade part; G = groove; H = parallel-sided; J = sharply everted blade tips (J-shaped); M = midrib or midridge; MI = midrib, narrow; MB = midrib, broad; MR = midridge; MT = midrib, trumpet-shaped; MV = midrib, V or triangular shaped; MY = midrib, Y-shaped, or trident; N = narrow-bladed; P = plain palstave (i.e., without arches on the sides, midrib or flanges on the blade part); S = sinuous (ogival) blade outline; W = wide-bladed (blade width c. => 5 cm); ^ = inverted V shape; trapeze-shaped; <> = 2-faceted (sides); > = large size; < = small size; >< = medium size.

For the imported palstave types present in the Netherlands, we have as much as possible employed the type-names currently in use in their area of origin. For the types connecting with Western Germany, this means in practice chiefly the nomenclature of Kibbert (1980), though we depart from his usage when it seems necessary in the light of our own material. We have adopted an arbitrary convention with respect to the extensions following the code-designation AXP. We put the extension in lower-case letters if it refers to a conventional type-name or cultural area: thus 'ne' for North European, 'we' for western European, 'ce' for

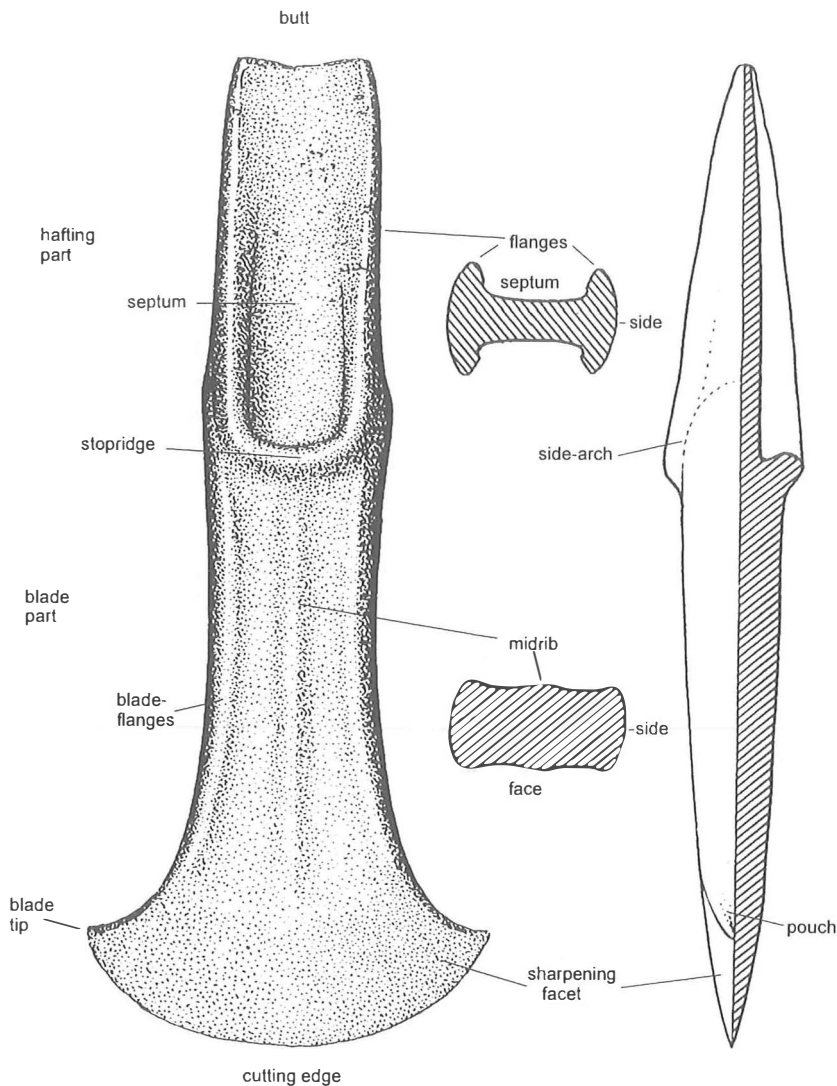


Fig. 40. Features of palstaves: terminology here employed.

'Central European'. If the extension is capitalized, it is descriptive: i.e., 'F' for 'flanged blade' or 'S' for sinuous outline.

Geographical expressions here abbreviated with lower-case letters with reference to palstave types are as follows: ap = Acton Park; boh = Bohemian; ce = Central European; iber = Iberian; nd = Normandy and related; ne = Northern European; nr = (Type) Niedermockstadt, (Var.) Reckerode; o = osthannover; ox = (Type) Oxford; port = (Type) Portrieux; ros = (Type) Rosnoën; stib = (Type) Stibbard; we = Western European.

The following additional symbols are used in the catalogue, taking advantage of some of the graphic possibilities inherent in the ASCII set: () = biconvex;) (= biconcave; [] = rectangular; { } = brace-shaped profile (i.e., receded flanges, projecting stopridge); [] = flat septum.

References to literature frequently include the term

Verslag. This refers to the Annual Report of the museum concerned. The citation *Jaarverslag R.O.B.* refers to the Annual Report of the *Rijksdienst voor het Oudheidkundig Bodemonderzoek* at Amersfoort. Other literature citations are located in section 7 below.

Unfortunately we have not been able to take into account the work, currently in press in the *Prähistorische Bronzefunde* series, of F. Laux on the axes of Niedersachsen, however desirable this would have been. When it becomes available it will no doubt require some amendments on our part, which we hope to be able to deal with in due course. It will also enable the completion of the distribution patterns of our regional types by incorporating the parallels found across the present-day national border. For Britain, the PBF volume of Schmidt & Burgess (1981) provides the key to North British and some southern British axe types that occur in the Netherlands as imports; but, regrettably, there is not as

yet a comprehensive palstave typology for southern Britain, northern and western France, and Belgium. It will be obvious that we have made much use of the many and various works that deal extensively with palstaves listed in the bibliography.

2. GENERAL REMARKS CONCERNING PALSTAVES IN THE NETHERLANDS

The midribs and blade-part flanges present and which help define our non-plain types are presumably features which in origin were functional, i.e. permitting a reduction in the amount of metal required while preserving the strength of the blade. Yet few of the palstaves present in the Netherlands have flanges and midribs prominent enough so that they would really have contributed significantly to the strength of the tool. They have in fact become vestigial features.

That native palstaves in the Netherlands were primarily tools is an inescapable conclusion. Hardly any have baroque forms or decoration to suggest that they were designed as weapons or prestige objects; and the few exceptions belong to imported types, such as the Scandinavian and North German 'belted palstaves' (AXP:B..., below) or the West German *Var.* Reckerode examples (type AXP:ce.nr below, Cat.Nos 238 and 239). Very many show signs of heavy use and of drastic re-sharpening; this we would hardly expect on weapons or prestige objects. Many have evidently had their blade parts shortened, sometimes drastically, in the re-sharpening process. Re-hammering of the blade is often attested by what we herein call 'pouches' at the base of

the sides alongside the cutting edge (a more compact designation than Kibbert's *Schneideneckrandleisten*). Re-grinding is often indicated by sharpening facets (concentric with the cutting edge or straight-ground) on the lower part of the blade (cf. fig. 40).

This does not, of course, exclude the possibility that locally made palstaves may also sometimes have been used as weapons. This, was, for example, very probable in the case of the wide-blade palstave from Sleenerzand (Cat.No. 359), one of the rare instances of a native palstave deposited in a grave, and therefore presumably serving the role of a battle-axe; that it was accompanied by a set of bronze arrowheads emphasizes the martial character of this interment.

The majority of the palstaves are plain (AXP: P...), i.e. without special features such as midrib or midridge, flanges along the blade portion, or arch-shaped side ornament. Blade width is generally moderate (c. 4 to 6 cm); a very wide blade (6 to 7.7 cm) is found chiefly on imported palstaves from western Europe (the widest-bladed being the 'Acton Park' palstaves in the Voorhout hoard), while narrow-bladed palstaves are very uncommon. Many have a more or less parallel-sided blade part then abruptly expands toward a fairly wide cutting edge (in our code, J blade tips).

The suitability of our palstaves for wood-working has been demonstrated amply by the experimental use of bronze copies of palstaves for the construction, in a number of places in the Netherlands, of replicas of Bronze Age houses. There is no shortage of actual evidence for extensive wood-working in the Netherlands in the period in which palstaves must have been the most available wood-working tool. The single or

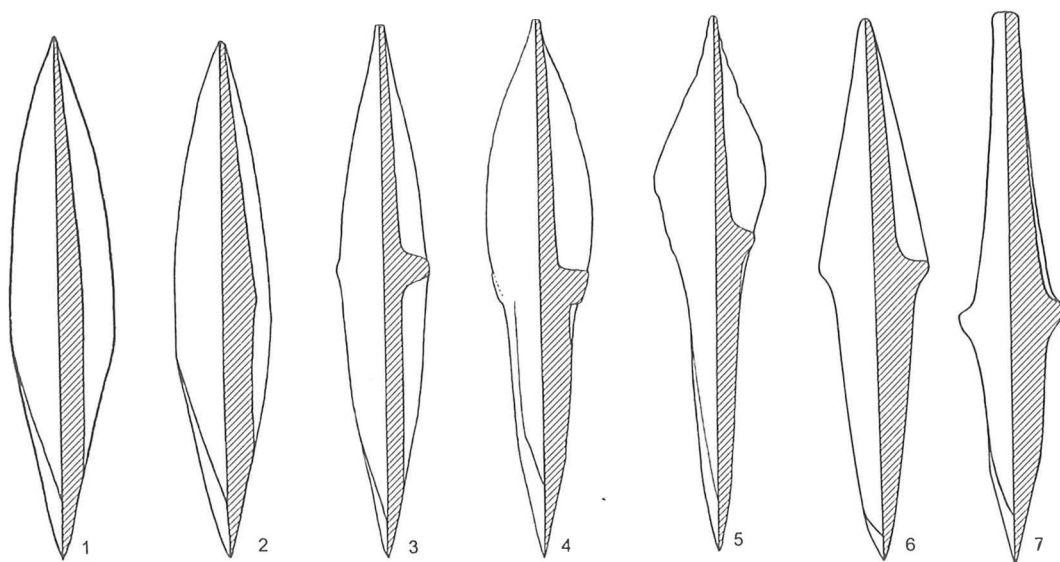


Fig. 41. Side views and longitudinal sections illustrating the development from high-flanged axes to later palstaves in the Netherlands. 1. High-flanged axe (AXR); 2. High-flanged axe with transverse medial ridge; 3. High-flanged stopridge axe (AXS); 4. Palstave with () flanges on hafting part (especially as on imports from Northwest France and Britain); 5. Palstave with <> flanges on hafting part (as on imports from SW Britain); 6. Palstave with ^ flanges; 7. Palstave with {} profile (reduced flanges, projecting stopridge).

multiple timbercircle surrounding a tumulus has become the most important defining feature for the Middle Bronze Age B phase of Lanting & Mook (1977). The wooden post-supported long house, with attendant auxiliary buildings, byres, storage structures, and enclosures, also proliferates in this period. Amongst other wooden structures we may mention a contemporary timber-built avenue (Van Giffen, 1949) and bog trackways (Casparie, 1987), plus the still unique Bargerosterveld ritual structure.

Among the 263 palstaves, 36 are looped. One, possibly two of the specimens here listed are chisels rather than axes (certainly Cat.No. 243, possibly Cat.No. 226). There are no adzes.

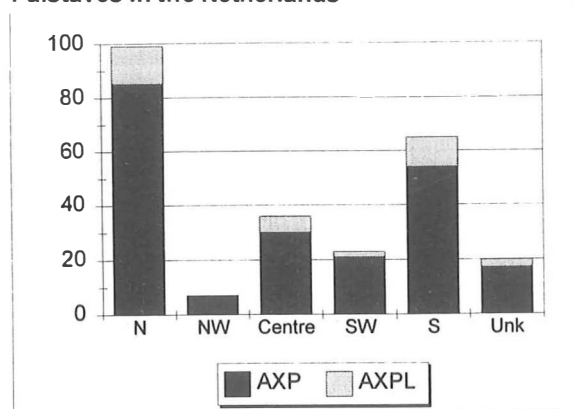
3. EXOTIC VERSUS LOCAL AND REGIONAL PALSTAVE TYPES

It should be borne in mind that palstaves were only one category of axes that were in use in the Middle and Late Bronze Age in the Netherlands. In the Middle Bronze Age, flanged axes, and especially flanged stopridge axes (catalogued in Part II:1) were also important. In the northern and central parts of the country the stopridge axes of Vlagtwedde type (Butler, 1995/1996: pp. 230-236) were an important local type. In the southern part of the country, winged axes (to be catalogued in a subsequent section) made their initial appearance in the latter part of the Middle Bronze Age.

In classifying our 263 palstaves, a comparatively small number (66 examples) can be assigned to recognized types characteristic of the South Scandinavian, North German, Middle West German or British-Northwest French cultural areas. These we have mostly catalogued under the type-names with which they are known in their area of origin.

The overwhelming majority of our palstaves do not,

Palstaves in the Netherlands



Graph 1. Number of palstaves (n=263), unlooped (AXP) and looped (AXPL).

Table 1. Classified palstaves in the Netherlands. Unlooped (AXP) and looped (AXPL), by region. N: Friesland, Groningen, Drenthe, Overijssel, Flevoland; NW: Noord-Holland; Centre: Gelderland, Utrecht; SW: Zuid-Holland, Zeeland; S: Noord-Brabant, Limburg; Unk: Unknown province; ne: northern Europe; ce: Central Europe; we: western Europe; regional: origin within the Netherlands or adjacent areas.

Region	N	NW	Centre	SW	S	Unk	Total
AXP	85	7	30	21	54	17	214
AXPL	14	0	6	2	11	3	36
Total	99	7	36	23	65	20	250

Origins	N	NW	Centre	SW	S	Unk	Total
ne	8	2	2	0	0	1	13
ce	0	0	1	0	2	2	5
we	6	2	8	20	9	2	47
regional	85	3	25	3	54	15	185
Total	99	7	36	23	65	20	250

AXP origin	N	NW	Centre	SW	S	Unk	Total
ne	8	2	2	0	0	1	13
ce	0	0	1	0	1	2	4
we	4	1	4	19	6	2	36
regional	73	4	23	2	46	12	160
Total	85	7	30	21	53	17	213

AXPL origin	N	NW	Centre	SW	S	Unk	Total
ne	0	0	2	0	0	0	2
ce	0	0	0	0	1	0	1
we	2	0	4	1	3	2	12
regional	12	0	0	1	8	1	22
Total	14	0	6	2	12	3	37

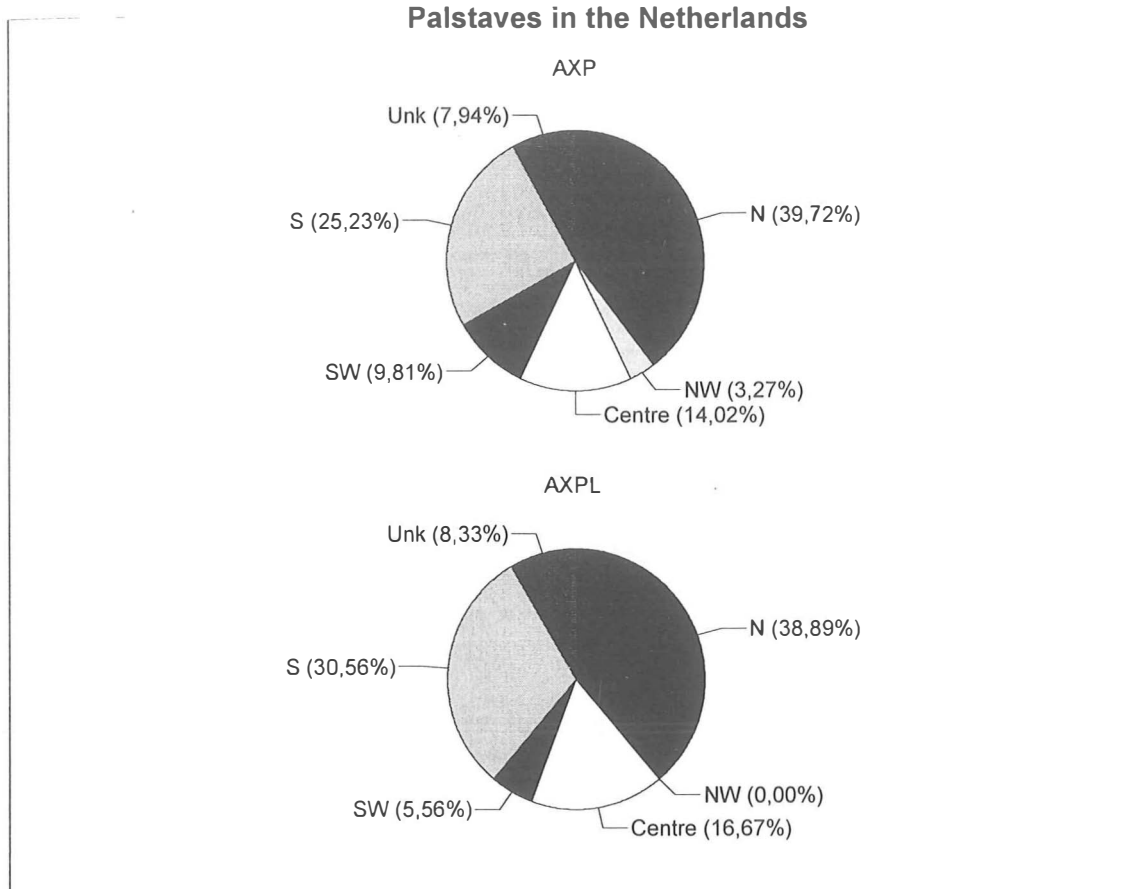
Number of Cat.Nos	263
Not classifiable (Cat.Nos 330-340)	-11

Rest	252
1 false (Didam)	-1

Rest	251
1 bronze mould	-1

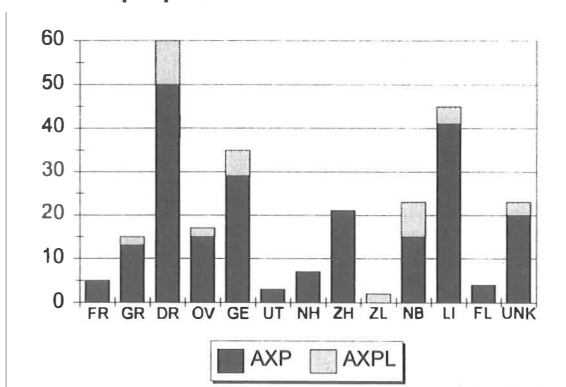
Rest	250
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however, fit into those import groups, and seem, on the basis of their distribution pattern, to represent local or regional production. 'Regional' here means products of a northern region (the provinces of Groningen, Drenthe, Friesland, Overijssel, together with the adjacent parts of



Graph 2. Percentages of unlooped palstaves (AXP) and looped (AXPL), by region.

Palstaves per province



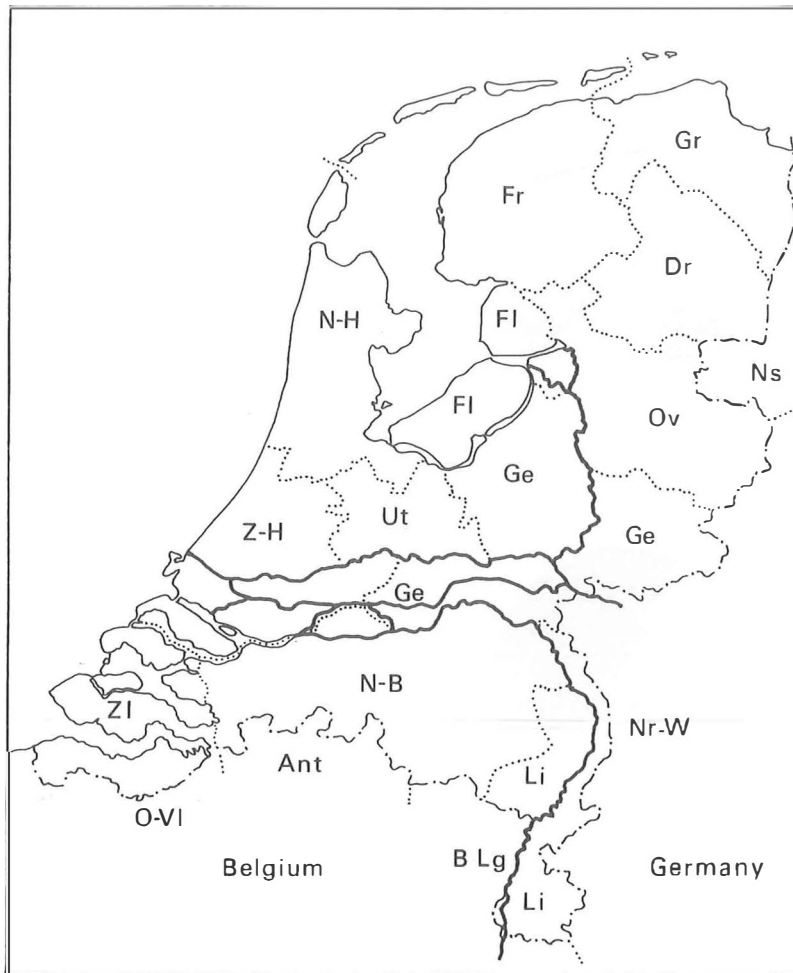
Graph 3. Number of palstaves, unlooped (AXP) and looped (AXPL) by province in the Netherlands.

Map 20 Northwest Germany) and of a southern region (provinces of Limburg and eastern North Brabant, part of Gelderland, with the Belgian Maas region and Map 21 the German Nordrhein-Westfalen). We have found the most useful features for classifying these to be: 1)

the outline, and 2) the presence or absence of certain specific features on the face or sides, such as an arch-shaped side ornament, a midrib or midridge, or a side loop (figs 40 and 41).

No one of such features is confined in its occurrence to a single type of palstave, so it is always a combination of features that can define a type. The scarcity of associated finds of palstaves in the Netherlands and adjacent areas renders it impossible to use fine chronological distinctions as a basis for a division into types. More useful for this purpose, however, are typological distinctions based on the differential occurrence of attribute combinations from area to area. The distribution maps are therefore a major tool in helping to decide which features are to be considered most significant for distinguishing types.

In the following, we have made a first broad division into: (Group I) import types of North European origin; (Group II) import types of West European origin; (Group III) those of Central European origin; and (Group IV) palstave types of local or regional character.



Map 20. Provinces of the Netherlands and neighbouring areas. Provinces of the Netherlands: Fr. Friesland; Gr. Groningen; Dr. Drenthe; Ov. Overijssel; Ge. Gelderland; Ut. Utrecht; N-H. Noord-Holland; Z-H. Zuid-Holland; N-B. Noord-Brabant; Li. (Ned.) Limburg; Fl. Flevoland; Zl. Zeeland. Belgian provinces: O-Vl. Oost-Vlaanderen; Ant. Antwerpen; B Lg. (Belg.) Limburg. German *Länder*: Ns. Niedersachsen; Nr-W. Nordrhein-Westfalen. Dot-dash line = national boundary; dotted line = provincial boundary.

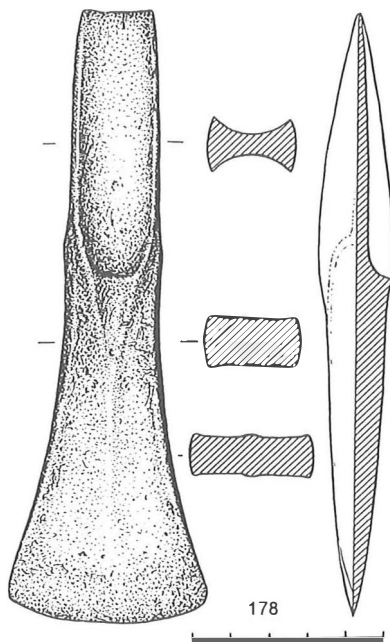


Fig. 42. (Type AXP:ne.MY) 178: Emmercompascuum, Dr.

3.1. Group I. Palstaves of North European types (combined distribution: Map 22)

3.1.1. *Type Ilsmoor (Kibbert); newly re-named Typ Neukloster (Laux) (AXP:ne.MY)* (fig. 42)

Only one example in the Netherlands.

Definition: A distinctive type, with () flange outline; U stopridge; flanges flanking blade portion with)(section. Blade part with large Y rib ornament on face; arch-shaped plastic ornament on sides. Detailed discussion in Kibbert, 1980: pp. 197-199.

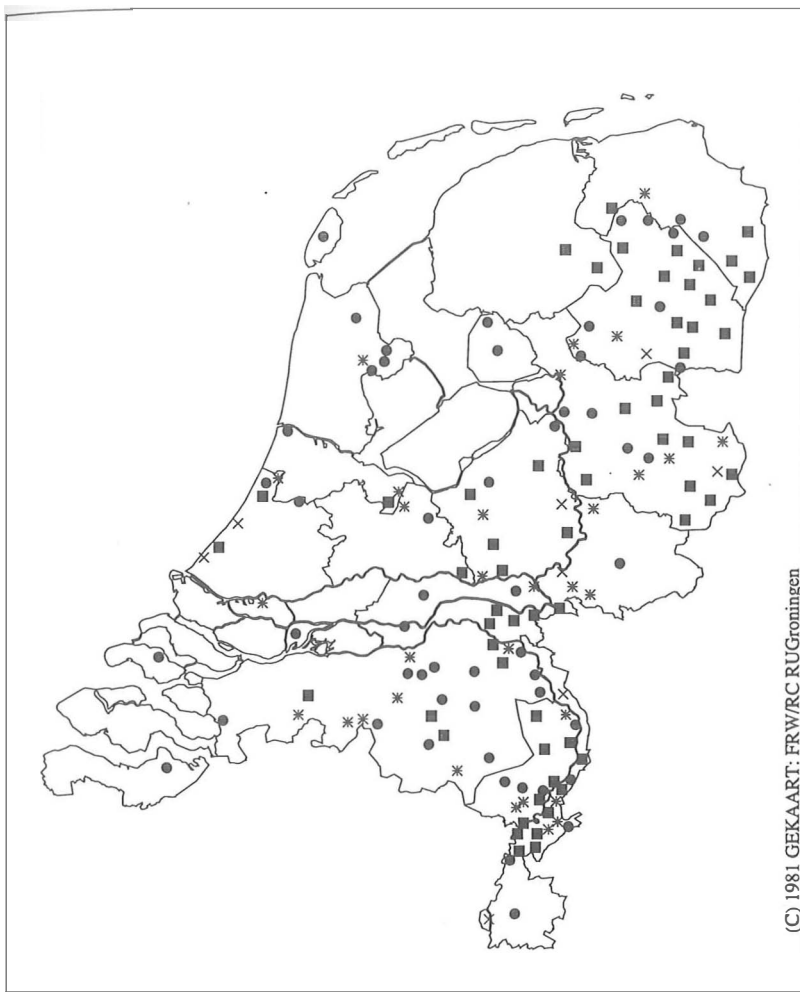
CAT.NO. 178. EMMERCOMPASCUUM, GEMEENTE EMMEN, DRENTHE.

L. 16.5; w. 5.3; th. 2 cm. Weight 377 gr. () flange outline;)(septum. Blade part with faces concave, sides rounded; slight flanges, becoming arch-shaped plastic ornament on the sides; large ribbed Y on face. Blade sharp. Patina: brownish (partly removed). Surface rough. Found 1906 in peat by labourer J. Heinen at a depth of c. 2 m. Museum: Assen, Inv.No. 1908/VII.4. (DB 108)

Map reference: Sheet 18C, c. 267/537.

References: Verslag, 1908: p. 7, No. 9; Butler, 1963a: Pl. VII: 1.

Parallels and discussion: Kibbert's type-name is derived from the Ilsmoor hoard in Kr. Stade, but this find is now



- * high-flanged axe
- X stopridge axe
- palstave
- more than one MBA axe

Map 21. *Gemeenten* in the Netherlands with at least one Middle Bronze Age flanged axe, stopridge axe or palstave (*gemeente* division as of 1986).

localized under the place-name Neukloster (newest publication: Wegner, 1996: p. 208, Abb. 110, a fine colour photo; p. 380, Kat.Nr. 13.7). This find should not be confused with another palstave hoard from Neukloster (Wegner, 1996: pp. 380-381, Kat.Nr. 13.8) containing palstaves of Kibbert's Type Kappeln A. The palstaves of Ilsmoor/Neukloster type occur also in e.g. the Stadelkampe hoard (Wegner, 1996: p. 379, Kat.Nr. 13.6), and the Danish Valsømagle hoard (Broholm, 1943: Find M1 and M2, pp. 211-212).

The full distribution extends from South Sweden to Emmercompascuum, but a reliable distribution map does not yet exist. That of Bergmann (1970: his *Form 1, frühestes nordwestdeutsches Arbeitsabsatzbeil*: p. 27, Karte 16, Liste 46, Taf. 3:7) shows half a dozen find-spots along the Lower Elbe, and only a few scattered finds in Northwest Germany, but this map includes some palstaves properly assignable to other types, such as those in the Wiegelsen hoard. Only three examples are known in Middle West Germany (Kibbert, 1980: pp. 197-199, Nos 476-478; 476 and 477 illustrated; see also his pp. 190 ff, with ample discussion and further references).

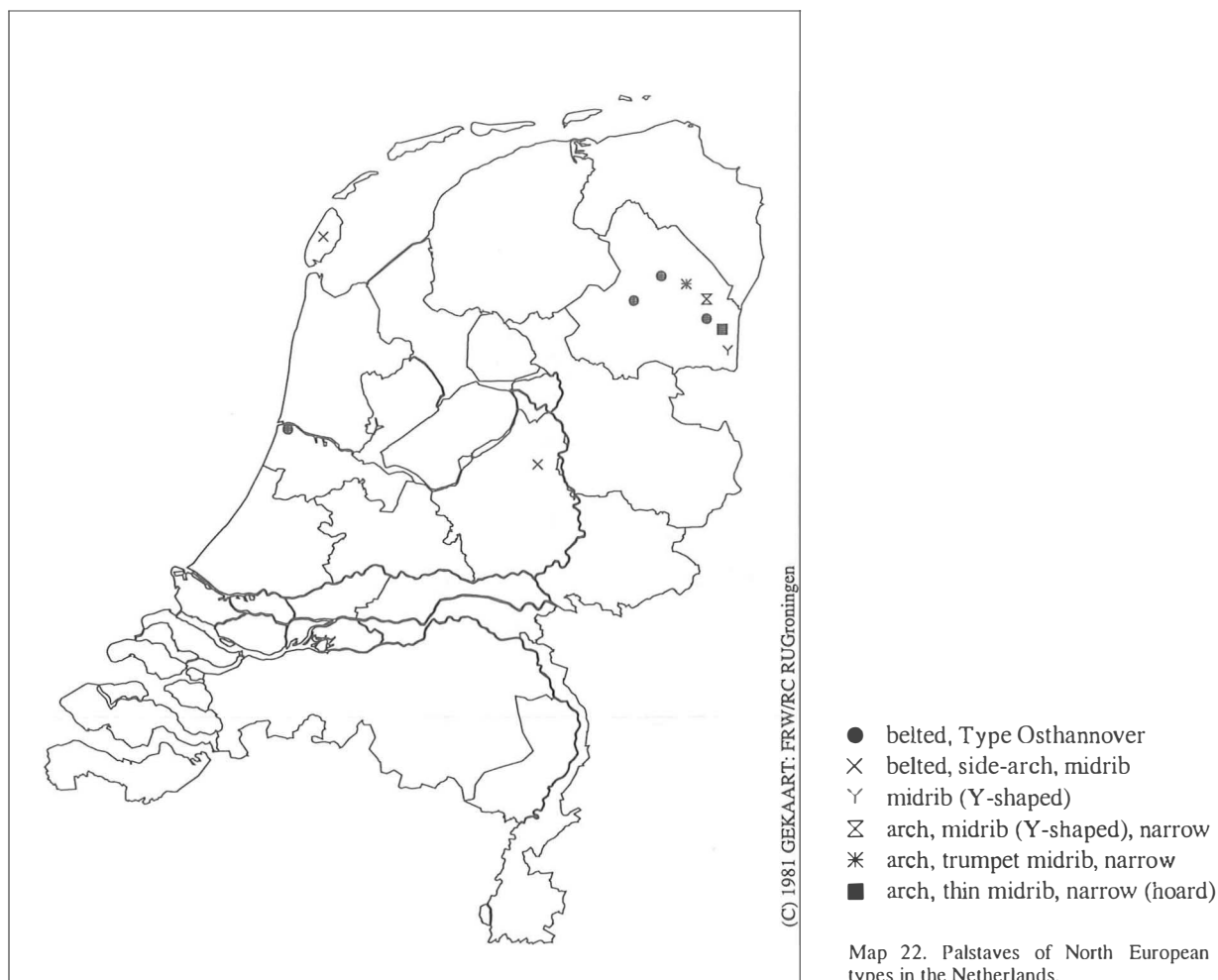
Most German authorities consider this type to be of western European origin, despite the fact that not one single example is known in western Europe. There are of course Y-ornamented palstaves in the west, but these are easily distinguishable from the North European varieties. The Emmercompascuum palstave must thus be an import from Schleswig-Holstein or adjacent parts of Northwest Germany.

Dating: Generally regarded as a characteristic form of the Ilsmoor-Valsømagle phase (cf. Sögel-Wohlde, Lochham, northern Bronze Age IB).

3.1.2. *Palstaves with plastic arch-shaped ornament on sides, midrib, and narrow blade (= Dano-Scanian 'work palstaves' of 'North European' type; otherwise, Kibbert: Typ Kappeln, Var. A; Bergmann: Nordeuropäisches Arbeitsbeil, Form 2a-c) (AXP:ne.AMN...)* (fig. 43)

Four, possibly five examples in the Netherlands; in three midrib-type variants.

Definition: fairly narrow S-outlined palstaves with)



Map 22. Palstaves of North European types in the Netherlands.

sectioned faces bearing a midrib; U septum. See Kibbert, 1980: pp. 201-206. Divisible into varieties with an arch-shaped ornament (that can be round-headed, or pointed like a Gothic arch) on the sides (Kibbert's Kappeln A); or without such a side ornament (Kappeln B). The midrib forms are a trumpet midrib (= Bergmann Form 2a and 2b); a narrow midrib (= Bergmann Form 2c); and a trident-shaped midrib.

a) *With narrow midrib (AXP:ne.AMIN)*

CAT.NO. 179. ANGELSLOO, GEMEENTE EMMEN, DRENTHE. L. 17.5; w. 4.5; th. 2.6 cm. Weight 412 gr. U septum and stopridge; narrow blade with narrow midrib. Arch-shaped plastic side ornament. Never sharpened; casting seams not worked away. Slightly bent. Butt damaged. Patina: varied green, with sandy encrustation. Breaks are patinated. Upper part corroded. Found 1982, together with Cat.No. 180, in the Emmerdennen, c. 60 cm under the surface, while digging to build a hut; both together in one shovelful. Subsequent examination of the site yielded traces of a prehistoric pit ["Met zijn tweeën in één keer op de schop. Gevonden in 1982, bij het graven van een hut, ca. 60 cm onder het oppervlak. Na-onderzoek door het BAI leverde ter plaats nog restant van een prehistorische kuil op"]. Museum: Assen, Inv.No. 1983/I.4(1). Purchased 1983 from L. Floor of Emmen. (DB 2054)

Map reference: Sheet 17H, 259.07/534.50.

References: *Nieuwe Drentse Volksalmanak*, 1985: p. 178.

CAT.NO. 180. ANGELSLOO, GEMEENTE EMMEN, DRENTHE. L. 17.5; w. 4.6; th. 2.6 cm. Weight 364 gr. Upper part severely damaged. Irregular bulges on septum above stopridge. Never sharpened; casting seams not worked away. Patina: mostly varied green, some blackish. Upper part severely corroded, slightly bent. Found together with Cat.No. 179 in Emmerdennen. Museum: Assen, Inv.No. 1983/I.4(a) Purchased 1983 from L. Floor of Emmen. (DB 2055)

Map reference: Sheet 17H, 259.07/534.50.

References: *Nieuwe Drentse Volksalmanak*, 1985: p. 178.

Discussion: The two palstaves from Angelsloo, Cat.Nos 179 and 180, constitute a small hoard. Both are rough castings, and evidently miscast. In view of the scarcity of the type in the Netherlands, it is most unlikely that these axes were cast locally. Since there would hardly otherwise be much reason for importing miscast axes, one must presume that the two Angelsloo axes were imported as founder's waste, intended for recycling locally. One may note the occurrence of similar palstaves, in a similar miscast state, in the Danish hoard with

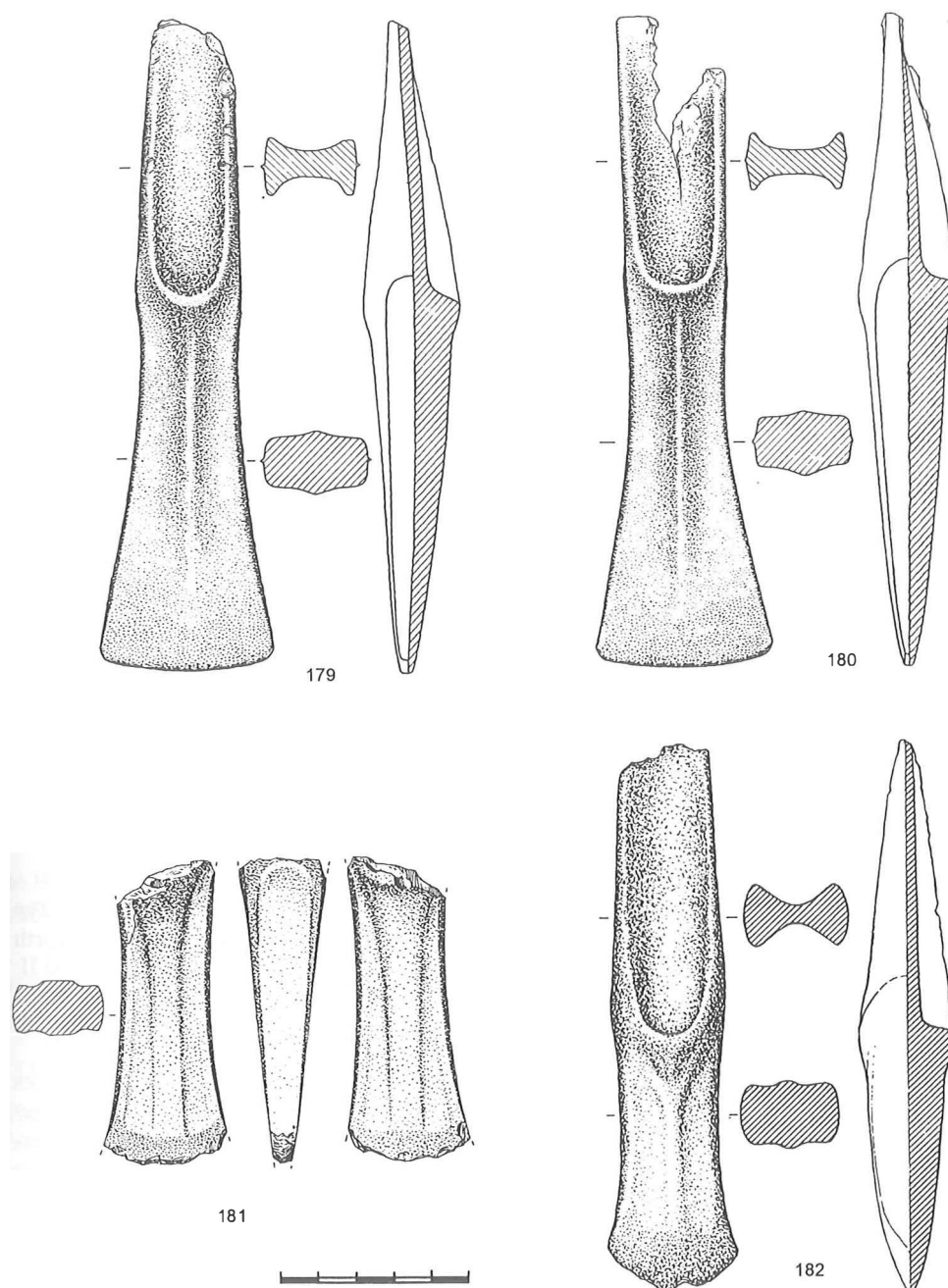


Fig. 43. (Type AXP: ne.AMIN) 179-180: Angelsloo, Dr (hoard); (Type AXP: ne. AM TN) 181: Drouwen, Dr; (Type AXP: NE. AMYN): Valthe, Dr.

founders' waste found at the Bronze Age three-aisled long-house site of Store Tyrrestrup in North Jutland, Denmark (Nilsson, 1993-1994: pp. 150-154, figs 5 and 6).

This deposit at Angelsloo must be related to the extensive settlement remains of the Middle and Late Bronze Age known from excavations, as well as bronze and amber finds, on both the sand ridge and in the adjacent bog of the area Angelsloo-Emmerhout-Bargeroosterveld (Butler, 1961; 1992: pp. 48-68; Van der Waals & Butler, 1976).

Parallels: Bergmann (1970: Karte 36, with Liste 88)

shows that his *Form 2c* palstaves, with narrow midrib and arches on the sides, are still fairly common in the Lüneburg region, but become rather scarce in Northwest Germany, with half a dozen examples along the Weser and its tributaries, and only three find-spots along the Ems. Kibbert's (1980: pp. 201-213) *Typ Kappeln, Var. A* (Nos 483-508, i.e. those with arch-ornament on the sides; distribution his Taf. 64B), is represented by eleven thin-ribbed examples (his Nos 498-508) in his West German area; thus rather more than are shown on Bergmann's map.

b) *With trumpet midrib (AXP:ne.AMTN)*

CAT.NO. 181. DROUWEN, *GEMEENTE BORGER, DRENTHE*. L. 8.2; w. 3.3; th. 2.3 cm. Blade half of palstave, with trumpet midrib, side-flanges; arch-shaped plastic ornament on sides. Edge heavily battered. Breaks ancient (patinated). Found Nov. 1986 in a pile of stones left over from harvesting potatoes. Private possession. (DB 605)

Map reference: Sheet 12G, 250.5/552.7.

Reference: Butler, 1986: pp. 150-151; p. 152 fig. 17; p. 164 note 7.

The Drouwen fragment is also a *germanisches Arbeitsbeil-Kappeln* A palstave, but has a trumpet midrib, a feature more common in the North European area; it is Bergmann's *Form 2b*, which, according to his *Karte 35* and *Liste 87*, is fairly common westward to the Weser area, but almost unrepresented in the Ems area; showing how isolated the Drouwen example really is in this region.

It is perhaps not merely coincidence that the only example of this variety in the Netherlands was found at Drouwen, since this locality was a relatively important centre of Bronze Age import from the northern North German area at various times during the Bronze Age (Butler, 1986). We do not know whether the Drouwen palstave was broken before importation (in which case it could be explained as scrap metal) or whether it was locally broken in use, or possibly ritually.

Mention should be made *en passant* of a palstave of this type allegedly found in a tumulus in Northeast England, at Driffild, E.R. Yorkshire (Butler, 1963a: p. 70; Burgess, 1976: p. 91, No. 36; Schmidt & Burgess, 1981: p. 90, No. 522). It is an old find, and not really adequately documented: "Very doubtful and ambiguous report, set down long after the event. It is not even certain whether the palstave and 'skeleton' were found together" (Burgess, 1976).

c) *With trident midrib (AXP:ne.AMYN)*

CAT.NO. 182. VALTHE, *GEMEENTE ODOORN, DRENTHE*. OOSTERESCH.

L. 14.75; w. 3.6; th. 2.6 cm. Butt irregular (damaged); U septum; Δ flanges with () sides; U stopridge, narrow S outline. Trident-shaped rib ornament on face. Blade straight-ground, with U-shaped but damaged cutting edge. Found c. 1957 by a farmer; surface find in cultivated field on the Ooster Es, c. 10 m from the *hunebedden* DXXXVI-DXXXVII. Private possession. (DB 1723)

Map reference: Sheet 17F, 256.56/540.22.

Parallels: The trident midrib is generally supposed to have been adopted into the North European repertoire from western European practice. North European finds of 'Nordic work' palstaves with trident midrib, like our Cat.No. 182 from Valthe, do not seem to be common, yet at least 16 examples were present in the large Period II hoard from Smørumøvre near Copenhagen in Denmark (Aner & Kersten, 1973: Nr. 354, pp. 120-121, esp. Taf. 69:41-50, 70:51-56). Cf. also the Frenderupgaard hoard (Sprockhoff, 1941: Taf. 35; Broholm, 1943: p. 216, hoard M.37, with photo p. 217).

d) *Kibbert's Type Kappeln B (as AXP:ne.AMTN, but without arch-ornament on sides) (fig. 44)*

One unprovenanced example in the Netherlands (AXP:ne.MTN)

CAT.NO. 183. PROVENANCE UNKNOWN.

L. 16.4; w. 3.6; th. 2.0 cm. Weight 249 gr. Butt nearly straight; narrow sinuous outline; Δ flanges with flat sides; U septum; slightly curved stopridge. Blade part with side-flanges and trumpet midrib. Straight ground; not pouched. Cutting edge sharp. Patina: brown. Surface

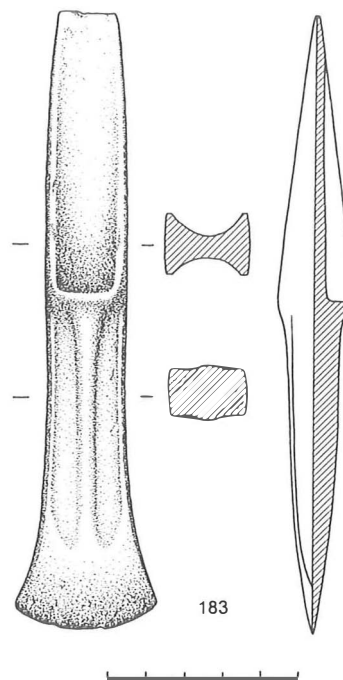


Fig. 44. (Type AXP:ne.AMTN) 183: no provenance.

damaged by crude attempt at mechanical cleaning, otherwise very well-preserved. Collection: B.A.I. Groningen, no inventory number, and no information as to how acquired. (DB 1391).

Comments and dating: 'Nordic work palstaves'/Typ Kappeln: occur in the South Scandinavian-North German area predominantly in the Northern Period II; although Kibbert (1980: pp. 211-211) has pointed to a few examples dated to Northern Period III or its South German Earlier Urnfield equivalent.

In summary, it would appear that the several varieties of the 'Nordic work palstave' type are together represented by less than a half-dozen finds in the Netherlands. The find-spots concentrate in southern Drenthe. It would seem reasonable to associate this palstave import with the amber necklace finds which concentrate so strikingly in the same neighbourhood (Butler, 1992: pp. 48-68, with distribution map p. 50 fig. 2).

3.1.3. *Belted palstaves (AXP:ne.B...)*

The term 'belted palstave' is our own invention, here employed to group together two sorts of palstaves that are characterized by a stopridge which, instead of merely being present on the faces, extends around the axe body, as a sort of belt. This belt may be single or multiple. Belted palstaves are extremely common in the Dano-Scanian area and adjacent parts of North Germany, and are elsewhere exceptional.

We distinguish here two main sorts: the slender, graceful axes resembling the simpler varieties of the 'weapon palstaves' of the Dano-Scanian area (AXP:

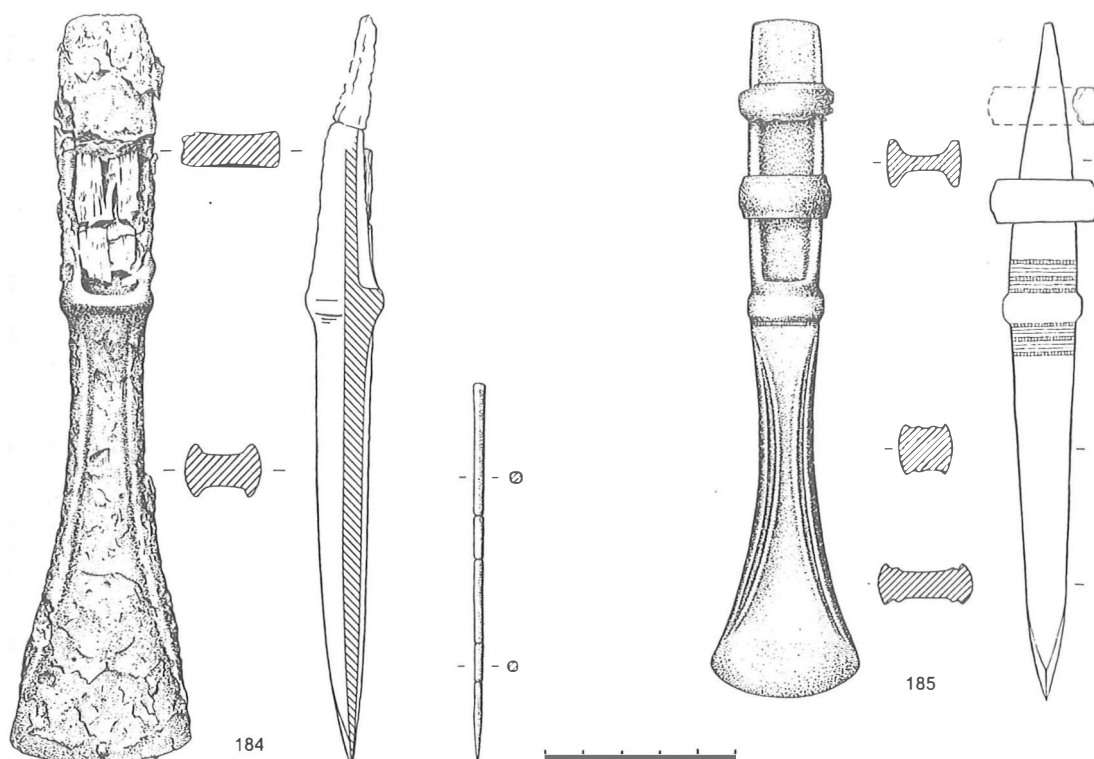


Fig. 45. (Type AXP:ne.BAF) 184: Den Burg, Texel (grave); 185: Epe, Ge (grave?).

ne.BA), and the squatter palstaves of Osthannover type (AXP:ne.Bo).

a) *Slender-bodied palstaves: belted, with arch-shaped side ornament, flanged and moderately widened blade (= Dano-Scanian 'weapon palstaves' and related) (AXP:ne.BAF) (fig. 45)*

These distinctive palstaves fall within the range of the 'weapon palstaves' of Danish prehistorians (Broholm, 1944: pp. 100-101, Pl. 16), and within the term *nordische Absatzbeile* of Piesker (1958) and other German authors. Such palstaves are represented by two examples in the Netherlands:

CAT.NO. 184. DEN BURG, TEXEL, NOORD-HOLLAND, Grave in Tumulus A.

L. 19; w. 4.8; th. 2.1 cm. Narrow, slender palstave. Narrow flanges; slightly concave septum; 'belt' at stopridge level. Blade with concave sides, flat faces with prominent side-flanges. Wood survives on both faces of septum. Varied patina: greenish, blackish mottled, blistered and *craquelé*. Excavated 1972 by P.J. Woltering for R.O.B., Amersfoort. Found together with headless bronze pin with a square-sectioned part of the shaft, comparable with the nail-headed pins of Var. Westendorf of Laux (1976: pp. 59-60, esp. Nos 304, 306-309; 1971: p. 55, Taf. 10:5-7; found in several men's graves assigned to Laux *Zeitgruppe* I), in the main grave (rectangular, c. 2.4x0.85 m, NW-SE; presumed extended inhumation) in Tumulus A, Beatrixlaan (one of a group of three excavated tumuli). It was built of sods, and surrounded by a double, closely spaced post circle with an external diameter of c. 12 m. ¹⁴C date from wood remains on the palstave (GrN-

7456): 2995±75 (calibrated 2-sigma: 1402-1010 BC). Collection: R.O.B. Amersfoort, depot. (DB 600)

Map reference: Sheet 9W, c. 115/563.

References: Woltering, 1974: p. 423, afb. 5; Woltering, in prep.; Lanting & Mook, 1977: p. 115. (We are grateful to the excavator, P.J. Woltering, for details in advance of publication.)

CAT.NO. 185. EPE, GEMEENTE EPE, GELDERLAND.

L. 17.95; w. 3.95; th. ('belt') 2.0 cm. Slender palstave; shafting part with nearly parallel sides; slightly convex flanges; slightly rounded sides. Two separate bronze annular binding rings were in situ on the hafting part. Waist 'belt' just below stopridge. Blade part with concave, rounded sides with double flanges. Cutting edge sharp. Linear incised decoration above and below 'belt'. Remains of wood were present on both sides of the septum. Found Autumn 1957 by A.S. Groen and G. van Laar, with cremated bones, upon digging a pit c. 1 m deep in a tumulus. Well-preserved. Has been treated conservation laboratory R.O.B., Amersfoort. Private possession. (DB 1734)

Map reference: Sheet 27D, c. 195/484.

References: Modderman, 1960-1961: afb. 5 and 6.

Comments: The Epe palstave is unusually long, slender and sinuous. It has some incised decoration on the sides; and has a doubled rib along each edge of the blade part. It is undoubtedly an import from the Dano-Scanian area. Noteworthy and highly unusual, however, are the bronze rings used to bind the hafting part. We do not know of any close parallel for this feature, although examples are known of wire windings being used for the same purpose. Closest to our Epe example, perhaps, is the extraordinary shaft binder with five parallel rings joined together, cast all in one piece, associated with a

palstave of Kibbert's *Typ Niedermockstadt, Var. Reckerode*, in a grave at Sommersells, Kr. Lippe in Westfalen (Kibbert, 1980: p. 233, No. 567, Taf. 71D). In the Netherlands a wire binding seems to be represented in the find of a flanged axe with remains of wire rings in a tumulus at Lage Vuursche, *gemeente* Baarn, Utrecht (Butler, 1995/1996: Cat.No. 149, fig. 34). Examples are also known in the Scandinavian area, and also in Central Europe (information from B. Sitterl, Münster). This Epe palstave comes from a tumulus, presumably from a grave, but it is not known to have been accompanied by other grave goods.

The palstave from the tumulus grave at Den Burg on the island of Texel has a slender, graceful outline comparable to that from Epe, but is without decoration. Its ^{14}C date of 2995 ± 75 is calibrated (2-sigma) at 1402–1010 BC. The earlier part of this range overlaps the period of the dendro-dated Danish Period II tree-trunk coffin graves (14th century BC: Randsborg, 1991; Della Casa & Fischer, 1997: Abb. 27–28), its later part seems rather too late.

The Epe and Den Burg palstaves belong to the simpler varieties among the Dano-Scanian 'weapon palstave' series, and were apparently designed as weapons (practical or symbolic); the more baroque varieties are richly decorated, and they are normally found in graves, as with our two examples in the Netherlands.

Parallels and distribution: the Dano-Scanian distribution is unmapped. For Northwest Germany, the map of Piesker (1958: Taf. 68 upper) shows occurrence especially in the Elbe estuary–Weser estuary triangle (cf. Bergmann, 1970: Form 5, p. 111, Liste 91, p. 38, Karte 38; this shows more finds than does Piesker, especially in the Lüneburg area, but Bergmann's list includes some specimens more resembling the palstaves of Osthannover type (his Form 6, *gedrungene Var.*).

b) *Belted palstaves of Osthannover type (AXP:ne.Bo)* (figs 46–47)

Five examples in the Netherlands. N.B.: The grammatical form Osthannoverscher *Typ* has hitherto been normal, but we adopt here the simpler *Typ* Osthannover, as employed in the recent Hannover Bronze Age exhibition catalogue (Wegner, 1996). These, like the Scandinavian 'weapon palstaves', are characterized by a stopridge which, instead of merely being present on the faces, extends around the axe body as a sort of belt. The Osthannover axes are, however, less slender, and their blade part is less flamboyant; they seem to have been designed as tools rather than as weapons, although the decorated examples (such as our Velsbroek specimen) may have been conceived as weapons. Both decorated and undecorated specimens occur, however, in graves.

CAT.NO. 186. 'VELUWE', GELDERLAND (exact provenance unknown).
L. 16.45; w. 3.8; th. 2.1 cm. \wedge flanges;] [septum, flat-faced blade with

low flanges; stopridge waist with five plastic ring-ribs, three of which are diagonally nicked. Break is modern. Patina: mottled green. Well-preserved. Museum: Apeldoorn, Inv.No. 62. (DB 2).

Remarks: In the Netherlands, approximately similar multiple waist ribs occur on a palstave (but of *Typ Niedermockstadt, Var. Reckerode*) from Doorwerth, *gemeente* Renkum, Gelderland (see below, Cat.No. 239); and on some examples in western Germany, attributed chiefly to the *Typ* Baierseich, *Var. Dörnigheim*, occurring in the Rhein-Main area (cf. Kibbert, 1980: Nos 532, 532A, 545, 546, 547, 548, 551, 552, 554, 743). Similar sets of waist ribs also occur on Dano-Scanian palstaves of various types.

CAT.NO. 187. NIEUW WEERDINGE, GEMEENTE EMMEN, DRENTHE.

L. 15.5; w. 4.3; th. 2.2 cm. Blade part with U septum; U stopridge, transverse ridge on sides; side-flanges; angles of flanges and stopridge nicked. Blade sharp. Patina: dark green; loamy encrustation. Found by one Bosklopper, 1.25 cm below the surface of the peat, at the boundary between grey and black peat, at the same spot where previously (Remouchamps, 1925; Butler, 1992: pp. 50–51, Fig. 3) were found an Early Iron Age bronze neckring, pair of knobbed bracelets, and amber beads. Museum: R.M.O. Leiden, Inv.No. c. 1929/6.1. Purchased through the school headmaster J. Graver. (DB 415)

Map reference: Sheet 18A, c. 262/542.

Comment: The green patina and loamy encrustation of this palstave seem to be in conflict with the attribution to a find-spot in peat.

CAT.NO. 188. BALLOËRVELD, GEMEENTE ROLDE, DRENTHE.

L. 15.4; w. 5.3; th. 2.7 cm. Weight 311 gr. U septum; \wedge flanges with () sides; stopridge undercut; body with flat faces, rounded sides, slight flanges; horizontal ridge on sides continuous with stopridge. Upper part broken off and missing. Patina: mottled green; corrosion-pitted surface. Museum: Assen, Inv.No. 1858/X.4. (DB 73)

Map reference: Sheet 12D, c. 229/559.

CAT.NO. 189. HIJKEN, GEMEENTE BEILEN, DRENTHE (estate Hooghalen; prehistoric barrow cemetery).

L. 16.1; w. 3.8; th. 2.3 cm. Nearly straight butt; \wedge flanges; () septum; belt stopridge. Blade part with side-flanges, rounded sides. Cutting edge sharpened but battered. Excavated 1952/53 by A.E. van Giffen, for B.A.I. Groningen and Museum Assen. Found as sole grave gift in central grave of Tumulus I: 3rd phase (tree-trunk inhumation, oriented NW–SE), surrounded by timber circle (18 m diameter, 18 posts). Stratigraphy: preceded by second-period grave without grave goods or peripheral structure, with ^{14}C date (charcoal from grave, GrN-6262: 3455 ± 35 ; = 2-sigma calibrated, three ranges within the period 1866–1680 BC); and prior to urn-cremation in handleless terrine. (A somewhat similar vessel from Valthe, Museum Assen, Inv.No. 1920/VII.6, 6a, was accompanied by a bronze pin of HaA2/Montelius III, with truncated-biconical head). Museum: Assen, Inv.No. 1953/VII.7. (DB 662)

Map reference: Sheet 17B, 230.52/547.99.

Reference: Van der Veen & Lanting, 1989: pp. 196–200, with figs 3–6; p. 227, fig. 38:7.

Parallel: Nearly identical is an example (Kibbert, 1980: No. 528), from Remminghausen-Lenstrup, Stadt Detmold, Kr. Lippe, Nordrhein-Westfalen, found in a disturbed tumulus, with undecorated nail-headed pin (Kibbert, 1980: Taf. 70F).

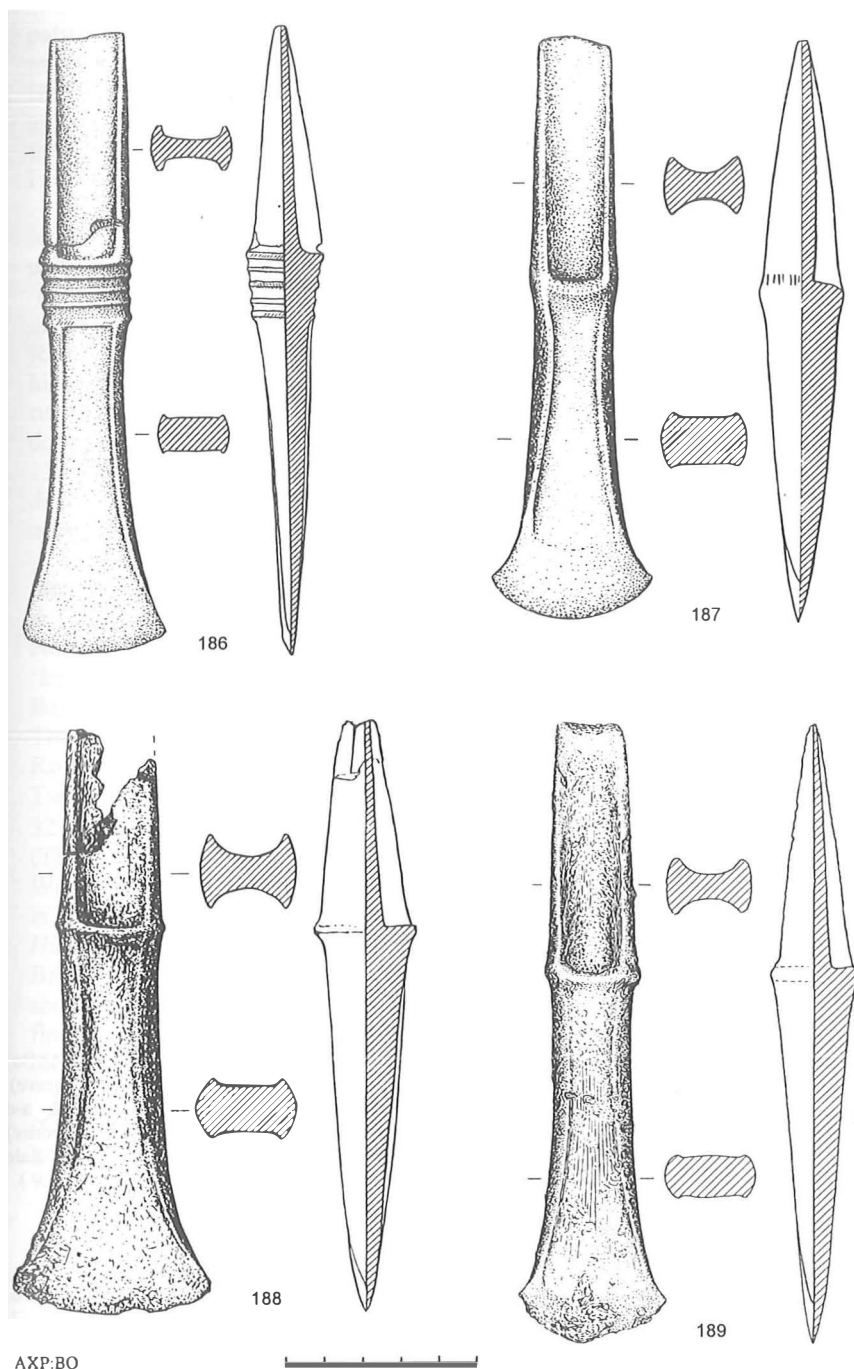


Fig. 46. (Type AXP:ne.Bo) 186: 'Veluwe', Ge; 187: Nieuw-Weerdinge, Dr; 188: Balloërveld, Dr; 189: Hijken, Dr. (grave).

CAT.NO. 190. VELSERBROEK, GEMEENTE VELSEN, NOORD-HOLLAND (grave find; Cf. Butler, 1992: Find No. 20, pp. 94-95, fig. 25:1).

L. 20.9; w. 4.3; waist rib 2.9x2.4 cm. Straight butt; haft part has flanges of slightly convex \wedge outline; J stopridge, with fine incised ornament, encircles the waist. Blade part has convex sides, side-flanges: modest blade expansion. Sides richly decorated with fine incision, with on upper part alternating bands of incised horizontal and zigzag lines; on lower part alternating bands of transverse incised lines and ladders. Cutting edge sharpened, but slightly abraded. Patina: brown. Severely corroded, but one face and the sides fairly

well-preserved. Excavated Nov.-Dec. 1988 by W.J. Bosman for I.P.P., Amsterdam. Found in inhumation grave with surround of vertical planks, adjacent to Middle Bronze Age settlement. Collection: I.P.P., Amsterdam. (DB 718)

Associations: Bronze rapier; four gold wire rings.

Map reference: Sheet 25W, 104.8/493.8.

References: Bosman & Soonijs, 1989: pp. 286-288; Butler, 1992: Find No. 20, pp. 94-95, fig. 25: 1-3.

Parallels: The Osthannover palstave type has been

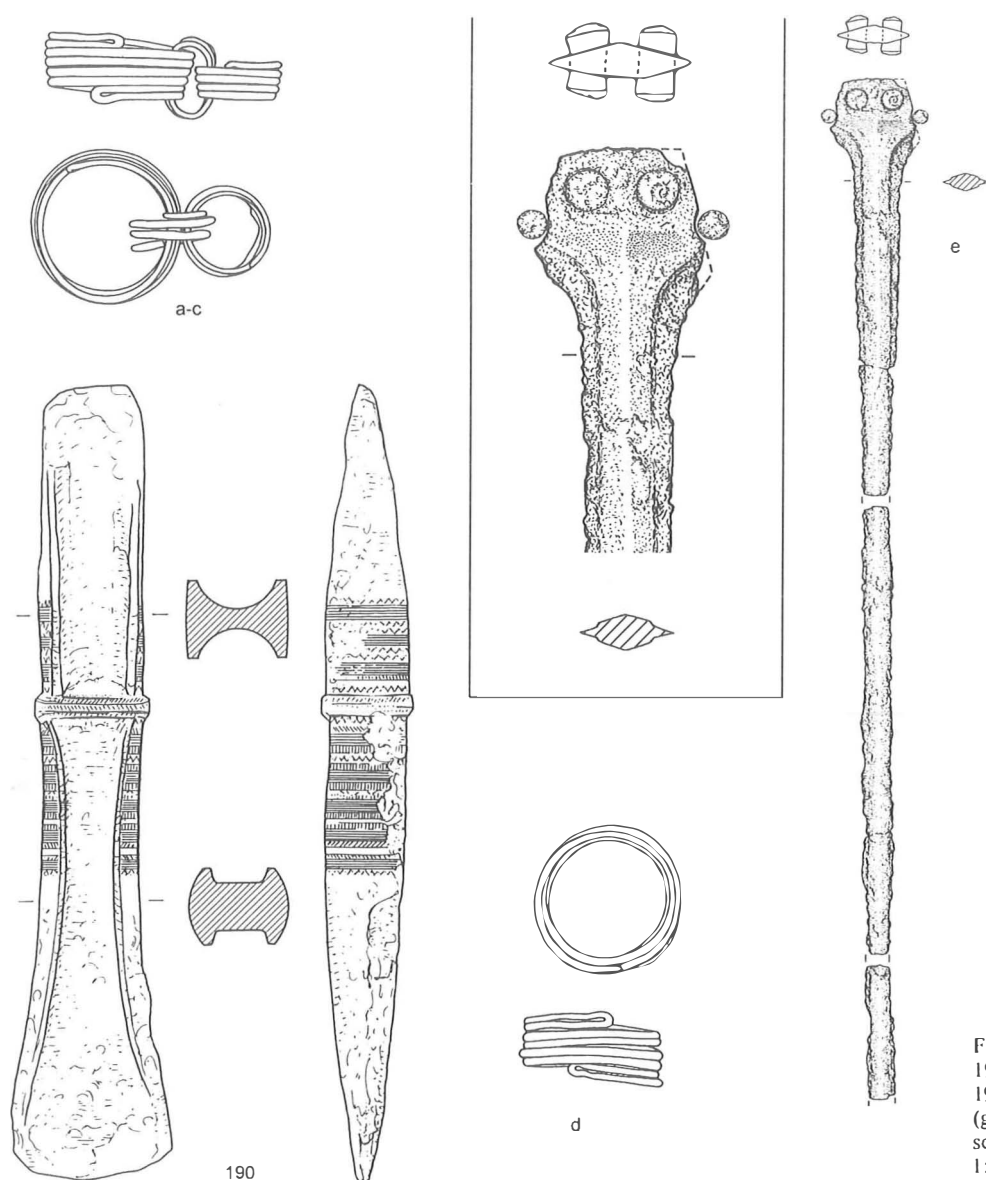


Fig. 47. (Type AXP:ne.Bo) 190: Velsbroek, NH (grave). 190 (bronze) scale 1:2; a-d (gold) scale 1:1; e (bronze) scale 1:3. Inset (bronze): scale 1:2. (190 a-d: drawing I.P.P.).

divided into several varieties (Laux, 1971: pp. 80-81). Laux *Var. A* and *B* are numerically the most important (distribution maps: his Karte 16 and 17). They are distinguished from one another by the cross-section of the blade part: *Var. A* has faint side-flanges and a biconcave surface, while *Var. B* has stronger flanges and a flattish surface. Furthermore, they are chronologically differentiated: *Var. A* is characteristic of the Sögel-Wohld phase (his *Zeitgruppe I*), while *Var. B* is dated by Laux to his *Zeitgruppe II*. Our five examples in the Netherlands are all attributable to Laux's Osthannover *Var. B*.

The 'Veluwe' palstave has, instead of a single 'belt', a group of five encircling ribs, three of which have diagonal nicking. Probably such multiple-waist ribs are

a skeuomorph of wire-shaft bindings. Multiple-ribbed belts are common on Dano-Scanian 'weapon palstaves' and occur also on palstaves of the Osthannover type; the number of belt ribs varies. For example, a specimen illustrated by Broholm (1952: No. 108) has a seven-ribbed 'belt' in the same manner. Kersten (1936: pp. 75, 142) lists others under the heading *Form CI3*, with a varying number of belt ribs.

But such multiple belts also occur on some palstaves of Middle West German Tumulus Bronze Age types; in the Netherlands one such example has been found, the *Typ Niedermockstadt, Var. Reckerode* palstave from Doorwerth (see below, Cat.No. 239).

Three of our remaining specimens are undecorated and have only a single 'belt'. The fourth, however, the

palstave from the Velserbroek sword grave, is richly provided with decoration, in a style common in the Dano-Scanian area. It comes from a rich inhumation grave (in fact, the only rich Bronze Age grave known in the west of the Netherlands) which is described in Part I (Butler, 1992: Find No. 20, pp. 94-95, fig. 25).

Mentioned there, but then not yet describable, was a long bronze rapier (here fig. 47), which had been taken up from the grave in a block of sand, and was only later 'excavated' in the I.P.P. laboratory in Amsterdam and given conservation treatment in the laboratory of the R.O.B. in Amersfoort. The rapier has a trapeze-shaped hilt plate with two rivets, below which are two smaller rivets in notches. This arrangement is typical in half a dozen of the rapier types of Schauer (1971: Nos 117-153, pp. 45-58). All these types, whatever their differences, are concentrated in the same Bodensee-upper Danube area (distribution: his Taf. 114A,B).

Similar rapiers are known from western Europe, but their number is small. Three are illustrated by Burgess & Gerloff (1981: p. 349), under their Type Surbiton: No. 377, from the Thames at Surbiton, Surrey; No. 336, 'Ireland' without known provenance; and No. 338, River Barrow, Co. Kilkenny, Ireland). Another from the Thames, without exact provenance, is illustrated by Rowlands (1976, II: p. 413, No. 1920, Pl. 46:1820). Two similar rapiers are illustrated by Briard (1965: fig. 32:1 and 3), one known to be from the Loire mouth area (Thouaré, Loire-Atlantique), the other presumed so. We may therefore conclude that the Velserbroek rapier is undoubtedly an import from the South German *Hügelgräber* area, as so also, probably, are the few British, Irish and Breton specimens. These seem to show a marked preference for estuarial and riverine find-spots, which in turn might suggest a maritime diffusion to western Europe.

Also in the Velserbroek grave a chain was made up of three small gold wire spiral rings, plus a fourth separate gold wire ring. Two of the spirals are of doubled wire, with both ends closed; two are of single wire.

Discussion: The five Ostthannover palstaves are apparently imports to the Netherlands. The Ostthannover type (Kibbert, 1980: pp 219-221) is rather widespread in Denmark and North Germany, but rare west of the Weser area (cf. Bergmann, 1970: *Form* 5, p. 38, p. 111, Liste 91, Karte 38, and *Form* 6, p. 38 and 112-113, Liste 92, Karte 39).

The occurrence of two belted palstaves eccentrically situated in grave finds along the North Sea coast – the Velserbroek and Texel-Den Burg specimens – provides a hint of maritime activity along the Frisian shores. The Velsenerbroek burial site lay only 25 m from traces of domestic buildings dated by potsherds to the Middle Bronze Age, and presumably had some connection therewith. Despite this, the form and content of the grave itself would be much less surprising if it had been found not in North Holland, but in the Danish-North German area. The curious grave form, with its ditched

surround and vertical plank revetting, is without parallel in the Netherlands; yet a number of more or less similar wooden 'chamber graves' of the same period have been found in Denmark (Madsen, 1988-1989).

The grave goods seem to tell a similar story. Bronzes are in any case rare in North Holland (only one grave with a rapier was previously known in North Holland, that from Zwaagdijk: Modderman, 1964 and Butler, 1964: Appendix I), and only a half-dozen stray palstaves have been found in that area. So neither type would have been easy to come by along the Netherlands west coast; and the combination of the two?

Laux and Willroth have studied and mapped the occurrence of various weapon combinations in graves in northern Germany. Willroth's map (1989: p. 90, fig. 2) shows that in Period II the combination sword-and-palstave occurs in considerable numbers in Schleswig-Holstein (as is also the case, of course, in Denmark). A map of Laux (1996: p. 124, Abb. 68B) shows that the grave combination sword-and-palstave occurs in some numbers in the Elbe estuary-Weser estuary triangle (the very part of North Germany which is generally considered to belong culturally to the *Nordischer Kreis*), but not on the Lüneburger Heide and nowhere in the rest of Northwest Germany.

In Denmark and North Germany, belted palstaves, both of the Scandinavian weapon and Ostthannover type, are frequently met with in rich warriors' graves, often in the company of swords and prestige items. The distribution of such sword-and-palstave graves is, however, not general in North Germany, but extends only as far west as the east bank of the Weser estuary, and stops there (cf. the maps of the distribution of various combinations of weapons in graves in Schleswig-Holstein, Willroth, 1989: p. 90, fig. 2) and in Niedersachsen (Laux, 1996: p. 124, Abb. 68B). These maps represent, however, all palstave and sword types. The swords include both native types and imports from the South German *Hügelgräber* area. The point is, however, clear: warrior graves with sword and palstave occur regularly in the northern cultural area (which includes the Elbe-Weser triangle) but not beyond. How, then, the Velserbroek grave on the Dutch North Sea coast? Nothing of the contents of this grave could have been acquired easily in the Netherlands, and certainly not in the west of the land.

Of extraordinary interest in this connection, therefore, is a rich warrior's grave in the Elbe-Weser triangle at Essel, Kr. Stade (Laux, 1973: D.158; Prüssing, 1982: p. 47, No. 72, Taf. 24B; here fig. 47:a). This is one of the many sword-and-palstave graves in the Dano-Scanian region, to which culturally the Elbe-Weser triangle also belongs; indeed, it is the westernmost of such graves. The swords in them can be native or they can be imports from Central Europe.

The Essel grave contains, together with a wide variety of ornaments and a possibly West European tanged razor, a South German rapier remarkably like the Vel-

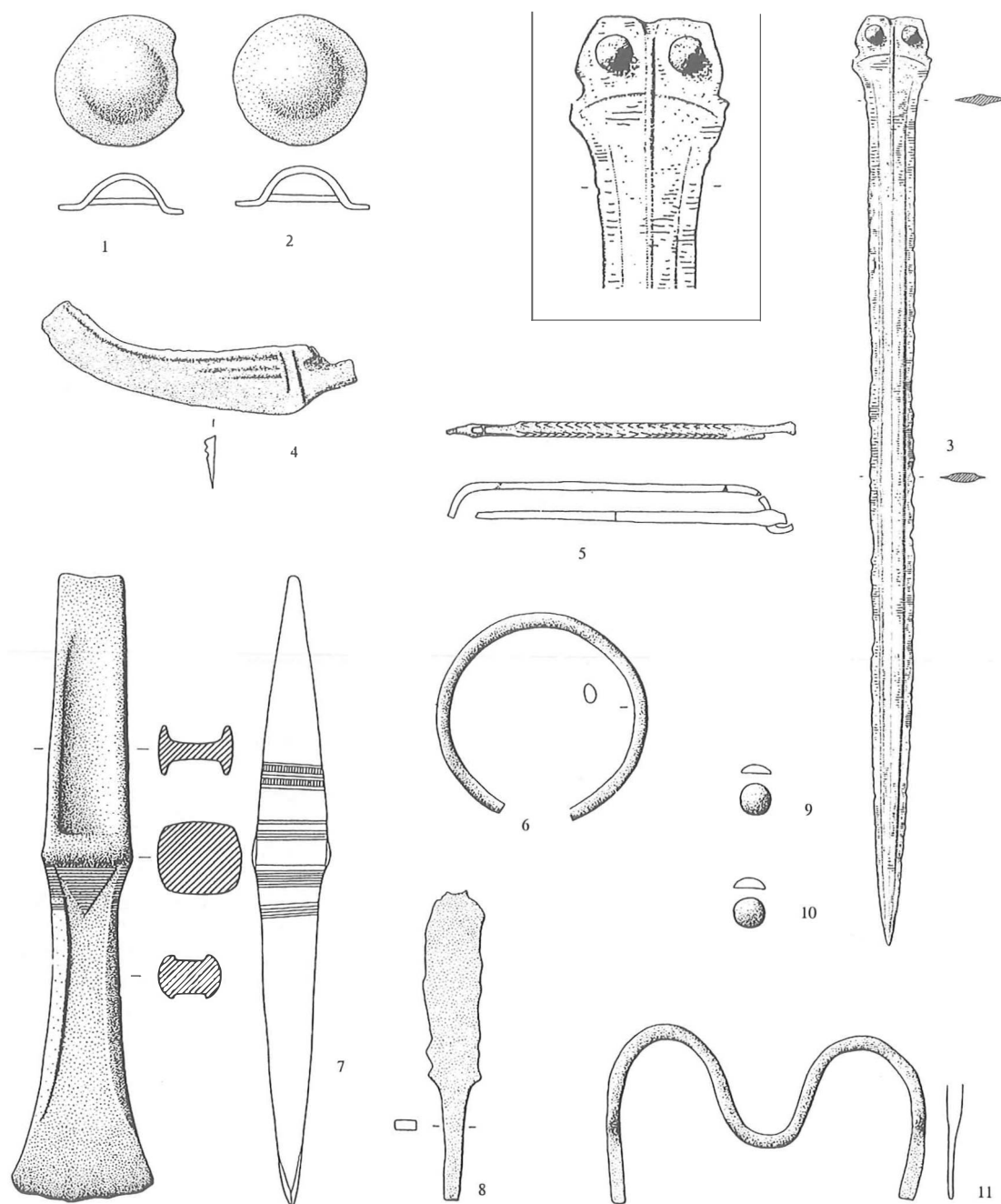


Fig. 47a. Essel, Kr. Stade (Niedersachsen), grave group. After Prüssing, 1982: Taf. 24B and Laux, 1973: Nos. 1,2,4-11. Scale: 1:2, except No. 3, scale 1:3. Inset: scale 1:2. (drawings: P.B.F.).

serbroek rapier; and also a palstave of Hannover B type, decorated on both faces and sides. This combination forms a striking parallel for the Velsbroek grave. We should also bear in mind that gold wire rings similar to those in the Velsbroek find are very scarce in Northwest Germany (Bergmann, 1970: Karte 81, with Liste 206a) and the Netherlands (double wire: Susteren, Limburg: Butler, 1979: p. 61, fig. 30; single wire: Hijken-Hooghalen, Drenthe: Butler, 1992, p. 66, fig. 11:1;

Sleenerzand, Drenthe: Butler, 1979: p. 85, fig. 20: 3,4). But such gold wire coils (the 'ring gold' of Danish publications) occur in impressive numbers in the Danish area, in Period II and III (Broholm, 1944: pp. 128-129; 1952, No. 180, pp. 25-26, 53-54), though they may be of Central European origin. Numerous examples from both Central and northern Europe are illustrated by Hartmann (1970; 1982). For a comment on the gold analyses, cf. Vandkilde, 1990: pp. 128-129, figs 14 and

15; the one analysed spiral from Velsbroek would seem to fit, if slightly peripherally, into the analysis pattern of the Danish Period II/III 'ring gold'. Thus, the grave type and all the contents of the Velsbroek find combine to create the impression that it could be the grave of an actual Dano-Scanian warrior, who has somehow come to rest near the North Holland beaches.

The Texel burial is not quite comparable; it has a palstave but no sword, and the palstave is deposited in an ordinary Netherlands sod and double post-circle tumulus. But in any case, both the Velsbroek and Texel-Den Burg palstaves must be imported from the Danish or North German area. The occurrence of Early and Middle Bronze Age West French and British bronzes in northern Europe has previously been documented (Butler, 1963a), and some of these bronzes are likely to have been brought by sea. Return traffic may have been less concerned with bronzes than with amber and perhaps perishables such as fur or dried fish, but at least one Dano-Scanian palstave may have travelled by sea to the British northeast coast (Driffild; see above, under Cat.No. 181).

Comment on North European palstave types: Since each of the North European types is represented by so few examples in the Netherlands, we have combined all our North European types on one distribution map (Map 22). It shows that within the Netherlands the palstaves of North European types occur almost exclusively in the northeast, i.e. in Drenthe. The amber necklace finds concentrated in southern Drenthe in the same period to which we have previously called attention (Butler, 1992: pp. 48-59), and which, we have suggested, are more

probably imports from the Baltic area than made from amber collected along the local beaches, must be presumed to be related somehow to this palstave import. The pair of miscast palstaves from Angelsloo we have interpreted as import of metal intended for local recycling.

The outliers are the two prestige palstaves from grave finds along the north and west coast (Texel, Velsbroek), which suggest maritime intercourse with the North European area, and the tumulus (grave?) find from the edge of the IJssel valley at Epe, which may somehow be related to this pattern.

Dating: The Emmercompascuum palstave, of Type IIsmoor/Neukloster, is in the North European chronology characteristic for the phase Valsømagle/Northern Period I/Sögel-Wohlde. The other northern palstave types here involved are all characteristic of Northern Period II, which according to the dendrochronological dates from Danish tree-trunk coffins (Randsborg, 1993) occupies the 14th century BC.

3.2. Group II. Palstaves of western European types

3.2.1. *Transitional form, stopridge axe type Plaisir/early palstave (AXSP/AXP) (fig. 48)*

Two examples in the Netherlands, both along the west coast.

CAT.NO. 191. MONSTER, GEMEENTE MONSTER, ZUID-HOLLAND.

L. 16; w. 6.6; th. 2.7 cm. Butt very irregular (break is patinated); JI septum; 2/3-length () flanges with flat sides; sloping ledge stopridge

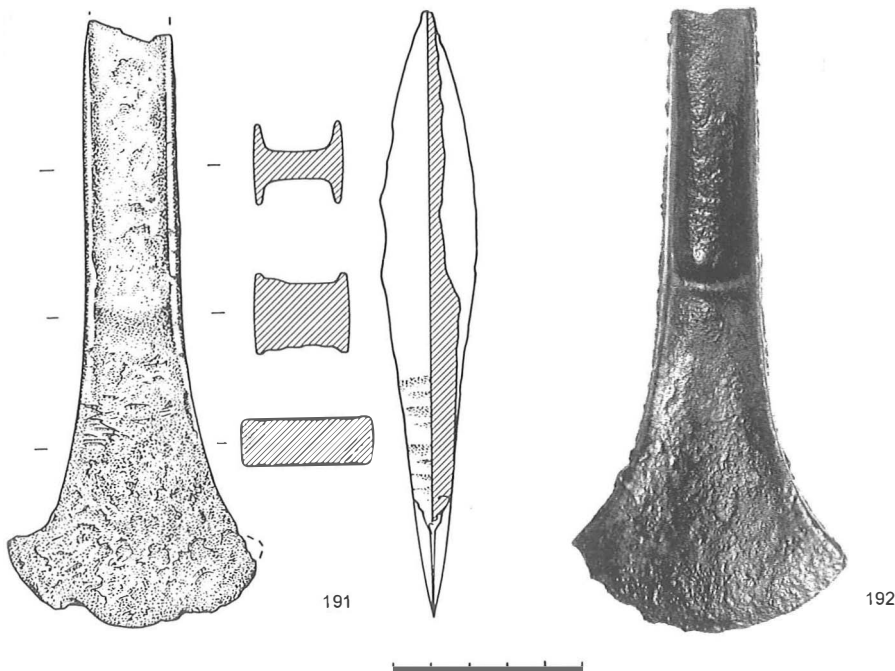


Fig. 48. (Transitional stopridge axe/ Type Plaisir/ early palstave) 191: Monster, Z-H; 192: gemeente 's-Gravenhage, Z-H (photo: R.O.B., Amersfoort).

(rather irregular); slight side-flanges on lower part, which has flat faces. Cutting edge sharpened but battered; one tip is recurved. Lower part of sides has horizontal ripples. Severely corroded. Patina mottled green, partly scrubbed off. Found some 60 years ago by an unknown person in the dunes at Monster during unspecified digging activity. Museum: R.M.O. Leiden, Inv.No. h.1986/9.1; purchased 1986 from J.B.M. Sassen of Delft. (DB 624)

Map reference: Sheet 37B, c. 71/449.

Reference: Hallewas, 1988: pp. 310-311, afb. I (right).

Comment: This specimen differs hardly from the high-flanged stopridge axes of Type Plaisir (Butler, 1987: esp. pp. 10-13, fig. 3, pp. 31-32, note 3; Butler, 1995/1996: section 5.2, pp. 227-230, fig. 36a-b, Map 16), except in one crucial respect: the septum immediately below the stopridge is rather thicker than it is above the stopridge; which in our view makes it a palstave. Also, the side-flanges are reduced in length in comparison with those of the Plaisir type.

Parallels: A very few related specimens are illustrated by Schmidt & Burgess (1981: Nos 500A, 521, and 521A). An unpublished French specimen is attributed to the 'region of Epernay' (Museum Epernay, Inv.No. 776); there will undoubtedly be others.

CAT.NO. 192. *GEMEENTE 'S-GRAVENHAGE, ZUID-HOLLAND* (exact provenance unknown).

L. c. 16.5; width c. 7.3 cm. From the photo, very similar in size and form to Cat.No. 191 immediately above. Found in the Kerketuin, on a storage site for earth of varied provenance, so that the exact original provenance can no longer be ascertained. Private possession. (DB 891)

Map reference: Sheet 30G, c. 79/451.

References: *Jaarverslag R.O.B.*, 1991: p. 166; Woltering & Hessing, 1992, pp. 355-356, afb. 11 (photo R.O.B.).

Note: This specimen was not available for examination; we are grateful to the R.O.B., Amersfoort, for a good photograph.

Distribution: These two examples are from the west coast dune area, as are the few related flanged stopridge axes of Type Plaisir.

Dating: Attributable to the Acton Park-Voorhout phase.

3.2.2. *Palstaves of western European types, wide-blade, decorated (on Map 23; AXP:we...W)*

a) *Primary shield palstaves, type Acton Park (AXP: we.apW)* (Schmidt & Burgess, 1981: p. 117-125) (figs 49a-49d)

There is only one occurrence of Acton Park palstaves in the Netherlands: the fourteen examples in the hoard from Voorhout, South Holland (Butler, 1992: Find No. 14, pp. 78-84, fig. 17A-E, fig. 18; with previous references and further details).

CAT.NO. 193. *VOORHOUT, GEMEENTE VOORHOUT, ZUID-HOLLAND.*

L. 17; w. 7.35; th. 3.7 cm. Broad blade, and with shield-shaped indentation beneath the stopridge. Museum: R.M.O. Leiden, Inv.No. h.1908/10.7. (DB 542)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17D:13.

CAT.NO. 194. *VOORHOUT, GEMEENTE VOORHOUT, ZUID-HOLLAND.*

L. 15.7; w. 6.4; th. 2.55 cm. Broad blade, and with shield-shaped indentation beneath the stopridge. Museum: R.M.O. Leiden, Inv.No. h.1908/10.9. (DB 544)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17C:11.

CAT.NO. 195. *VOORHOUT, GEMEENTE VOORHOUT, ZUID-HOLLAND.*

L. 16.8; w. (5.9); th. 2.3 cm. Broad blade, and with shield-shaped indentation beneath the stopridge. Museum: R.M.O. Leiden, Inv.No. h.1908/10.10. (DB 1675)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17C:9.

CAT.NO. 196. *VOORHOUT, GEMEENTE VOORHOUT, ZUID-HOLLAND.*

L. 14.7; w. 6.05; th. 2.73 cm. Broad blade, and with shield-shaped indentation beneath the stopridge. Museum: R.M.O. Leiden, Inv.No. h.1908/10.14. (DB 1679)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17B:7.

CAT.NO. 197. *VOORHOUT, GEMEENTE VOORHOUT, ZUID-HOLLAND.*

L. 17.1; w. (6.5); th. 2.78 cm. Broad blade, and with shield-shaped indentation beneath the stopridge. Museum: R.M.O. Leiden, Inv.No. h.1908/10.5. (DB 540)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17B:6.

CAT.NO. 198. *VOORHOUT, GEMEENTE VOORHOUT, ZUID-HOLLAND.*

L. 16.6; w. 7.15; th. 3 cm. Broad blade, and with shield-shaped indentation beneath the stopridge. Museum: R.M.O. Leiden, Inv.No. h.1908/10.2. (DB 537)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17D:14.

CAT.NO. 199. *VOORHOUT, GEMEENTE VOORHOUT, ZUID-HOLLAND.*

L. 17.1; w. (6.45); th. 3 cm. Broad blade, and with shield-shaped indentation beneath the stopridge. Museum: R.M.O. Leiden, Inv.No. h.1908/10.11. (DB 1676)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17B:8.

CAT.NO. 200. *VOORHOUT, GEMEENTE VOORHOUT, ZUID-HOLLAND.*

L. 16.6; w. (6.3); w. 2.95 cm. Broad blade, and with shield-shaped indentation beneath the stopridge. Museum: R.M.O. Leiden, Inv.No. h.1908/10.12. (DB 1677)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17C:12.

CAT.NO. 201. *VOORHOUT, GEMEENTE VOORHOUT, ZUID-HOLLAND.*

L. 16.2; w. 7.7; th. 2.95 cm. Broad blade, and with shield-shaped indentation beneath the stopridge. Museum: R.M.O. Leiden, Inv.No. h. 1908/10.4. (DB 539)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17C:10.

CAT.NO. 202. *VOORHOUT, GEMEENTE VOORHOUT, ZUID-HOLLAND.*

L. 12.8; w. (6.1); th. 2 cm. Shield-shaped indentation below the stopridge; a vertical rib inside the 'shield'. Blade and butt damaged. Museum: R.M.O. Leiden, Inv.No. h.1980/10.16. (DB 1681)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17E:17.

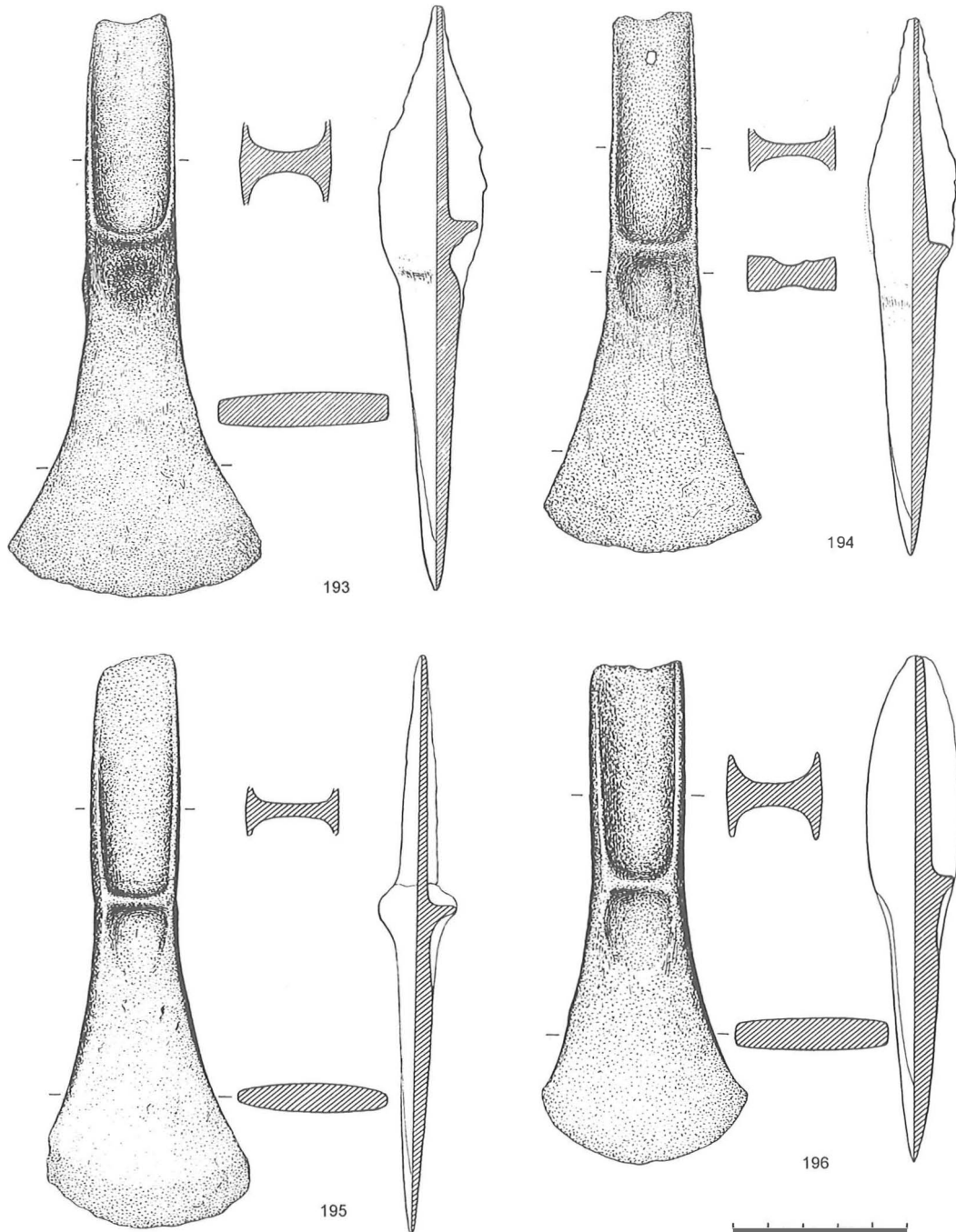


Fig. 49a. (Type AXP:we.apW) 193-196: Voorhout, Z-H, from hoard (see also figs 49b-49d).

CAT.NO. 203. VOORHOUT, *GEMEENTE VOORHOUT, ZUID-HOLLAND*.

L. 16.5; w. 7.6; th. 3 cm. Shield-shaped indentation below the stopridge; a vertical rib inside the 'shield'. Museum: R.M.O. Leiden, Inv.No. h.1908/10.3. (DB 538)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17E:19.

CAT.NO. 204. VOORHOUT, *GEMEENTE VOORHOUT, ZUID-HOLLAND*.

L. 17.7; w. 7.65; th. 3.7 cm. Shield-shaped indentation below the stopridge; a vertical rib inside the 'shield'. Museum: R.M.O. Leiden, Inv.No. h.1908/10.15. (DB 1680)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17E:18.

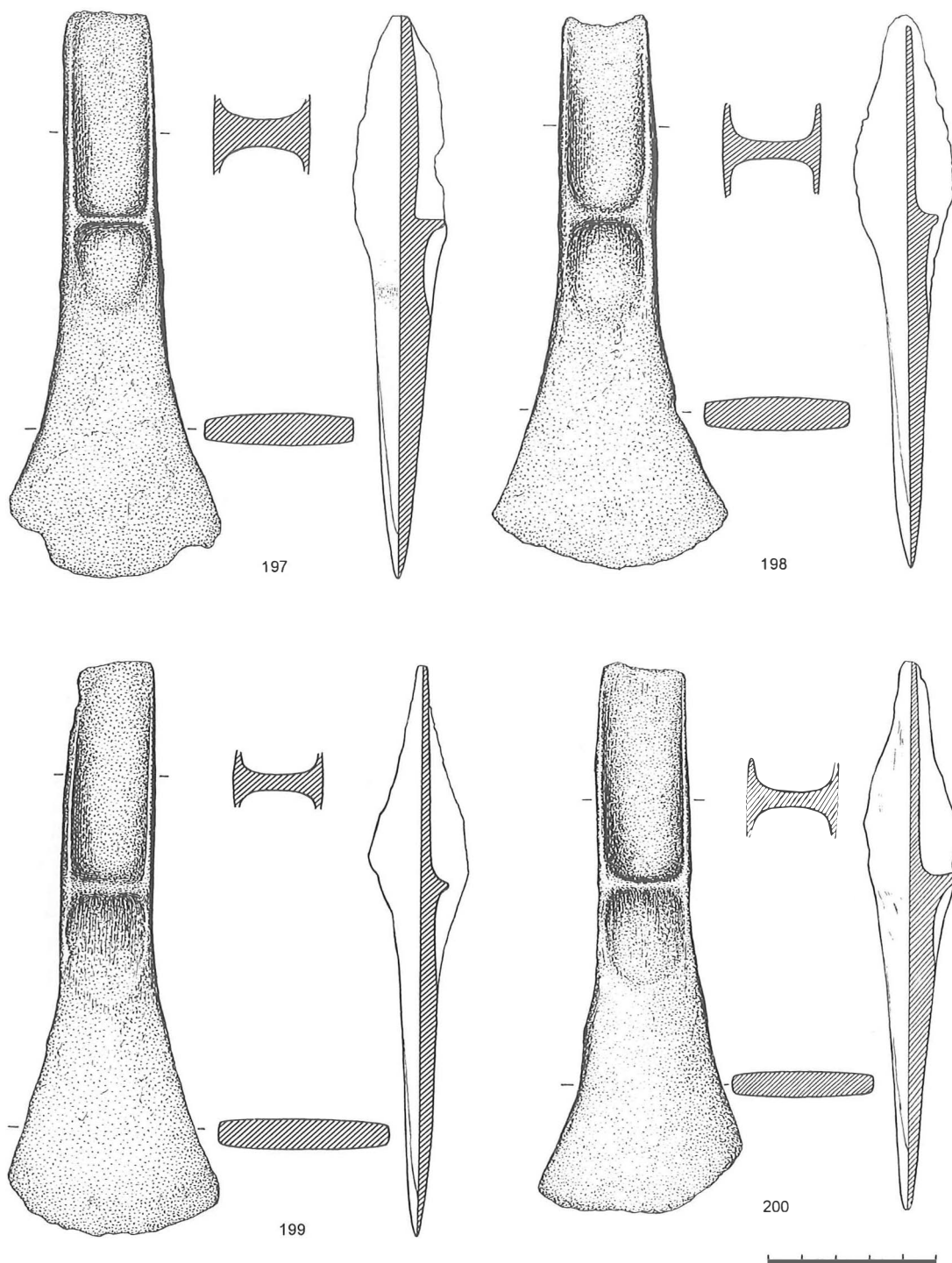


Fig. 49b. 197-200: Voorhout, Z-H, from hoard (see also figs 49a, 40c-d).

CAT.NO. 205. VOORHOUT, *GEMEENTE VOORHOUT*, ZUID-HOLLAND.

L. 17; w. 7.35; th. 2.84 cm. Shield-shaped indentation below the stopridge; a vertical rib inside the 'shield'. Museum: R.M.O. Leiden, Inv.No. h.1908/10.13. (DB 1678)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17D:16.

CAT.NO. 206. VOORHOUT, *GEMEENTE VOORHOUT*, ZUID-HOLLAND.

L. 16; w. (5.8), flanges 3.7 cm. Shield-shaped indentation below the stopridge; a vertical rib inside the 'shield'; raised bar on sides. Museum: R.M.O. Leiden, Inv.No. h.1908/10.1. (DB 536)

Map reference: Sheet 30E, 93.3/470.4.

Reference: Butler, 1992: fig. 17D:15.

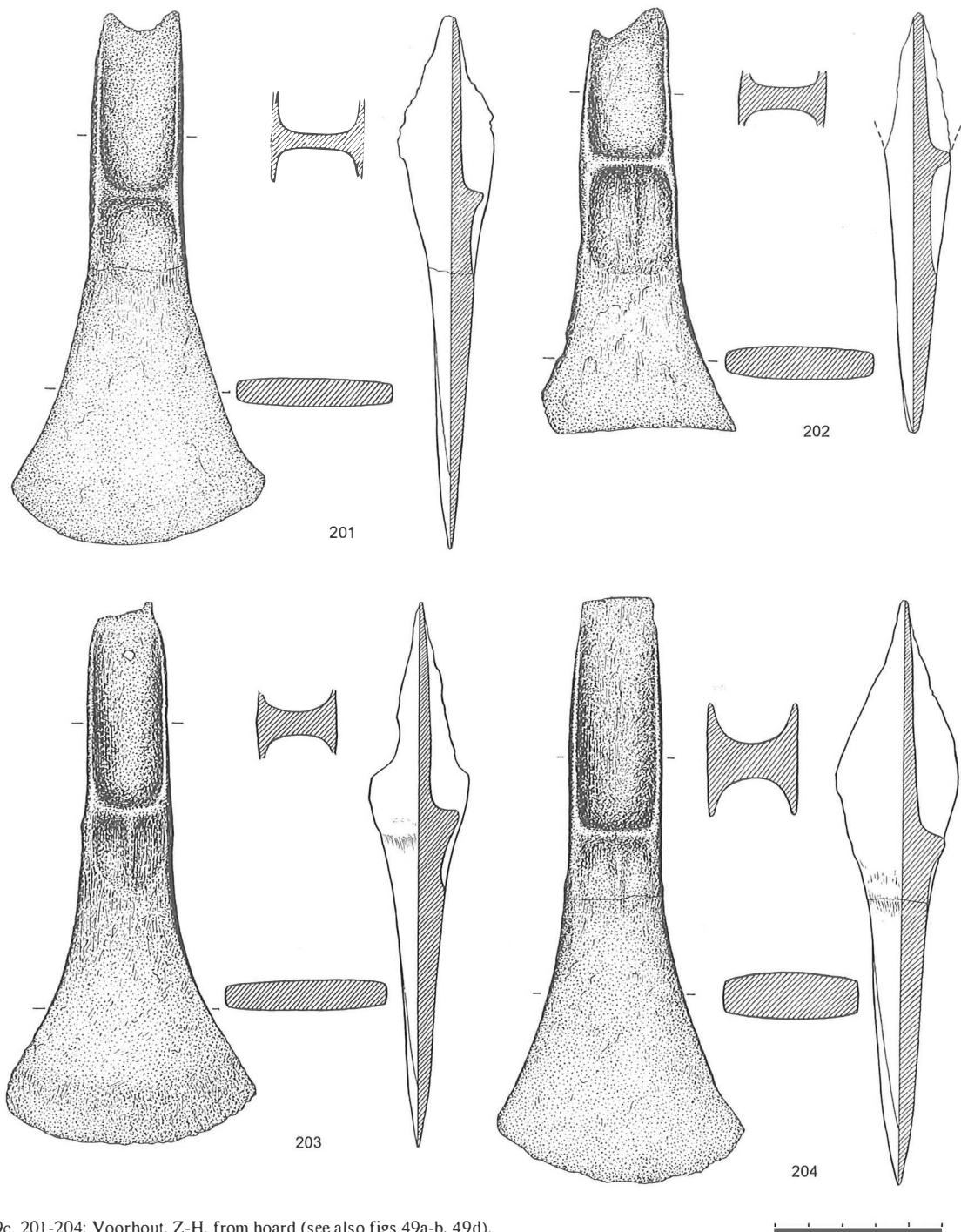


Fig. 49c. 201-204: Voorhout, Z-H, from hoard (see also figs 49a-b, 49d).

Associations: High-flanged axe of Atlantic type (Butler, 1992: fig. 17A:2); stopridge axe of Type Plaisir (Butler, 1992: fig. 17A:3); curious narrow-shafted but wide-bladed flanged axe (proto-palstave?) (Butler, 1992: fig. 17A:1); southern British/Northwest French primary shield palstave (Butler, 1992: fig. 17B:7); flat lugged chisel (Butler, 1990: fig. 17A:4).

Dating: Late in the British Acton Park phase: Ilsmoor/Sögel-Wohlde phase in northern Europe.

Discussion: Most of the Voorhout palstaves correspond in all respects with the North Welsh 'Type Acton Park' primary shield palstaves as defined by Burgess in various publications, and in Schmidt & Burgess (1981: pp. 117-125), which, though not directly

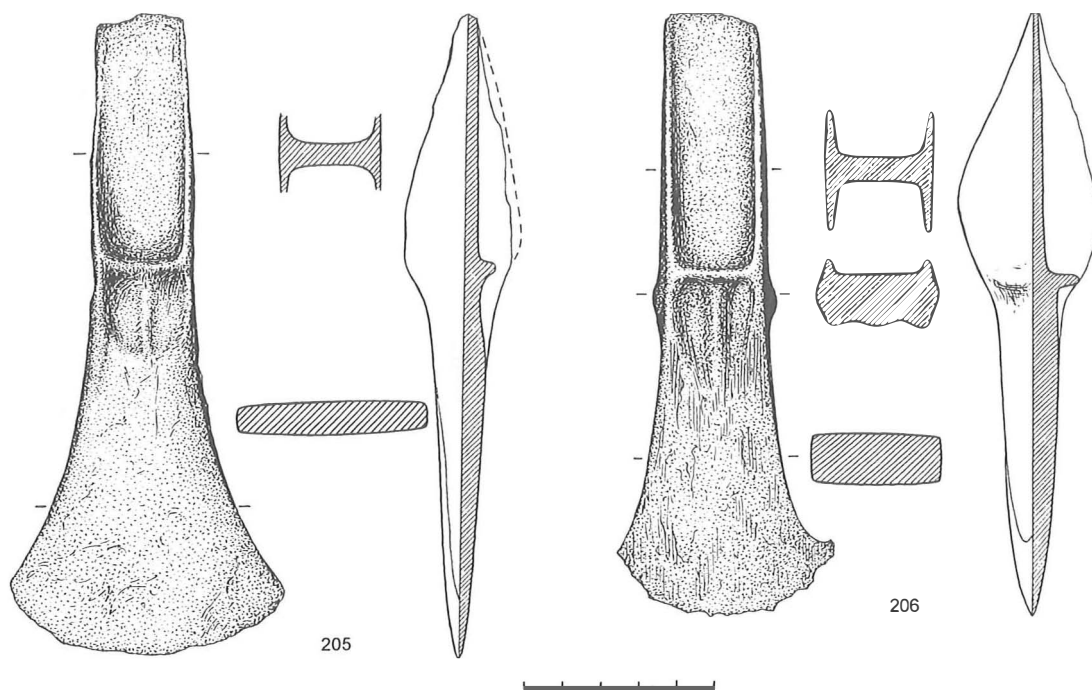


Fig. 49d. 205-206: Voorhout, Z-H, from hoard (see also figs 40a-c).

concerned with North Wales, illustrates a considerable number of examples from the adjacent area of North England. This includes most of their Nos 770-787A; distribution map their Pl. 121 (triangles) excepting a few, their Nos 778, 787, 782, which they assign to their 'Type Colchester'. One of the Voorhout palstaves (Cat.No. 206) has the narrower body and the 'relatively narrow blade, with expanded cutting edge that may have prominent, recurved, projecting tips' (as their Nos 778, 787, 782) which indicates a certain relationship to their Type Colchester (Schmidt & Burgess, 1981: p. 121; Davies, 1968: fig. 1, Pl. II, with flattened-biconical amber bead), but its size and the height of its flanges suggest that Cat.No. 206 is more an Acton Park than a Colchester palstave. Another of the Acton Park palstaves (Cat.No. 196 above), of smaller size and more elegant proportions and with leaf-shaped flanges, is more probably of South English or Northwest French affinities; it is similar in size and form to Schmidt & Burgess' No. 770.

It is curious that the largest hoards of 'North Welsh' primary shield palstaves have been found not in North Wales or adjacent areas, but on or near far-distant shores. The largest, the Pyrzyce (Pyriz) hoard, at no great distance from the Oder estuary and the Baltic Sea, contained no less than 20 examples – all rough castings, from several different moulds (photo: Sprockhoff, 1941: Taf. 31; see also Kersten, 1958: p. 70, Kat.Nr. 662, Taf. 68:662, with drawings of five examples). There are also some stray finds of such palstaves in the area. The next largest hoard is our Voorhout hoard, found in a boggy

hollow in the coastal dune belt of Holland, containing a dozen 'North Welsh' shield palstaves, together with implements of Northwest French types; all of North Welsh metal, on the ground of metal analyses by P. Northover (his 'M metal'), where it is an isolated phenomenon, since no other Acton Park palstaves have been found in the Netherlands or adjacent areas. It is not easy to suggest an explanation for the presence of the Voorhout hoard in a boggy deposit in the coastal Holland dune area. Unfortunately the Voorhout bronzes are so strongly corroded that it is difficult to assess the condition of the bronzes when they were deposited. Probably some at least were damaged before deposition, so that the hoard might be a combination of scrap metal and usable tools. This brings us close to belief in an itinerant bronze-caster; although this model has been discredited by Rowlands on the ground of African ethnological parallels, and Schmidt & Burgess (1981: p. 123) were undoubtedly wise to declare that there is not yet enough evidence to permit a decision on this question.

It is, however, important that the content of the Voorhout hoard, though mostly North Welsh, is not purely so. The Atlantic flanged axe and the Plaisir stopridge axe in particular are likely to be of Northwest French origin. If one does not wish to postulate a direct voyage from North Wales to South Holland, it is well known that there were contacts between the Welsh metal industry and Brittany in the Acton Park-Tréboul phase (Briard, 1965) which must have involved sea travel. Perhaps what we should imagine in the case of Voor-



Map 23. Unlooped palstaves of western European types in the Netherlands.

hout is a vessel from Britain cruising along the Northwest French coast, blown off its course in a storm and ending up on the Dutch coast. But such an explanation would obviously be unsuitable for finds such as the Pyrzyce hoard and the Habsheim hoard in Alsace, where 'North Welsh' shield palstaves occur as raw castings and were thus apparently locally made (Butler, 1963a: pp. 54, 60, fig. 12; Schmidt & Burgess, 1981: pp. 119-125). If we exclude the itinerant smith, we are left with the possibility that imported prototypes were used as a pattern for mould manufacture by local smiths. At the very beginning of the Middle Bronze Age, we can postulate the presence of local smiths in, say, Drenthe or Limburg, but hardly in the coastal area of Holland.

b) *Other primary shield palstaves (AXP:we.psw)*
(Schmidt & Burgess, 1981: pp. 117-125) (figs 50a-50b)

Six examples in the Netherlands, with scattered distribution (on Map 23).

CAT.NO. 207. VLODROP, GEMEENTE VLODROP, LIMBURG. L. 15.7; w. 5.6; th. 2.3 cm. Butt slightly rounded; () flanges; shallow U septum; sides with three facets. Side-arches. Slightly rounded stopridge, 'shield' is round depression surrounded by U-rib. Fairly wide blade. Hammer marks on faces and on sides of shaft part. Patina: dark glossy green; lighter green in places, where file-damaged. Found April 1971 by J. op het Veld (Vlodrop) in ploughing up an asparagus bed. Museum: St. Odiliënberg, Inv.No. 91/1. (DB 1940)

Map reference: Sheet 60E, 202.3/348.4.

References: Bloemers, 1973: p. 21,afb. 4.8; Desittere, 1976: p. 90; De Laet, 1982: p. 431; Wielockx, 1986: Cat.No. Hi33; Butler, 1987: p. 13, fig. 4.

Comments: O'Connor (1980: pp. 431-432) places this specimen in a list of 'non-British' shield palstaves, presumably because of its side-arches, a feature practically never occurring on British examples. Presumably its true home is the Lower Seine area: cf. Muids (Coutil, 1921: fig. 2:25); Heusden, E. Flanders, Belgium (Desittere, 1976: p. 91, fig. 4:5); Hausberge, Kr. Minden, Westfalen (in hoard: Kibbert, 1980: p. 192, No. 468).

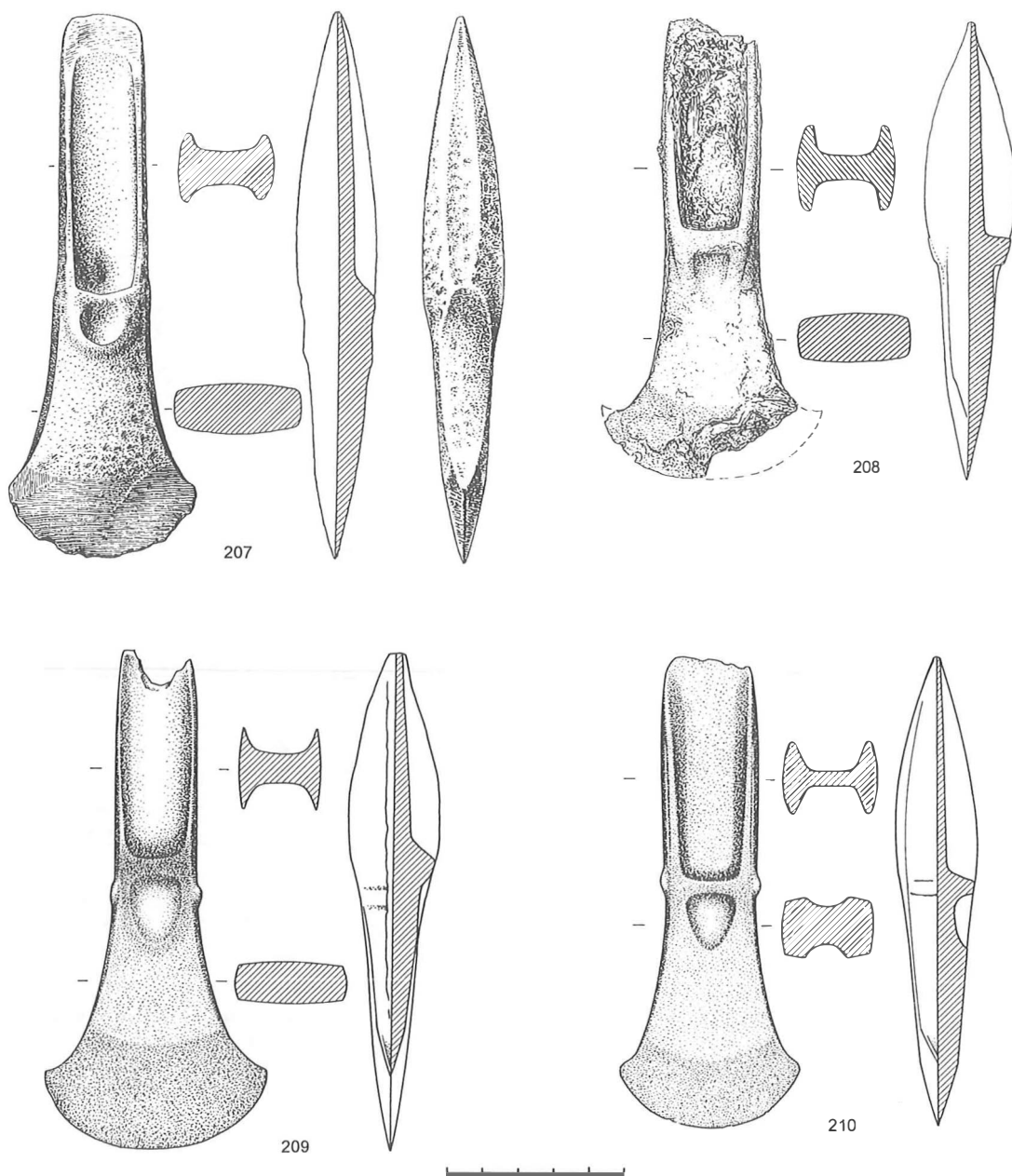


Fig. 50a. (Type AXP:we.psW) 207: Vlodrop, Li; 208: 's-Gravenhage, Z-H; 209: Dordrecht, Z-H; 210: Bennekom, Ge (see also fig. 50b).

CAT.NO. 208. 's-GRAVENHAGE, *GEMEENTE* 's-GRAVENHAGE, ZUID-HOLLAND.

L. (11.9); w. (4.3); th. 2.4 (flanges) cm. Butt damaged (modern), sinuous outline; () flanges; slightly convex sides; J] septum; nearly straight stopridge, overhanging; shield-shaped depression surrounded by U-rib below stopridge. Blade part with wide fan-shaped blade, everted tips; pouched. Edge sharp. Patina: where preserved (especially on face), glossy black, slightly *craquelé*. Part is severely corroded and damaged, part malachite; part recently polished shows bright bronze colour. Found 1967 by the apprentice paving-layer E.L. de Graaf, at the Savornin Lohmanplein at a depth of 50 cm. Museum: Museon, Den Haag, Inv.No. 56734, purchased from finder. (DB 1360)

Map reference: Sheet 30D, 76.68/453.84.

Documentation: *Nieuwe Haagse Courant*, 22 March 1967; letters

H.G. Schenk to Butler: 21 March 1967 and 18 March 1968.

References: Van Zijl de Jong, 1968: pp. 211-213; Van Heeringen, 1983: p. 105, afb. 10-3.

CAT.NO. 209. DORDRECHT, *GEMEENTE* DORDRECHT, ZUID-HOLLAND (dealer's provenance).

L. 14.0; w. 6.4; th. (flanges) 2.62 cm. Weight 355.4 gr. Butt with irregular U-shaped indentation; () flanges with flattish sides; nearly J] septum; fan blade with widely everted tips. 'Shield', in the form of a U-shaped depression, outlined by a rib, below the stopridge. Crescent-ground; faint hammer marks on ground portion. Prominent horizontal bar on sides. Patina black (partly removed), glossy. Very well-preserved. Museum: Allard Pierson, Amsterdam, Inv. No. 701. Purchased in 1934 from Museum Scheurleer, the Hague; to which it

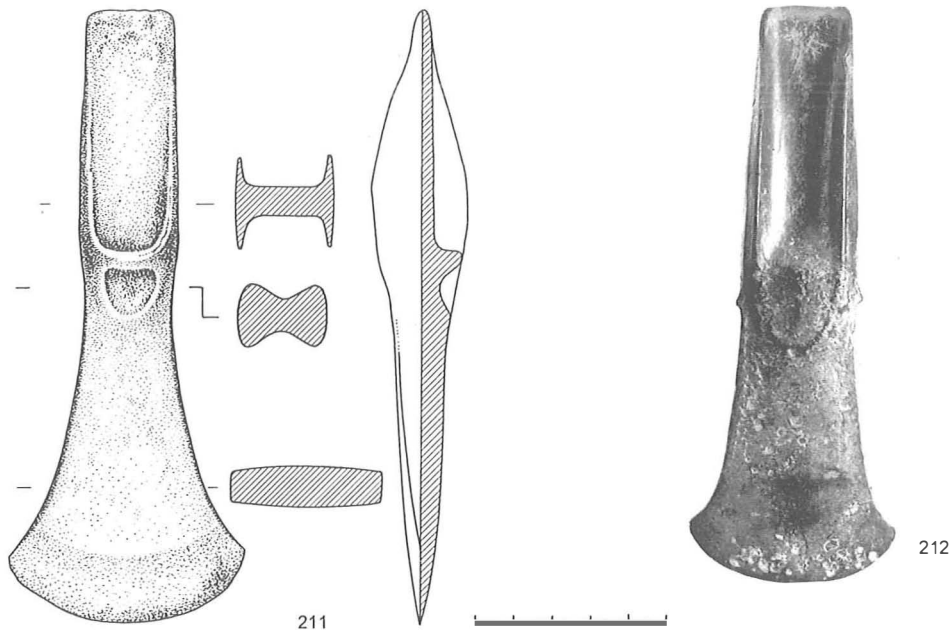


Fig. 50b. (Type AXP:we.psW) 211: Leimuiden, Z-H; 212: Wessem, Li (photo: R.O.B., Amersfoort) (see also fig. 50a).

had been presented 1906 by D.F. Scheurleer; who in turn had purchased it from dealer Müller (Cologne, Germany). (DB 751)

Map reference: Sheet 44A, c. 105/423.

Reference: Cat. Mus. Scheurleer 1909, No. 171.

CAT.NO. 210. BENNEKOM, *GEMEENTE EDE, GELDERLAND*. L. 13.3; w. 5.0; th. 2.2 cm. Weight 307.3 gr. Nearly straight, slightly irregular, nearly sharp butt; () flanges, with hollowed edges; \ septum; shelf stopridge, with shield-shaped depression below it. Blade part nearly flat faces and sides, fan blade, extra everted at cutting edge. Slight pouches; crescent-ground. On side a horizontal plastic bar. Cutting edge sharp. Patina: originally brown, but now mostly dark bronze to blackish; well-preserved, but crack in one flange. Museum: Arnhem, Inv. No. GMF 135. (DB 949)

Map reference: Sheet 39F, c. 174/446.

Reference: *Informatieblad Gemeentemuseum Arnhem* VII, No. 20.

CAT.NO. 211. LEIMUIDEN, *GEMEENTE LEIMUIDEN, ZUID-HOLLAND* (playing-field).

L. 16.3; w. 6.2; th. (flanges) 2.5 cm. Sinuous leaf-shaped flanges; straight butt;] septum; U stopridge, with rib-outlined shield-shaped depression below it. Blade with flat faces, wide blade, slightly everted, crescent-ground, sharp cutting edge. Patina: part black, mostly bronze-colour. Slight damage on one side; scratch on one face. Otherwise very well-preserved. Found c. 1981/1982 by M.A.J. van den Hoek of Leimuiden, in a slight pile of sand alongside a ditch at the edge of the football field, while playing football. In view of the peat patina of the palstave, it would seem reasonable to suppose that it came to the surface during the laying of drainage in the football field, or in digging the post-holes for the fence, or in cleaning out the ditch. Museum: R.M.O. Leiden, Inv.No. h.1987/10.1. Purchased from finder. (DB 625)

Map reference: Sheet 31 W, 105.4/470.9.

Reference: Hallewas, 1988: pp. 310-311, afb. 1 (left).

CAT.NO. 212. WESSEM, *GEMEENTE WESSEM, LIMBURG, RIVER MAAS* (possibly not the original place of deposition, as there is a large gravel depot at Wessem).

L. 15.5; w. c. 5.6 cm. Straight butt, nearly parallel sides; flanges joined

by shield-shaped ridge below a faint stopridge. Cutting edge sharp, with blade tips slightly everted. Recovered in the 1960's in gravel along the River Maas. Formerly private possession, now collection unknown. (DB 620) Note: This palstave has not been seen, and in 1995 was no longer accessible. Photo used here kindly made available by the R.O.B.

Map reference: Sheet 58D, c. 190/352.

References: Stoecker, 1991: pp. 273-274, afb. 42; *Jaarverslag R.O.B.*, 1989: p. 194.

c) *Palstaves with Y or trident-shaped midrib (AXP: we.MYW; Type Wantage: Schmidt & Burgess, 1981: p. 135) (fig. 51)*

Only three examples are known in the Netherlands (on Map 23); plus one probably from the Wester Schelde (and thus attributable either to Belgium or the Netherlands):

CAT.NO. 213. *GEMEENTE STEVENSWEERT, LIMBURG*.

L. 16; w. 6.8; th. 2.4 cm. Straight butt; () flanges;] septum. Wide blade, concave edges, J blade tips. On face below stopridge, Y rib; on sides, horizontal plastic bar. Dredge find. Private possession. (DB 1907) Drawing: R.O.B.

References: Bloemers, 1973: p. 48, afb. 47; Wielockx, 1986: Cat.No. Hi28.

CAT.NO. 214. BETWEEN *GEMEENTE WIJCHEN/NIJMEGEN, GELDERLAND*.

L. 16.8; w. 7.3; th. 3.1 cm. U septum; ^ flanges; broad blade; on face below stopridge, Y midrib. On sides, slight knobs at stopridge level. Patina: mottled reddish brown, black in places. Surface rough. Museum: Nijmegen, Inv.No. AC 23 (old No. E III No. 13). Acquired 1893. (DB 1492)

Map reference: Sheet 40C, c. 183/426.

References: *Verslag*, 1893: p. 4, No. 13; Boeles, 1920: fig. 6; Butler, 1961: Pl. XVII:6; Butler, 1963a: Pl. VII:6, p. 72.

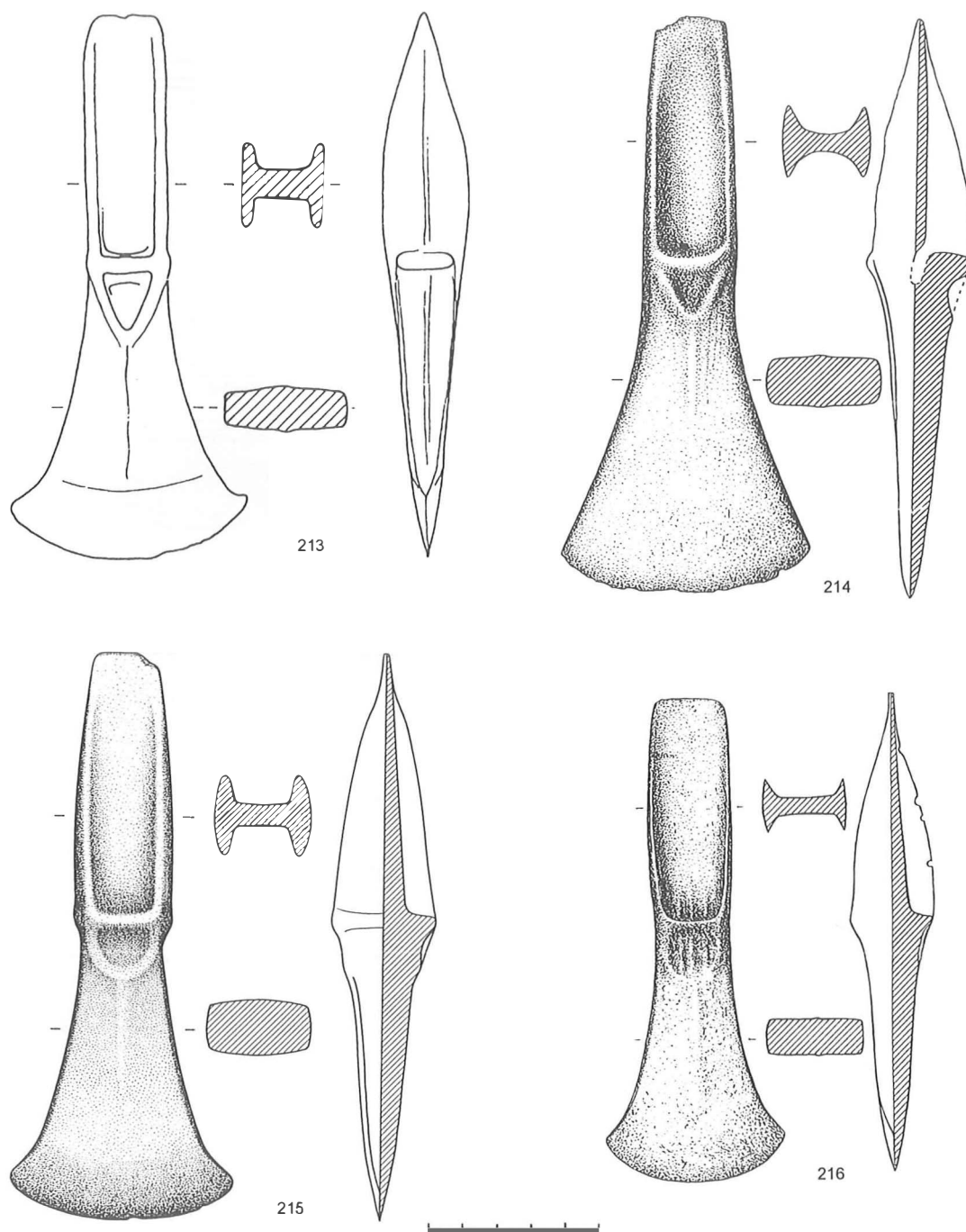


Fig. 51. (Type AXP:we.MYW) 213: *gemeente Stevensweert*, Li; 214: between *gemeenten Wijchen/Nijmegen*, Ge; 215: 'River Schelde'; 216: *gemeente Norg*, Dr.

CAT.NO. 215. EXACT PROVENANCE UNKNOWN; RIVER SCHELDE, PROVINCE ZEELAND OR FLANDERS, BELGIUM. L. 16.9; w. 6.5; th. 3.0cm. Weight 454.8gr. Thin straight butt; sinuous flange outline;][septum; straight overhanging stopridge. U-rib under stopridge. Blade part with A sides, everted blade tips. Horizontal bar on sides, at stopridge level. Blade part fan-shaped, with extra widening toward sharp cutting edge; faces slightly convex, sides flat. Patina light green, but for 3/4 filed off. Otherwise very well-preserved. Some brownish encrustation. Straight grinding facet. Casting seams worked

away. Private possession, ex coll. of father of owner. Presumably dredge find from the Wester Schelde. (DB 899)

CAT.NO. 216. *GEMEENTE NORG*, DRENTH (no exact provenance).

L. 14.3; w. 5.25; th. 2.4 cm. Weight 290 gr.][septum; triangular, slightly convex flanges; thin sharp butt and flange edges; slightly rounded, overhanging stopridge; 'shield' ornament with three vertical ribs, on face below stopridge; slight midrib below 'shield'; three short

ribs on septum. Blade sharp. Patina: bronze colour (originally dark).
Museum: Assen, Inv.No. 1908/VII.3. (DB 107)

References: *Verslag*, 1908: p. 7, No. 12; Butler, 1963a: Pl. VII:4 and p. 71(26).

Parallels: Similar palstaves are known in considerable numbers in South England and western France; many occur in hoards, illustrated in publications such as O'Connor, 1980 (some ten hoards containing Y and trident palstaves); Gaucher, 1981 (hoards of Sucy-en-Brie, Val de Marne; Pointoise, Somme; Sermizelles, Yonne) and Blanchet, 1984 (hoards of Pointoise, Somme; Dommiers, Aisne; La Heurrelle, Oise).

Dating: The French hoards belong to *Bronze moyen 2*, the British ones to the Taunton phase.

d) *Type Stibbard* (AXP:we.stib) (fig. 52)

Definition: A distinctive small variety of wide-blade western European palstave, known chiefly from the Stibbard hoard in Norfolk. In the hoard from Stibbard are unlooped examples with thin-ribbed Y decoration, together with looped undecorated palstaves of similar size and form. They have not previously been recognized in the literature as a distinct type, but they surely represent an easily recognizable local variant.

CAT.NO. 217. EERSELEN (GROENBOSCH), GEMEENTE AMBT MONTFORT, LIMBURG.

L. 11.4; w. 3.45; th. 2.3 cm. U septum, U stopridge, Y-shaped midrib. Edge blunt. Patina: dark glossy green. Old surface partially peeled off, leaving chalky light green. Museum: Bonnefontenmuseum Maas-tricht, Inv.No. 237 (old No. 1039 IIIB). (DB 217)

Map reference: Sheet 60B (60E new) c. 194/347.

References: Butler, 1973a: pp. 321-329 afb. 3.4; De Laet, 1982: p. 432; Wielockx, 1986: Cat.No. Hi21.

Parallels: Y-ornamented palstaves are common in Britain but also occur in the North European area, seemingly imitating this western European feature (cf. above, Types AXP:we.YW and AXP:ne.Y). Possibly the best parallels in most respects for the Eerselen-

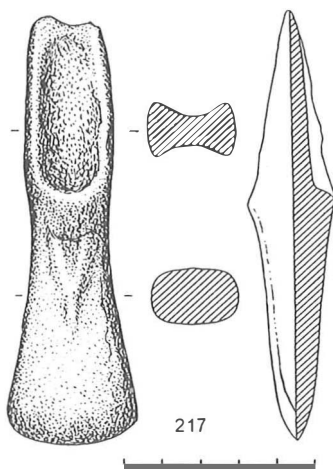


Fig. 52. (Type AXP:we.stib) 217: Eerselen, Li.

Groen Bosch palstave are the small, Y-ornamented examples best known in the palstave-and-spearhead hoard of Stibbard, Norfolk (Britton, 1960: No. 14ff; cf. Schmidt & Burgess, 1981: No. 835). These are very similar to the Eerselen palstave in size and general configuration; but the cutting-edge of the Eerselen specimen is narrower in width than those of the Stibbard specimens, so that it could not have come from the same mould as any of the Stibbard palstaves illustrated (which, however, are only a small selection of c. 70 palstaves, many subsequently lost or scattered, originally present in the hoard).

Dating: Both the affinities of the Stibbard palstave and the basal-looped, triangular-bladed spearheads in the hoard point to a dating in the British Taunton phase.

e) *Type Oxford* (AXP:we.ox) (fig. 53)

Definition: British low-flanged, broad-blade, rib-decorated palstave of Type Oxford (see Schmidt & Burgess, 1981: p. 132).

CAT.NO. 218. EPE (near), GEMEENTE EPE, GELDERLAND, hoard in tumulus (= Part I, Butler, 1992: Find No. 18, pp. 91-92, fig. 23, with discussion and further references).

L. 17; w. 6.4; th. 2.8 cm. Straight butt, convex \wedge flanges, U septum, rounded stopridge; flattish blade with marked sinuous ('crinoline') outline; sharp cutting edge. Decoration below stopridge: narrow midrib in series of short vertical ribs. Multitudinous hammer marks on faces. Patina: patchily bright green to almost black; in fine state of preservation. Museum: R.M.O. Leiden, Inv.No. WE 6. (DB 345)

Map reference: Sheet 27D, c. 195/484.

Associations: Flanged stopridge axe of Type Vlagtwedde (Part II:1, Butler, 1995/1996: Cat.No. 165, fig. 37b); two-knobbed ribbed sickle.

Parallels: nearly identical specimen in Blackrock (near Brighton, Sussex) hoard (Piggott, 1949: pp. 114-115, fig. 3, third from left; *Inventaria* GB. 47, No. 13; O'Connor, 1980: p. 329). Schmidt & Burgess (1981: p. 132) assign the Epe palstave to a Type Oxford, with reference to the two Oxford hoards (Leopold Street and Burgesses' Meadow).

References: Pleyte, Gelderland (1889): p. 89, Pl. XXIV:4; Butler, 1959: pp. 136-139, fig. 5; Butler, 1963a: pp. 68-69, 72-73, 221, 243, fig. 17, Pl. VIIIa; Butler, 1992: pp. 91-92; fig. 23.

Dating: British Taunton phase.

f) *Type Normand and related* (AXP:we.nd) (fig. 54)

Two examples in the Netherlands.

Definition: See Briard & Verron, 1976: pp. 91-95 (their Type 522).

CAT.NO. 219. PROVENANCE UNKNOWN.

L. 14.65; w. 6; th. 2.95 cm. Sinuous outline, with broad trapeze-shaped blade with J-shaped blade tips. \wedge septum, \wedge flanges, pronounced projecting stopridge; rough nick in butt. Blade sharp but battered. Trident pattern on face. Patina: blackish. Museum: Nijmegen, Inv.No. AC 3 (old No. E III.3). Ex coll. Guyot. (DB 1480)

References: Butler, 1961: Pl. XVII:5; Butler, 1963a: pl. VII:5, p. 72 (36).

CAT.NO. 220. LEUNEN/BRUKSKE (BETWEEN), GEMEENTE VENRAY, LIMBURG.

L. 14.3; w. 5.4; th. 2.6 cm. Weight 337.6 gr. Butt irregular (damaged); \wedge flanges, U septum, prominent U stopridge. Under stopridge double

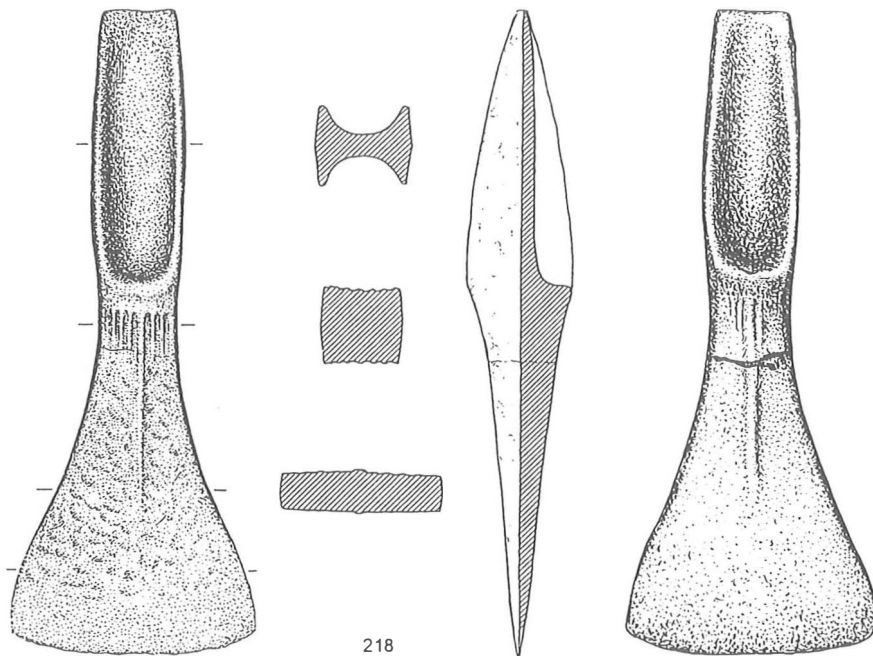


Fig. 53. (Type AXP:we.oxf)
218: Epe, Ge.

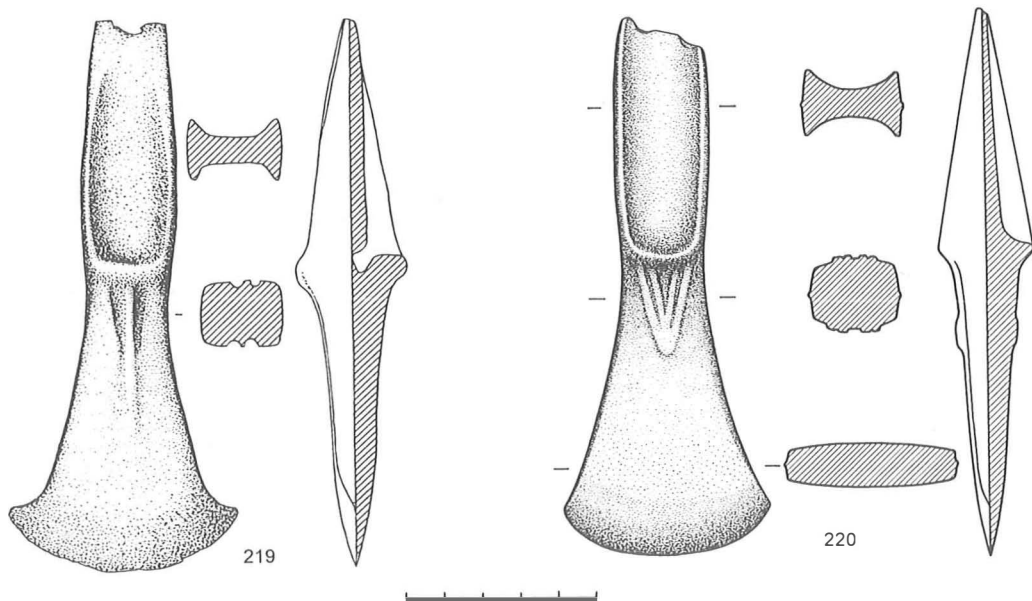


Fig. 54. (Type axp:we.nd) 219: no provenance; 220: between Leunen & Brukske, Li.

V ribomament. Sinuous outline, wide blade. Blade part with slightly convex faces and sides. Cutting edge sharp; casting seams sharp. Patina: brown; where peeled off, light powdery green. Found 1993 with metal-detector across the road from stable marked '1930' along former Scheidenweg, by P. Vermeulen. Museum: Venray, Inv.No. 2729 (old no. RKD 0699), purchased from finder. (DB 2345)

Map reference: Sheet 52B, 196.750/392.20.

Parallels and dating: Numerous in Normandy and the Paris basin, also in southern England; typical for the

French *Bronze moyen 2* and the British Taunton phase. See especially O'Connor, 1980: pp. 47-49, List 7A-B, Map 5.

g) *Looped palstave, West European (British-Northwest French, low-flanged), wide blade with trident-trumpet midrib (AXPL:we.MYTW)* (fig. 55)

Only one example in the Netherlands.

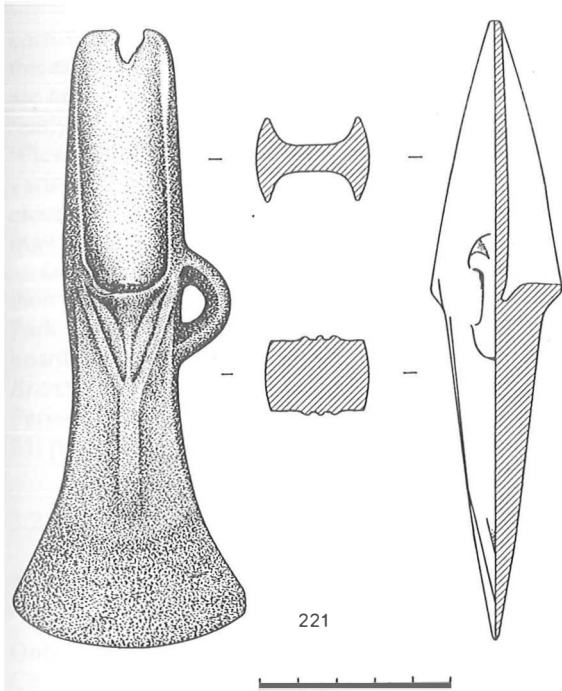


Fig. 55. (Type AXPL:we.MYTW) 221: 'River Schelde'.

CAT.NO. 221. EXACT PROVENANCE UNKNOWN; RIVER SCHELDE, PROVINCE ZEELAND OR FLANDERS, BELGIUM. L. 16.7; w. 6.2; th. 3.5. Weight 568.9 (unusually heavy specimen). D loop 3.2x0.6 cm; butt rounded, with irregular V-shaped indentation (casting defect); \wedge flanges, slightly \cup sides; U septum, with on one side a deep blowhole at junction septum stopridge; U stopridge, strongly overhanging, depending from which a large trident, the central prong of which is trumpet-shaped. Blade part begins parallel-sided, but expands gradually to a wide blade. Cutting edge crescent-ground, with many visible hammer marks on sharpening facet. Cutting edge sharp. Patina mostly dark bronze, but black in depressions. Virtually mint condition. Private possession, ex coll. father of present owner. Presumably dredge find from the Wester Schelde. (DB 2326)

Reference: *Jaarverslag R.O.B.*, 1992: p. 192.

Parallel and dating: Rather similar is a palstave illustrated by Schmidt & Burgess (1981: pp. 82, 148, No. 875) from a hoard at Kirtomy, Farr, Sutherland in northern Scotland (their Pl. 134G). This palstave is assigned to the trident variant of their Type Shelf; they date it to 'not earlier than the Penard phase'.

3.2.3. *Palstaves, West European, with midrib and side-flanges, wide-blade (AXP:we.MFW) (fig. 56)*

Three examples known in the Netherlands, all three apparently from one hoard find (approximate location on Map 23; dealer's provenance?).

CAT.NO. 222. FLEVOLAND (exact provenance unknown). L. 13; w. 6.3; th. 1.5 cm. Side-flanges and midrib. Asymmetrically rounded butt; \cup sides; \cup septum; rounded stopridge; wide blade with side-flanges and midrib. Rough casting, cutting edge blunt; heavily abraded. Patina: dark brownish to bright bronze; traces of green. Surface rough and irregular. Private possession, exchanged. (DB 1930)

Possibly from same find, and same mould, as Cat.Nos 223 and 224.

CAT.NO. 223. FLEVOLAND (exact provenance unknown). L. 13.3; w. 6.1; th. 1.8 cm. Weight: 301.4 gr. Rounded butt; faintly \cup flanges; \cup septum. Blade part with wide blade expansion; side-flanges, narrow midrib. Cutting edge blunt. Patina: varied brown to light green. Heavily corroded and abraded. Was originally a poor casting: in the septum is a roughly vertical irregular crack, through which daylight is visible, and the blade surface has some irregular bulges. Museum: Museon, Den Haag: without Inv.No. (DB 901)

CAT.NO. 224. FLEVOLAND (NOORDOOSTPOLDER?) (exact provenance unknown).

L. 13.3; w. 5.7; th. 1.6 (at stopridge). Rounded butt; slightly \cup flanges; \cup sides; U septum; U stopridge. Fan-shaped wide blade, with side-flanges, narrow midrib. Cutting edge sharpened. Patina: light powdery green, with dark bronze patches; corroded, distorted. Museum: the Hague, Museon, without inventory number. (DB 2325)

Purchased, along with another of the near-identical palstaves (Cat.No. 223) December 1980, as part of the collection of A. van Steijn (Den Hoom), who in turn had purchased the two palstaves from a merchant in military goods (decorations, medals etc.) in Rotterdam around 1974.

According to the Van Steijn catalogue (see below), found 1941 during drainage of the Noordoostpolder (portion of the former Zuiderzee); allegedly together with the virtually identical palstaves Cat.Nos 222 and 223 (above), and possibly from the same mould as these.

Documentation: The Museon possesses a typed catalogue of the Van Steijn collection (an assortment of fossils and archaeological objects of very heterogeneous, mostly non-Netherlands origin). Its brief entry concerning these palstaves is the only known written source of information as to their provenance. It reports, presumably on the authority of the Rotterdam merchant, only that the axes were found in 1941 during drainage of the Noordoostpolder, but it does not state that other objects were found with them.

In 1982, W.-J. Hoogestijn (now R.O.B., Amersfoort; then research for a student thesis for the I.P.P., Amsterdam) made telephone enquiries of the owners. The information he received is briefly reported in his unpublished thesis (p. 278, find-spot No. 110). The informants recalled having seen six or seven axes, similar to each other, at the merchant in Rotterdam; Van Steijn purchased two of these. The buyer of the third axe understood that the axes were found, with a dugout canoe, in the vicinity of Lelystad. What happened to the other axes is unknown.

Despite the insufficient documentation and its hearsay character, the great similarity of the three known palstaves in form, and their identical condition and patination, makes it quite credible that they should have been found together as or in a hoard.

a) *Possibly related fragment*

CAT.NO. 225. ZOELLEN-DE BELDERT, GEMEENTE BUREN, GELDERLAND.

L. (3.2); w. (2.9) cm. Weight 105.4 gr. Fragment of midribbed palstave. Sides slightly convex; stopridge nearly straight, overhanging, slight narrow midrib. Breaks are patinated. Patina: mostly light green,

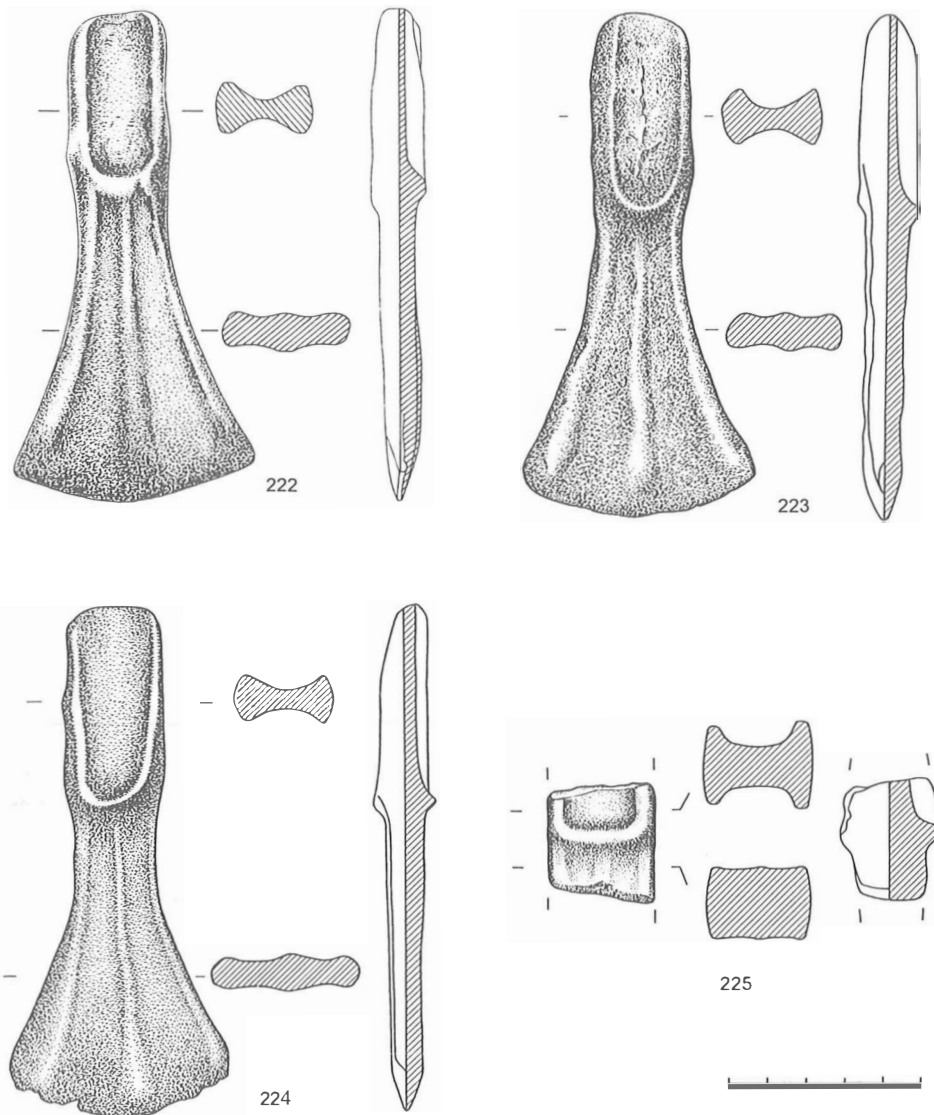


Fig. 56. (Type AXP:we.MFW)
222-224: 'Flevoland' (probable hoard); 225: Zoelen-de Beldert, Ge.

partly brown. Found in ploughed field, with metal detector. Private possession. (DB 889)

Map reference: Sheet 39D, 158.89/438.04.

Reference: *Jaarverslag R.O.B.*, 1991, p. 144.

Parallels: Similar palstaves are not otherwise known in the Netherlands. These palstaves are obviously related to the 'early midribbed palstaves' of southern Britain (Burgess, 1962; Schmidt & Burgess, 1981: pp. 125-128; cf. Butler, 1963a: p. 57, Type IB; Rowlands, 1976: II, pp. 30-32, Pl. 29, No. 731 ff, Map 4; O'Connor, 1980: p. 433, List 4, especially his 'side-flanged with midrib' group therein). French examples in, for example, the Pointoile (Somme) hoard (Blanchet, 1984: pp. 160-161, figs 78-79, Map 4). Schmidt and Burgess distinguish three types within the 'early midribbed' series; their Type Liswerry (their Nos 790-794A) is perhaps the most appropriate in this connection.

The British 'early midribbed' palstaves would seem to have their prototypes in the stopridge axes of Type Plaisir of Northwest France (cf. Butler, 1987: esp. pp. 10-13, fig. 3, pp. 31-32, note 3; Butler, 1990: p. 78, fig. 17A3; Butler, 1995/1996, pp. 227-230). A gradual transition between the two is observable: compare, for example, the various specimens from the Paris area illustrated by Mohen (1977: pp. 48-50). The prototypes went as far as the Baltic area (Rülow, Babbins hoards) in company with early western European shield palstaves. Mohen's figure 40 well illustrates the stage of the development which, as the 'early midribbed' palstave type, becomes common in southern England.

In contrast to these, the 'Flevoland' palstaves are debased in form. Admittedly it is not easy to be sure to what extent this debased appearance is due to typological devolution, or to poor casting, or simply to the severe

corrosion that the 'Flevoland' axes have undergone. Be this as it may, the U-sectioned septum and the U stopridge are not characteristic of the British-Northwest French 'early midribbed' type, so that the palstaves of the 'Flevoland' hoard may be considered to be a devolved variety, possibly of 'local' origin. But, in the absence of close parallels, it is futile to speculate as to where they may actually have been made.

Dating: Schmidt and Burgess argue for a dating of their 'early midribbed' palstaves within their Acton Park phase. But related examples certainly occur in hoards of the British Taunton phase, and in the French *Bronze moyen* 2; a looped example occurs in the Northern Period II Frøjk hoard (Broholm I, 1943: hoards M.80-81, pp. 222-224 with photos).

3.2.4. Palstaves of Armorican type

a) Palstaves of type Portrieux (AXP:we.portN) and related (fig. 57)

Only two examples are known in the Netherlands. Characteristic are the long narrow, faintly sinuous outline;][septum; and non-expanded cutting edge.

CAT.NO. 226. BREDa, GEMEENTE BREDa, NOORD-BRABANT.

L. 14.7; w. 3.8; th. 2.45 cm. Straight butt; ^ flanges;][septum; slightly curved, slightly overhanging stopridge. Blade part narrow, slightly)(outline. Collection: B.A.I. Groningen, no number. (DB 1070)

Map reference: Sheet 50B, c. 113/399.

Note: This palstave has had the longest journey of any here reported. It was taken to Tasmania by an emigrant from the Netherlands in the 1920's, and repatriated by his son in the 1960's.

Parallels: Briard (1965: pp. 109-118) discusses the type under the heading *Les haches à talon à nervure médiane*, but examples without a medial rib occur also (his fig. 34:3). O'Connor (1980) has listed and mapped the occurrence (ribbed and unribbed) in Britain, in France from the Seine mouth northward, and Belgium (his p. 435, List 4 and Map 4). Some of the (ribbed) examples from Picardy and northern France have been cited and illustrated by Blanchet (1984: p. 166, fig. 82:2,13; pp. 168-169, fig. 84:1-5,7, map p. 195, fig. 105). Cf. an unribbed example found with British palstave types in the Wantage, Berks. hoard (Burgess, 1970: Taf. 13; Jockenhövel, 1975: p. 170, Abb. 18C2).

Dating: Briard cites hoard evidence for the occurrence of palstaves of Portrieux type in his *Bronze moyen* I, II and III.

b) Possibly related

CAT.NO.227.HILVERSUM, GEMEENTE HILVERSUM, NOORD-HOLLAND (tumulus (grave?) find).

L. c. 18; w. now 2.8 at top of side ornament; th. (flanges) 1.87 cm. Slender, thin, chisel-like palstave. Butt straight, sharp (some modern battering); hafting part with faintly convex outline; slightly)(flanges; in section convex sides;][septum; straight stopridge, barely projecting, slightly undercut. Blade part with, in section, flat, parallel sides bearing a rectangular-topped plastic ornament; faint side-flanges, broad shallow midrib. The plastic side ornament extends to c. 1.8 cm above the level of the stopridge.

The cutting-edge part of this specimen has recently been broken off and is missing. The break shows that the interior of the axe is brownish and somewhat porous. The battered butt also shows the same brownish colour. Patina: mottled green, dull, with in places brownish earthy encrustation. Excavated c. 1855 by L.J.F. Janssen in a tumulus on the Hilversum Heide, situated c. 500 *e*/north of the third

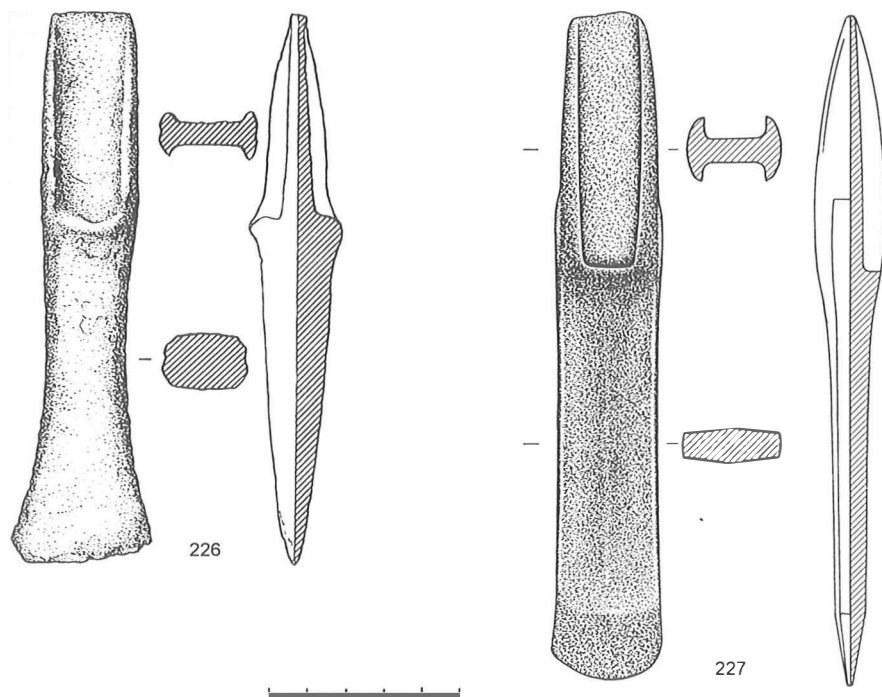


Fig. 57. (Type AXP:we.portN) 226: Breda, N-B; 227: Hilversum, N-H.

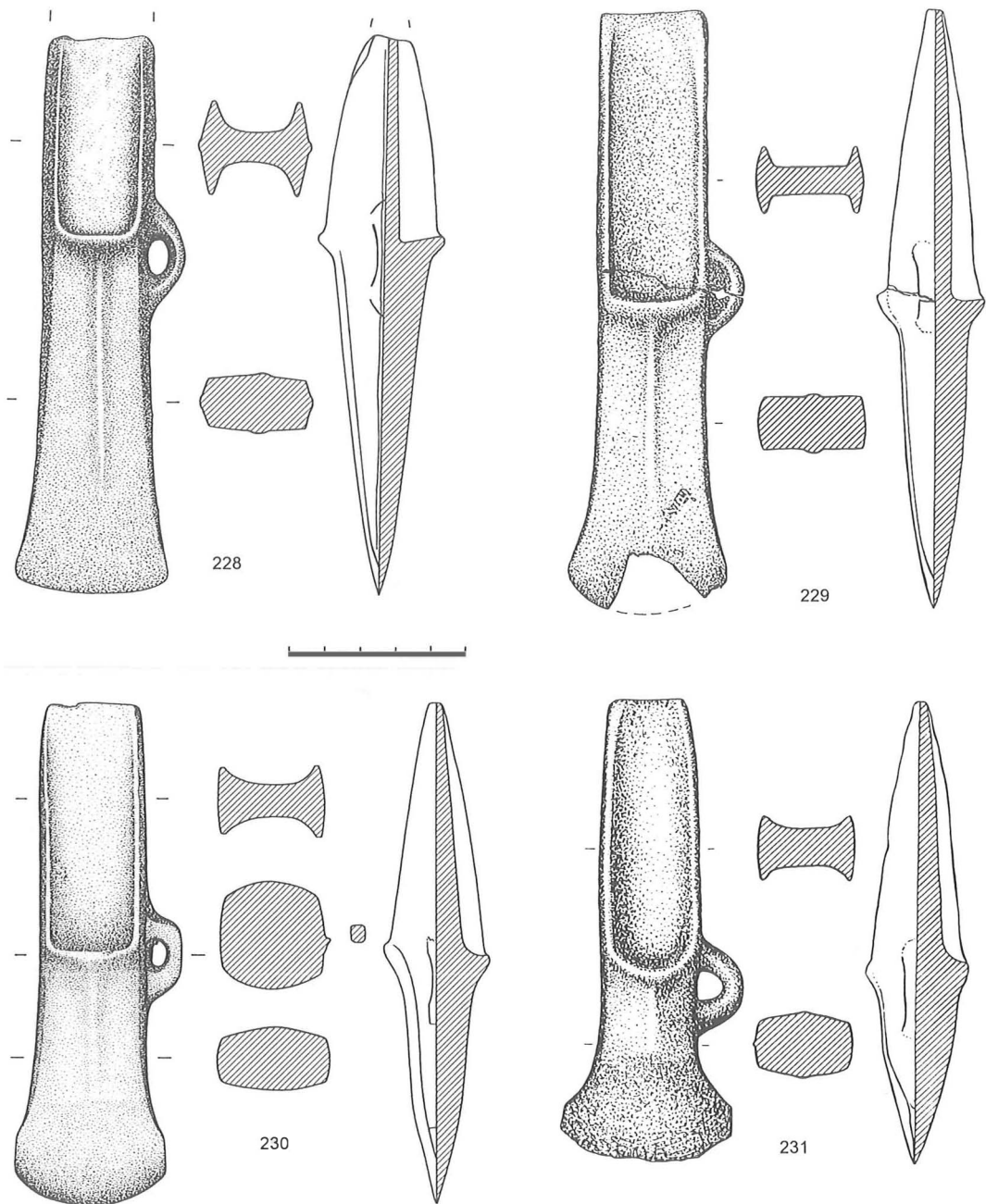


Fig. 58. (Type AXPL:we.rosN) 228: no provenance; 229: near Heesche Poort, Ge; 230: Weurt, Ge; 231: Venlo, Li.

kamp ["gelegen 500 el ten no. van het derde z.g. 'kamp'"]. Museum: R.M.O. Leiden, Inv.No. Hi.487. (DB 1105)

Map reference: Sheet 32A, c. 143/472.

Reference: Janssen, 1856: p. 67 en Pl. X.I; Pleyte, 1902: p. 11, Pl. V:2.

The present drawing is from the original palstave, but the missing broken-off part is restored after the accurate drawing of Janssen.

Discussion: This palstave has, as far as we know, no close parallels. The long narrow-bladed form, [septum, straight stopridge and slight midrib suggest that it is related to the Portrieux type, but the () flange outline of

the hafting part is perhaps an archaic feature relating it to the types of the Acton Park-Tréboul phase. The flat-topped plastic side ornament is difficult to match.

It may perhaps be considered to be related generally to the small series of narrow, chisel-like palstaves such as that in the Pointoile (Somme) hoard and the example from Aisne(?) illustrated by Blanchet (1984: figs 85:2 and 85:3; the latter = his fig. 78:11) and that from Bedburg, Kr. Bergheim, Nordrhein-Westfalen (Kibbert, 1980: No. 475, with further references).

c) *Looped palstaves, narrow-bladed, large, with narrow midrib, Type Rosnoën (AXPL:we.ros)* (fig. 58)

Four examples in the Netherlands (2 Gelderland, 1 south, one unknown).

CAT.NO. 228. PROVENANCE UNKNOWN.

L. 15; w. 4.3; th. 3.7 cm. Weight 523.7 gr. Butt nearly straight, thick (5 mm), broken off anciently. Shafting part with convex \wedge outline, ridged sides with prominent, rib-like casting seams; \parallel septum; straight stopridge, undercut and overhanging. Blade part with nearly parallel sides; flat faces, ridged sides; narrow midrib. Low-placed D loop, 3.3x0.7 cm. Heavy specimen. Patina varied green; heavily encrusted with gravel and sand. Well-preserved. Cutting edge sharp. Museum: Nijmegen, Inv.No. 1.9.24. (DB 1561)

CAT.NO. 229. HEESCHEPOORT(near), GEMEENTE NIJMEGEN, GELDERLAND.

L. 17.1; w. 4.5; th. 3.1 cm. Palstave, looped; \wedge flanges; \parallel septum; nearly straight, prominent overhanging stopridge; parallel-sided blade with rectangular cross-section; midrib. Blade very slightly expanded. Normal loop position; the opening has not been fully perforated. Broken, apparently in antiquity, through middle. Cutting edge damaged recently. Initial H punched on blade. Patina: black; partly dark bronze. Hoard with Cat.Nos 289 and 320? Museum: R.M.O. Leiden, Inv.No. I.D.B.B.4a (old No. B.41 and I.556). Acquired Nov. 1823, with DB 310 and DB 311 from J. Becker of Amsterdam, ultimately ex coll. 'in the Betouw'. (DB 309)

Map reference: 40C, c. 186/428.

CAT.NO. 230. WEURT, GEMEENTE BEUNINGEN, GELDERLAND.

L. 14.3; w. 4.3; th. 3.0 cm. Weight 446 gr. Straight blunt butt; \wedge flanges; \parallel wedge septum; slightly convex sides; straight stopridge, overhanging. Blade part with slightly ridged faces. Sides slightly convex and nearly parallel, but with sinuous blade tip expansion. D loop (1.3H0.6 cm) with flattened faces, normal placing. Large sharpening facet on lower part of blade. Patina: dark bronze, nearly black. Reddish to yellowish encrustation on part of septum. Found 3 November 1971 in the River Waal at a time of unusually low water level. Private possession. (DB 634) (identification in black ink on septum: WEU/RG)

Map reference: Sheet 40C, 184.37/431.37.

Reference: Verscharen, 1976: afb. 1 (photo).

CAT.NO. 231. VENLO, GEMEENTE VENLO, LIMBURG.

L. 13.2; w. 4.9; th. 2.95 cm. Slightly concave, blunt butt. Hafting part with slightly convex \wedge flanges; () sides; \wedge septum; U stopridge. Blade part with parallel sides, but with a very drastically shortened and sinuous cutting-edge part. Narrow midrib. Large D loop, low-placed (upper end at stopridge level). Found during construction of a house on the Hamburger Singel. Museum: R.M.O. Leiden, Inv.No. 1.1935/11.5. Purchased from one Kortooms, Venlo, via Keus. (DB 455)

Map reference: Sheet 52G, c. 209/375.

References: Butler, 1973a: pp. 321-329, esp. p. 326, afb. 5.4; De Laet, 1982: p. 432; Wielockx, 1986: Cat.No. Hi32.

Remarks: The Weurt example, Cat.No. 230, has had its blade shortened and reworked to produce a 'mini-crinoline' blade shape; so also, even more drastically, Cat.No. 231 from Venlo.

Parallels: Palstaves of Type Rosnoën: Briard, 1965: pp. 155, 180. The Rosnoën type includes also palstaves with trumpet midrib, trident midrib, and other midrib forms. O'Connor offers a list (1980: List 50, pp. 473-474) and distribution map (his Map 23) of 'Rosnoën and

related palstaves', with examples in the Dover, Kent hoard, seven finds in Northwest France from the Seine mouth to Anzin (including five hoards), three finds in Belgium, and only one (Nijmegen; our Cat.No. 229; his fig. 37:2) in the Netherlands. See also the numerous examples and variants in Anjou (Cordier & Gruet, 1975).

The Venlo example, here Cat.No. 231, has been honoured by Kibbert (1980: esp. pp. 216-217) by being made the eponymous find of his *Form Venlo*, but this is hardly sustainable, as the Venlo axe is evidently a much-shortened palstave of Rosnoën type (cf. below, under Type AXP:MS).

Dating: Briard dates Rosnoën palstaves to his Rosnoën and St. Brieuc-des-Iffs phases. For late examples cf. also the Luzarches (95 Val d'Oise) hoard (Blanchet, 1984: pp. 241-244, figs 129-131). Blanchet dates this hoard to *Bronze final 3a*, but much of its contents are appropriate to *Bronze final 2* (Blanchet, 1984: pp. 241-244 and his table on p. 369).

3.2.5. *Looped palstaves, West European*

a) *Plain with narrow blade (AXPL:we.PN)* (fig. 59)

Four examples, from three finds, in the Netherlands (on Map 24).

CAT.NO. 232. BETWEEN WALSOORDEN & SAEFTINGE; RIVER WESTERSCHDELDE, ZEELAND.

L. 17.5; w. 4.5; th. 2.9 cm; loop 2.0x0.6 cm. Round, slightly undercut stopridge, \wedge septum, faces and sides slightly convex. Edge sharp. Patina: dark bronze (grey sandy encrustation). Surface very pitted. Dredge find. Private possession. (DB 1938)

Map reference: Sheet 49A, c. 66/376.

Parallels: Except for the loop, this palstave is a good match for the palstave in the North French Anzin hoard (Blanchet, 1984: pp. 228, 231, fig. 122). Similar looped and unlooped palstaves, heavily rolled but still recognizable, are present in the Dover, Kent hoard (O'Connor, 1980: figs 34-35). Cf. also the unlooped specimen from Serskamp, Oost-Vlaanderen (Warmenbol, 1992: p. 79, No. 56, fig. 38:56).

Dating: The Anzin hoard is dated, on the basis of its median-winged axe of Kibbert's *Type Grigny, Var. Altrip*, to *Bronze final II Stufe Rosnoën-Stockheim*.

CAT.NO. 233. BARGEROOSTERVELD, GEMEENTE EMMEN, DRENTHE (hoard of 1900, including two palstaves: see also Cat.No. 234).

L. 14.4; w. (blade) 4.0; th. 3.1 cm. Weight 382 gr. Butt anciently damaged; slightly convex \wedge flanges; \parallel septum, flat sides; slightly rounded, somewhat undercut 'shelf' stopridge. Blade part with nearly parallel sides, very slight, gradual blade tip expansion; section slightly convex-rectangular. D loop, 2.8x0.4 cm. Patina: varied light to dark green, with dark brown tinge. Museum: Assen, Inv.No. 1900/III.30. (DB 1183)

Metal analysis (P. Northover, No. V17): Sn 11.22, As 0.37, Sb 0.04, Pb 8.21, Co tr, Ni 0-0.1, Fe tr, Ag 0.01, Bi tr, no Au and Zn; according to Northover, South English metal (unpublished communication).

Associations: with palstave fragment, Cat.No. 234 below; small, tanged single-edged 'Urnfield' knife with two backing ribs; pair of *Nierenring* bracelets; three non-joining fragments of a bracelet with a thin medial rib. Found in a low tumulus, presumably as a secondary deposit.

Map reference: Sheet 18C, c. 261.4/533.6.

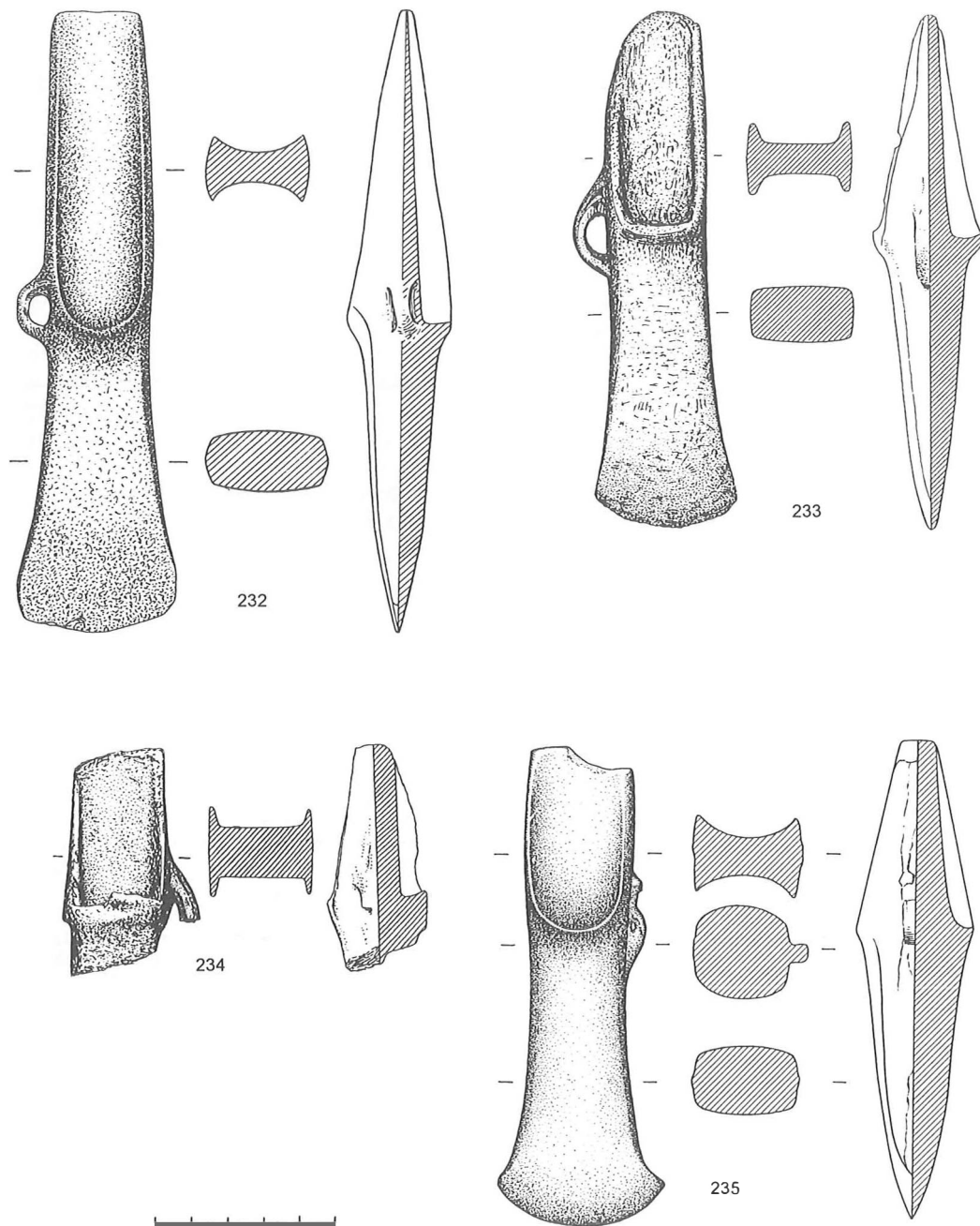


Fig. 59. (Type AXP:we.PN) 232: between Walsoorde & Saeftinge, Zl; 233-234: Bargerroosterveld, Dr (hoard); 235: Zaltbommel, Ge.

CAT.NO. 234. BARGERROOSTERVELD, GEMEENTE EMMEN, DRENTHE (hoard of 1900; see also Cat.No. 233).

L. (6.1 cm). Weight (184 gr.). Midsection fragment of a palstave, in so far as preserved quite similar to Cat.No. 234 above. Breaks ancient. Museum: Assen, Inv.No. 1900/III.31. (DB 1182)

Metal analysis No. V18: Sn 11.22, As 0.50, Sb 0.45, Pb 3.55, Co 0.03, Ni 0.14, Fe 0.02, Ag 0.13, Bi 0.03, Au tr, Zn tr. (According to Northover, of East English metal.)

Associations: see Cat.No. 233.

Map reference: Sheet 18C, c. 261.4/533.6.

References: *Verslag*, 1900: p. 16; Butler, 1959: pp. 139-140, fig. 6; Butler, 1960: pp. 207-211, fig. 9, p. 226, Bijlage I; Butler, 1960

(1961): p. 105, fig. 9, pp. 123-124; Butler, 1963a: p. 68, fig. 18; *Inventaria Arch.*, NL 16.

Parallels and dating: According to Schmidt & Burgess (1981: p. 131) the Bargerroosterveld palstaves fall within the British 'transitional' palstave group, but have also some features of the British 'late' type; O'Connor (1980: Find No. 195) assessed them as 'late' palstaves. For Schmidt & Burgess such palstaves occur in the Penard and Wilburton-Wallington phases. A development



- Type Rosnoen, narrow-blade
- + 2-looped, Iberian
- × plain, trapeze sides
- * plain, narrow-blade
- plain, narrow-blade (hoard)

Map 24. Looped palstaves of western European types in the Netherlands.

similar to that in Britain is seen in France; a few examples reached North Spain (Monteguado (1977: Type 25A and 25A1, his Nos 904-908, map Taf. 137). In North Germany, a similar palstave, but with a slightly trapeze-shaped blade, was found with a double-T-handled Urn-field knife (Northern Period IV for all authors except Tackenberg, who insists on Period V) at Barrien-Bülten, Kr. Grafschaft Hoya in Niedersachsen (Nowothnig, 1962; Tackenberg, 1971: pp. 215-217; Prüssing, 1982: p. 87, No. 186; Kibbert, 1980, p. 258). The *Nierenringe* in the Bargerooosterveld find (Tackenberg's *Typ 2*) are similarly Period IV to most authors but Period V to Tackenberg. In the Netherlands, Bargerooosterveld 1900 may well be more or less contemporary with the hoards from Drouwenerveld in Drenthe (Butler, 1986) and Berg-en-Terblijt in Netherlands Limburg (Butler, 1973a: Abb. 14a,b), their connections belonging with Period IV in Denmark and North Germany.

CAT.NO. 235. ZALTBOMMEL, GEMEENTE ZALTBOMMEL, GELDERLAND.

L. 13.5; w. 4.7; th. 3.1 cm. Weight 427 gr. Butt unusually thick, straight (butt part broken off). U septum, slightly undercut. U stopridge;

thin \wedge flanges with flat sides. Blade part with convex sides and faces; section of blade convex-rectangular; nearly parallel sides, but slightly expanded blade tips. Loop broken and hammered in. Very broad casting seam, spread by hammering. Cutting edge sharp. Patina: dark bronze. Dredged up summer 1974 from a 25-meter deep sand pit near KM 932, on the Bommel side of the Waal. Acquired by H.J. Buitelaar, then employed on a barge; who in turn sold it to the R.M.O. Leiden, Inv.No. e.1982/2.1. (DB 2043)

Map reference: Sheet 45A, c. 145/424.

Parallels: A specimen closely related to the Zaltbommel example is illustrated by Kibbert (1980: p. 257, No. 697), from Brochterbeck, Kr. Tecklenburg in Westfalen. More generally, good parallels for this piece, and the others here presented, are to be found among the North British 'transitional' palstaves of the 'plain variants' of various types (Roundhay, Shelf, and others), illustrated by Schmidt & Burgess, 1981: on, for example, their Pl. 65-66.

Dating: Probably Wilburton-Wallington phase of Schmidt & Burgess, 1981.

b) *With wide, trapeze-shaped blade (AXPL:we.P \wedge)* (fig. 60)

Two examples in the Netherlands (on Map 24).

CAT.NO. 236. BEEK EN DONK, GEMEENTE BEEK EN DONK, NOORD-BRABANT.

L. 17.1; w. 5.15; th. 2.65 cm. \wedge flanges, U septum; slightly rounded,

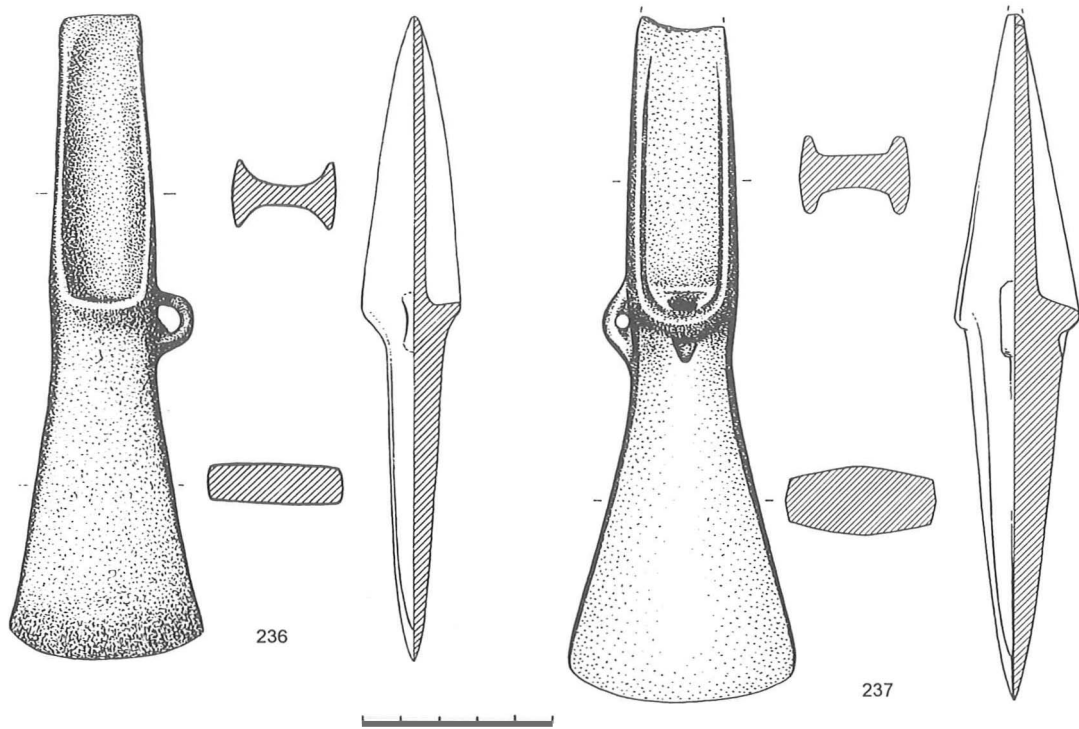


Fig. 60. (Type AXPL:WE.p/Δ) 236: Beek en Donk, N-B; 237: gemeente Roermond, Li.

somewhat sunk-in, overhanging stopridge; blade of rectangular section, with slightly convex-faces. Blade sharpened recently. Low-set loop. Patina: dark brown. Museum: R.M.O. Leiden, Inv.No. k.1939/9.I. Acquired through J.F. Gestel of Beek en Donk. (DB 486)

Map reference: Sheet 51F, c. 172/393.

CAT.NO. 237. RIVER MAAS, GEMEENTE ROERMOND, LIMBURG.

L. 18.2; w. 6; th. 3.3 cm.][wedge septum; 4 short ribs on septum above stopridge (on one side only); U stopridge; small plastic V below stopridge. Blade of octagonal section (ridged on faces and sides). Blade sharp. Traces of wood on septum. Patina: blackish; partly sand-encrusted. Dredge find, period 1954-8. Museum: R.M.O. Leiden, Inv.No. 1.1971/11.4. Ex coll. Van der Pijl (dredger, Roermond); purchased 1971 from his heirs. (DB 1797)

Documentation: Inventarisboek 29, pp. 61-63, esp. p. 62.

c) Iberian two-looped palstave (AXPL:we.iber) (fig.61)

CAT.NO. 238. DEBIJLAND?, GEMEENTE HERWENEN AERDT (NOW GEMEENTE RIJNWAARDEN), GELDERLAND (dealer's provenance).

L. 18.1; w. 6.15; th. 2.8 cm. Weight: 456.3 gr. Butt rectangular (flattened by hammering). Upper half narrow, with slightly ridged sides; narrow, thick][septum; bar-ledge stopridge. The side-flanges continue below the stopridge; between them are two vertical ribs. Below this portion the blade of the axe fans out gradually to a wide blade, with [] cross-section. There are two large loops (2.8x0.75 cm), on which the casting seams are preserved. The cutting edge seems to have been recently re-sharpened. Patina: black, partly removed mechanically showing bronze colour. Preservation nearly perfect, except for some surface scrubbing. Collection: B.A.I. Groningen, Inv. No. 1938/IV.10. (DB 1095)

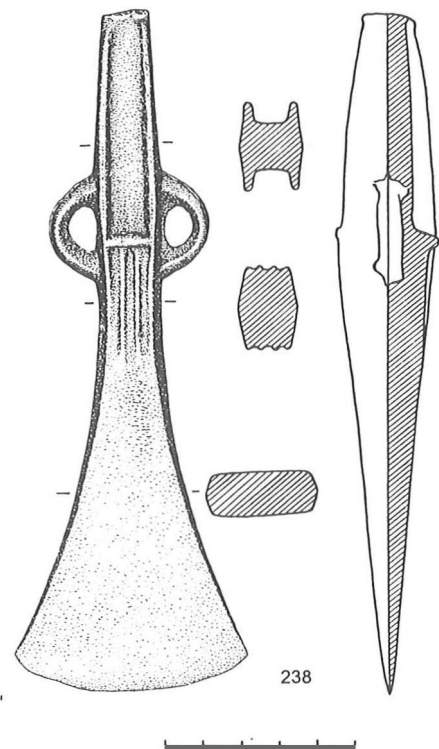


Fig. 61. (Type AXPL:we.iber) 238: de Bijland(?), Ge.

The B.A.I. acquired it in 1938, through purchase, via the dealer J. Esser (Nijmegen), of the large collection of H. Blijdenstein, harbour-master at Nijmegen, consisting of dredge finds attributed to the rivers Maas or Waal. (Also from this collection are *inter alia* the palstaves Cat.Nos 315 and 386).

Parallels: Iberian two-looped palstaves; more particularly the sub-type 32H of Monteagudo (1977: pp. 200-201, Nos 1272-1277), with seven examples occurring especially in eastern Oviedo in North Spain.

Dating: According to Monteagudo, datable 'probably' to Iberian Late Bronze Age II or thereabouts.

Comment: Iberian two-looped palstaves are otherwise unknown in the Netherlands. One specimen is known in Belgium (as from Deinze, Oost-Vlaanderen; of Monteagudo's subtype 32G-West Oviedo A); it is regarded by Warmenbol (1992: pp. 109-110, No. 110, with further references), as of dubious provenance. In West Germany, another specimen is attributed to Wildeshausen, Ldkr. Oldenburg, with no further details as to find-spot or circumstances (Laux, 1984; Wegner, 1996: p. 276, Cat. Nr. 4.8; of Monteagudo's variety 26B1, with four examples in North Spain). This piece was purchased in 1883 by the Hamburg Museum für Völkerkunde und Vorgeschichte from the art and antiquities dealer Eduard Wiggerts, whose reliability is upheld by Laux (but we know nothing of the identity or reliability of whoever sold it to dealer Wiggerts). The palstave is, according to Laux, incompletely finished off. Its patina is described only as being appropriate to a hoard or stray find (Wegner, 1996: p. 276, Cat. Nr. 4.8). Thus, while we cannot eliminate the possibility that these three palstaves were found where claimed or assumed, neither can we regard them as having confidence-inspiring credentials.

Two-looped palstaves do occur in the British Isles (13 in Britain, two in Ireland, according to the list of O'Connor, 1980: pp. 441-442, List 13); but Schmidt & Burgess (1981: No. 932, pp. 163-164, with further references) declare that these are, despite their double loops, actually British rather than Iberian palstaves.

Thus our palstave Cat.No. 238 is a genuine North Iberian export, but the real question is whether the import was ancient or modern. Admittedly, the patina of this specimen is consistent with its having been a river-dredge find.

3.3. Group III. Palstaves of Central European Tumulus Bronze Age types (Map 25)

3.3.1. Typ *Niedermockstadt*, Var. *Reckerode* (Kibbert, 1980: pp. 232-236, Taf. 65B: round symbols) (AXP:ce.nr) (fig. 62)

Two examples in the Netherlands.

CAT.NO. 239. DOORWERTH, GEMEENTERENKUM, GELDERLAND (tumulus along the Italiaanse Weg in the Doorwerthse Bosch. L. 16.05; w. 4.8 cm (a/c Boeles, 1924). Straight butt; shaft part with Δ flanges; straight stopridge; wide Δ blade, with side-flanges flanking an arch-shaped depression on the face. Collection: unknown. (DB 833)

Dug out 2 Jan. 1923 by Jhr. Mr. H.B.A. Laman Trip (then Mayor of Doorwerth), after probing approximately in the centre of a tumulus, at a depth from the top of c. 0.75 to 1.00 m. Excavation followed, in June 1924, by P.C.J.A. Boeles in behalf of the Museum Arnhem, with the assistance of a foreman and draughtsman-photographer from the B.A.I. Groningen. A large charcoal deposit (interpreted as the remains of a funeral pyre in situ), grave pits and a ringditch were found, but the relationship of the palstave to these is unknown.

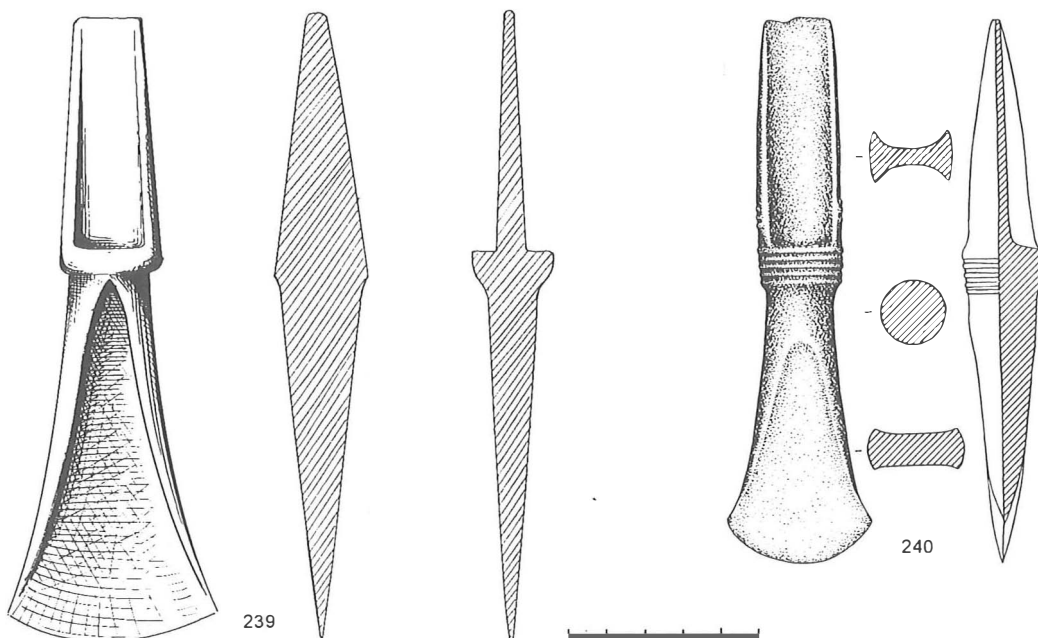


Fig. 62. (Type AXP:ce.nr) 239: Doorwerth, Ge; 240: Vught, N-B.

Map reference: Sheet 40A, c. 184.5/444.

Documentation: In B.A.I. Groningen, correspondence (Boeles to Van Giffen, 15 April 1923 and 20 July 1924); undated manuscript excavation report by Boeles, wherein: "Bronzen Absatz-bijl, lang 16.05 cm. br. 4.8 cm. Den 2 Jan 1923 door Jhr. Mr. H.B.A. Lanman Trip in het centrum ongeveer van den Heuvel ontgraven op een diepte van ongeveer 0.75-1 m., nadat bij het insteken van een peil-ijzer op dit voorwerp was gestuit. Dit peil-ijzer heeft ongeveer de lengte van een wandelstok. Mr. Boeles heeft nog in Jan. '23 het gat gezien waar de bijl uitgehaald is. Het oppervlak is daar wat onregelmatig en hol". Documentation: B.A.I. *Fotoboek* 1924a: Nos 15-16; 1924b: Nos 17-27, with unpublished excavation plan; B.A.I. *Vondstenboek* 1923-1924.

Note: The drawing in the B.A.I. archives here reproduced is in the style of the then B.A.I. draughtsman L. Postema.

Parallels: Kibbert, 1980: Nos 562-568, pp. 232-236 (*Typ Niedermockstadt, Var. Reckerode*; distribution Taf. 65B, round dots); Laux, 1971: p. 85, Taf. 16:7 (Recklingen, Kr. Lüneburg, Hgl. 3, Best. I, Kat.Nr. 296c; with Tumulus dagger). The distribution is mainly in the Fulda-Werra area of Hessen, but there is a secondary concentration also in the Lüneburger Nordheide/Stader Geest area.

The West German examples illustrated by Kibbert do not have the multi-ribbed *Zwischenstück* (which, however, occurs on a variety of palstaves of local types in the same area).

CAT.NO. 240. VUGHT, *GEMEENTE VUGHT, NOORD-BRABANT*.

L. 14.45; w. 3.9; th. 2.15 cm. Convex V-wings, each with 3 ribs: flat septum; level stopridge; encircled by 5 cast ribs. Blade round-sectioned at top, with sunken flat arch-facets forming faces; edge sharp. Patina: brownish, with patches of light green. Museum: 's-Hertogenbosch, Inv.No. 8181. Purchased c. 1933. (DB 261)

Map reference: Sheet 45C, c. 148/407.

Discussion: The 'belt' of five ribs close-set ribs encircling the waist of the specimen from Vught calls to mind the presence of the same feature on the otherwise quite different palstave from 'the Veluwe' (above, Cat.No. 186). It is noteworthy that this 'belt' feature, with varying number of ribs, occurs on both North European and some German Tumulus types in South Germany. Kibbert suggests that these were battle-axes, chiefly because they occur frequently in graves.

Distribution and dating: There are two main areas of distribution of *Var. Reckerode* palstaves: the Fulda-Werra area in Hessen, and the Lüneburg Nordheide-Stade area.

Kibbert (1980: pp. 234-235) allows a dating predominantly in the *mittlere Hügelgräberzeit*, but extending a phase earlier or a phase later.

3.3.2. *Bohemian palstaves (AXP:ce.boh)* (fig. 63)

Two examples of unknown provenance.

CAT.NO. 241. PROVENANCE UNKNOWN.

L. (8.3); w. 3.9; th. 1.7 cm. Weight 132.6 gr. Butt roughly broken off (anciently); hafting part, with flat septum; low side-flanges, convex sides. Blade part has () outline, with () sides. The sides have been hammered in until the flanges meet to form a V stopridge. Cutting edge sharp. Patina dark green, but partly scrubbed off, showing dark bronze. Museum: Nijmegen, Inv.No. xxx.d.11; ex coll. Kam. (DB 1530)

CAT.NO. 242. PROVENANCE UNKNOWN.

L. (9.8); w. 2.9; th. 2.0 cm. Weight 124.3 gr. Butt roughly broken off (anciently); long, deep V stopridge; hafting part has slightly concave faces, but no distinct flanges. Blade part has rounded sides. Cutting edge sharp. Patina: dark green, but mostly scraped off, showing dark bronze. Brown loamy encrustation in hollow. Museum: Nijmegen, Inv.No. xxx.d.29; ex coll. Kam. (DB 1535)

Discussion: Bohemian palstaves do not otherwise occur in the Netherlands. Since both specimens are unprovenanced, the possibility lies open that they were acquired by Kam through the antique trade, and could thus be modern import. This is the more likely since none are known in Kibbert's area in western Germany, and there are none in Laux (1971). A few examples in Britain are, however, accepted by Schmidt & Burgess (1981: No. 524, pp. 91-92).

3.3.3. *Flanged palstave-chisel (very narrow body with 'geknickt' sides, flanged blade part)* (AXP/CL) (fig. 64)

Only one example in the Netherlands.

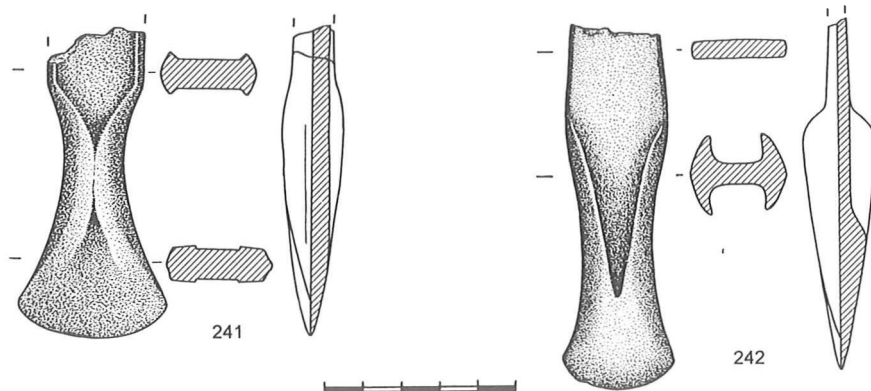


Fig. 63. (Type AXP:ce.boh) Bohemian palstaves. 241-242: no provenance.

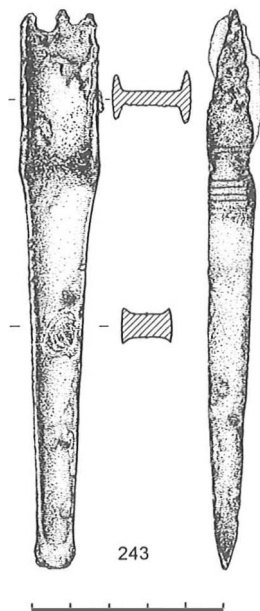
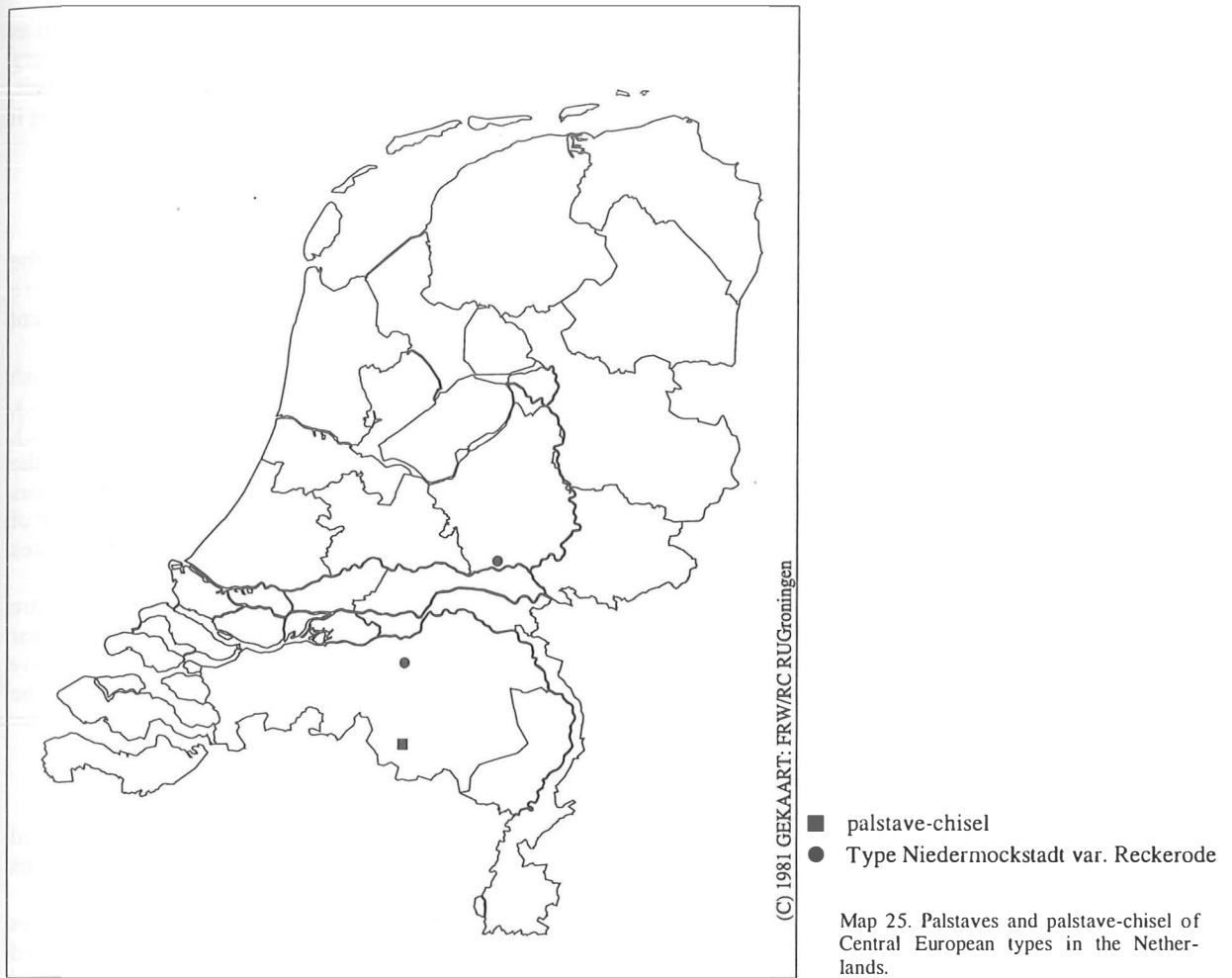


Fig. 64. (Type AXP/CL) Palstave-chisel. 243: Hoogeloon, N-B.

CAT.NO. 243. HOOGELOON, *GEMEENTE HOOGELOON, HAPERTENCASTEREN, NOORD-BRABANT* (tumulus the Zwartenberg, or Zwartberg).

L. 14.8; w. at stopridge level 2.2 (cutting edge w. 1.1), th. flanges > 2.6 cm. Butt irregular, severely damaged. Haft part with || septum, probably () flange outline. At level of the slight shelf stopridge a *Knick* in the outline. Blade part with acute V-outline, slight side-flanges; nearly flat sides, ornamented with two groups of incised transverse parallel lines. Patina: partly brownish, partly mottled green, in places whitish. Museum: 's-Hertogenbosch, Inv.No. 21 (DB 256)

Found 1846 by P.N. Panken (schoolmaster, later postmaster, amateur archaeologist) by digging a pit in the centre of a large tumulus. According to Panken the palstave-chisel occurred at the old ground level; presumably this was a primary central burial, but further details or finds were not observed or recorded.

The tumulus was excavated in July 1950 by (later Professor) H. Brunsting for the R.O.B., prior to restoration later in 1950 (and again 1960-1961). The original construction was a large bell barrow, with a central sod-built mound 19 cm in diameter, placed on an old heath surface; surrounded concentrically by a berm, bank and ditch. The external diameter of the ditch was c. 40 m; thus the Zwartenberg is one of the largest Bronze Age grave monuments in the Netherlands. A post circle (single widely spaced posts, Glasbergen Type 3) was placed in the ditch after some silting had taken place. Three secondary coffined cremation graves and an inhumation grave, all without grave goods, were also found; there was also a secondary ring-ditch. Pollen analysis of the old ground surface by H.T. Waterbolk suggested

contemporaneity with the Toterfout-Halve Mijl Tumuli I and IB (primary Hilversum urn); thus contributing to the 1950s' revision of British-Netherlands Early Bronze Age chronology and relations initiated by Glasbergen.

Map reference: Sheet 51C, 146.2/379.75.

References: Hermans, 1845: II, pp. 280-281 (reproducing Pankens' account); Brunsting, 1950; Glasbergen, 1954: Part I, pp. 110-111, 118; Part II, p. 40, No. 15, pp. 128, 168-169, fig. 72; Waterbolk, 1954: pp. 103, 108-109; Kamminga, 1982.

Parallels: A background for the Zwartenberg palstave-chisel has been established by Willroth (1985) in his examination of the chisels of the *ältere nordische Bronzezeit*, with citation of some Central European parallels; cf. also Kibbert, 1980: pp. 124-126 (*Randleistenmeissel*, Nos 164-169) and pp. 224-226 (*Absatzmeissel*, Nos 533-544); various examples in Hachmann, 1957. The best parallels for the Zwartenberg example are found among the chisels classified by Willroth and Kibbert as 'flanged chisels' rather than among their 'palstave chisels'. Nevertheless, some of the examples they list among the flanged chisels have in fact a weak or incipient stopridge; justifying Glasbergen's term 'palstave chisel' for the Zwartenberg example while recognizing that the palstave-chisels of the German authors have generally a more developed stopridge.

The forerunners appear in Classical Únětice and Late Únětice times; an exported copper example, with flanged blade part and *geknickt* sides, appearing already in the northern Late Neolithic metal hoard of Skeldal in Jutland (Vandkilde, 1988; 1990). Closer parallels to the Zwartenberg example are found among the chisels attributed to the Northern Period IB/Sögel-Wohld phase; especially among the *Form 7* and *Form 10* of Willroth, more or less equal to the *Variant C* of Vandkilde. Especially noteworthy are examples such as Pahlkrug (Gem. Linden, Kr. Norderditmarschen in Schleswig-Holstein), a probable Northern Period I grave find in tumulus, with small spearhead related to Type Bagterp: Aner & Kersten, 1991: p. 66, No. 9182, with further references; a hoard rather than a grave find according to some writers. A similar specimen, but shortened through re-sharpening: Quickborn, Kr. Norderditmarschen, Aner & Kersten, 1991: p. 66, No. 9206. It remains an open question as to which of these chisels are imports from Central Europe and which might be of local manufacture; the Dano-Scanian and North German examples are now better (if not yet completely) known, while the Central European material has not had equivalent attention.

Dating: Glasbergen's dating to Northern Period II/III is superseded. The Willroth *Form 7* and *Form 10* (Vandkilde *Variant C*) chisels are mostly dated to the Northern Period IB, though perhaps beginning in the preceding Northern Period IA. The decoration on the side of the Zwartenberg chisel suggests contemporaneity with the Sögel-Wohld/Lochham phase.

Function: The very narrow cutting edge, barely more than 1 cm wide, clearly establishes it functionally as a chisel rather than an axe. Almost any sharp and

sufficiently sturdy tool can, of course, also function as a weapon. We do not know whether the Zwartenberg chisel was in fact a grave gift or a non-grave deposit, though its depth in the tumulus tends to suggest that it was in a grave.

3.4. Group IV. Regional palstave types

Under this heading we list palstave types which, on the basis of their distribution, can be considered to have been produced in the Netherlands and/or in the adjacent areas of Northwest Germany or Belgium.

As a primary classification device, we distinguish between palstaves with a midrib or midridge (AXP:M...), palstaves with flanges on the blade portion (AXP:F...), palstaves with an arch-shaped raised ornament on the sides (AXP:A...), and palstaves with the various combinations of these features. Palstaves with none of these attributes are described as plain palstaves (AXP:P...).

Palstaves with a loop on the side (AXPL:...) are classified separately, but in parallel. When it is clear that a looped palstave type is otherwise practically identical with an unlooped type, this is indicated in the coding and in the text.

3.4.1. *The plain palstaves (AXP:P..., AXPL:P...)*

Total: In the Netherlands, 96 palstaves: 79 unlooped (Cat.Nos 244-322; Maps 26-28) and 17 looped examples (Cat.Nos 325-340; Maps 27 and 29).

We group together as 'plain palstaves' all examples that lack the attributes midrib/midridge, arch-shaped side ornament, and flanges on the blade part. We should emphasize that this definition by no means corresponds with the German term *schlichte Absatzbeile*, since German authors include both palstaves with flanged blade part and palstaves with arch-ornament on the sides within their concept of *schlichte Absatzbeile* (e.g. Kibbert, 1980: pp. 237-238).

On the basis of variations in outline, the plain palstaves can be divided into several varieties. Most numerous are types AXP:PS (22 examples), AXP:PSW (19 examples), and AXP:P^ (15 examples), followed by groups AXP:PH, AXP:PHJ, AXP:PHC, and AXPL:PH<, all listed and described successively below.

a) *Plain palstaves with sinuous outline (AXP:PS)* (figs 65a-65e)

22 examples in the Netherlands (Cat.Nos 244-265), 20 of which are provenanced. Fairly equally common in the north and south of the country, but absent in the west and, more surprisingly, in the Central part of the Netherlands (Map 26). The blade part expands gradually to a moderately wide cutting edge (usually in the range 4 to 5 cm). Most examples have a U-sectioned septum and U stopridge. But there are several examples with a

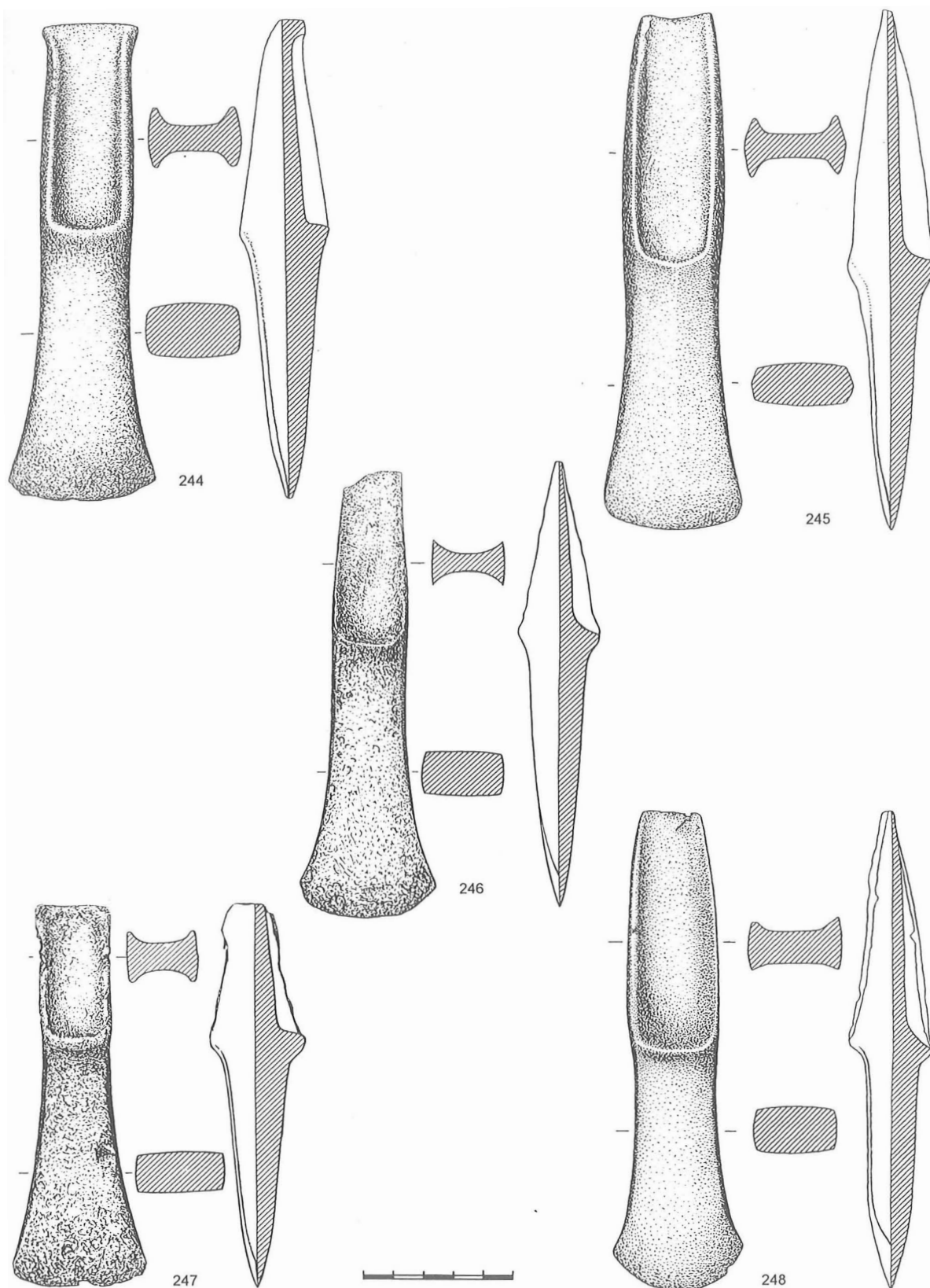
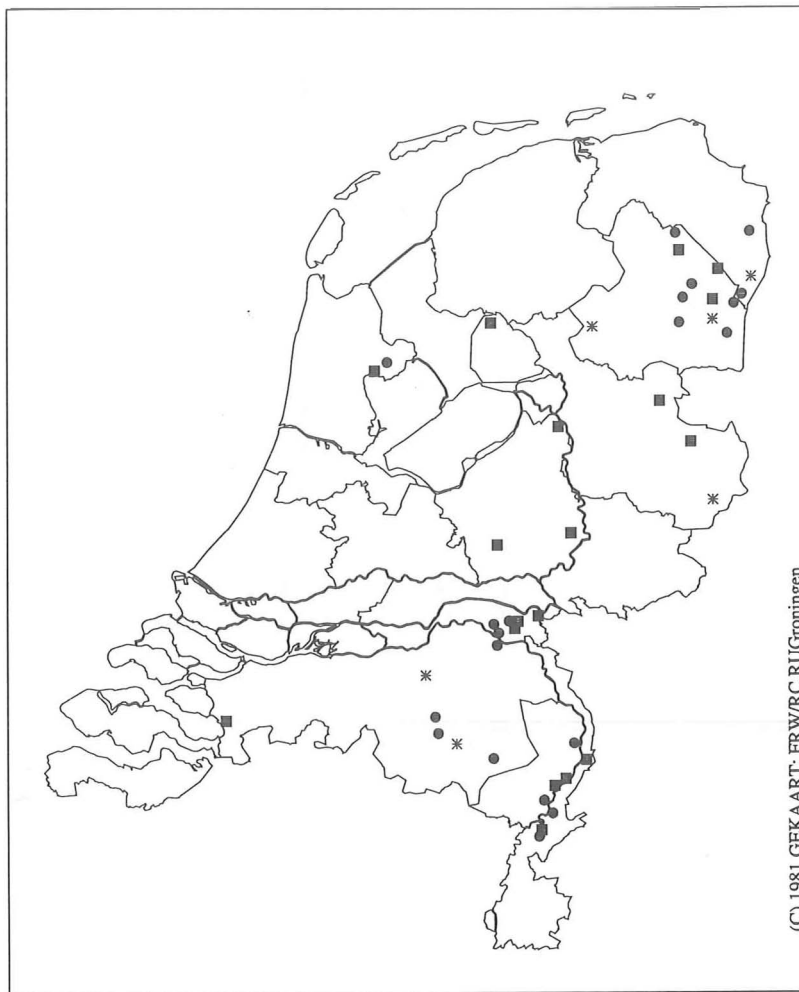


Fig. 65a. (Type AXP:PS) 244: Best, N-B; 245: Eerselen, Li; 246: near Emmen, Dr; 247: Borgerveld, Dr; 248: 'Westerveld', Dr (see also figs 65b-e).



- medium size (PS)
- idem, wide-bladed (PSW)
- * small size (PS<)

Map 26. Regional palstaves, plain, un-looped, with sinuous outline: Types AXP: PS, AXP:PSW, PS<.

more or less flat septum, and a few (Cat.Nos 259, 260, 262, 263) with a straight or nearly straight stopridge.

CAT.NO. 244. BEST, *GEMEENTE BEST*, NOORD-BRABANT. L. 16.1; w. 5; th. 3 cm. \wedge flanges; U septum, prominent stopridge. Blade part with slightly convex faces and sides. Butt has been flattened in antiquity. Blade anciently blunted. Patina: blackish; surface somewhat pitted. Found (c. 1910) in the moor. Museum: 's-Hertogenbosch, Inv.No. 8044. (DB 260)

Map reference: Sheet 51B, c. 157.5/391.5.

CAT.NO. 245. EERSELEN, *GEMEENTE ABMT MONTFORT*, LIMBURG.

L. 17.3; w. 4.7; th. 2.9 cm. \wedge flanges with < sides; \backslash / septum; slightly rounded overhanging stopridge. Blade part faintly ridged on faces and sides. Cutting edge blunted. Patina: glossy dark green (not identical to Cat.No. 393). Found at Groen Bosch, "langs Eerselen". Museum: Bonnefantenmuseum, Maastricht, Inv.No. 241 (old No. 1039 IIIA, Montfort No. 7). (DB 221)

Map reference: Sheet 60B (68E new), 194/347.800.

Reference: Wielockx, 1986: Cat.No. Hi20 (with drawing).

CAT.NO. 246. EMMEN (near), *GEMEENTE EMMEN*, DRENTHE. L. 15.1; w. 4.65; th. 2.8 cm. Weight 399 gr. Triangular flanges; wedge U septum; overhanging U stopridge; rectangular blade cross-section (actually somewhat lozenge-shaped through poorly registered mould).

Cutting edge sharp, but battered; butt end damaged slightly. Patina: mottled green; originally dark green to blackish. Surface severely pitted. Museum: Assen, Inv.No. 1855/I.57. Ex coll. Willinge. (DB 68)

Map reference: Sheet 17H.

References: Pleyte, Drenthe, 1882: p. 15, No. 3, Pl. XVI:3; Butler, 1963b: p. 211, IV.A.4.

CAT.NO. 247. BORGERVELD, *GEMEENTE BORGER*, DRENTHE. L. 13; w. 4.6; th. 3.2 cm. Weight 345 gr. \wedge flanges; wedge U septum; nearly straight, prominently overhanging stopridge; [] blade cross-section. The two halves of the mould were not accurately aligned. Butt damaged by recent hammering. Patina: blackish. Surface corrosion-pitted. Found 1904 by one Jansen while turning over soil near his house. Museum: Assen, Inv.No. 1904/VII.1. Purchased from M. Nathans of Assen. (DB 102)

Map reference: Sheet 12G, c. 247/550.

References: *Verslag*, 1904: p. 10, No. 4; Butler, 1963b: p. 210, IV.2.

CAT.NO. 248. 'WESTERVELD', DRENTHE (exact provenance unknown).

L. 16.1; w. 4.4; th. 3.2 cm. Weight 431 gr. \wedge flanges; \backslash / septum. Blade part with slightly convex faces and sides. Cutting edge sharp. Patina: mottled green, brown, dark bronze, with greenish patches, (originally all brown); has been scraped. Heavily pitted. Found in the

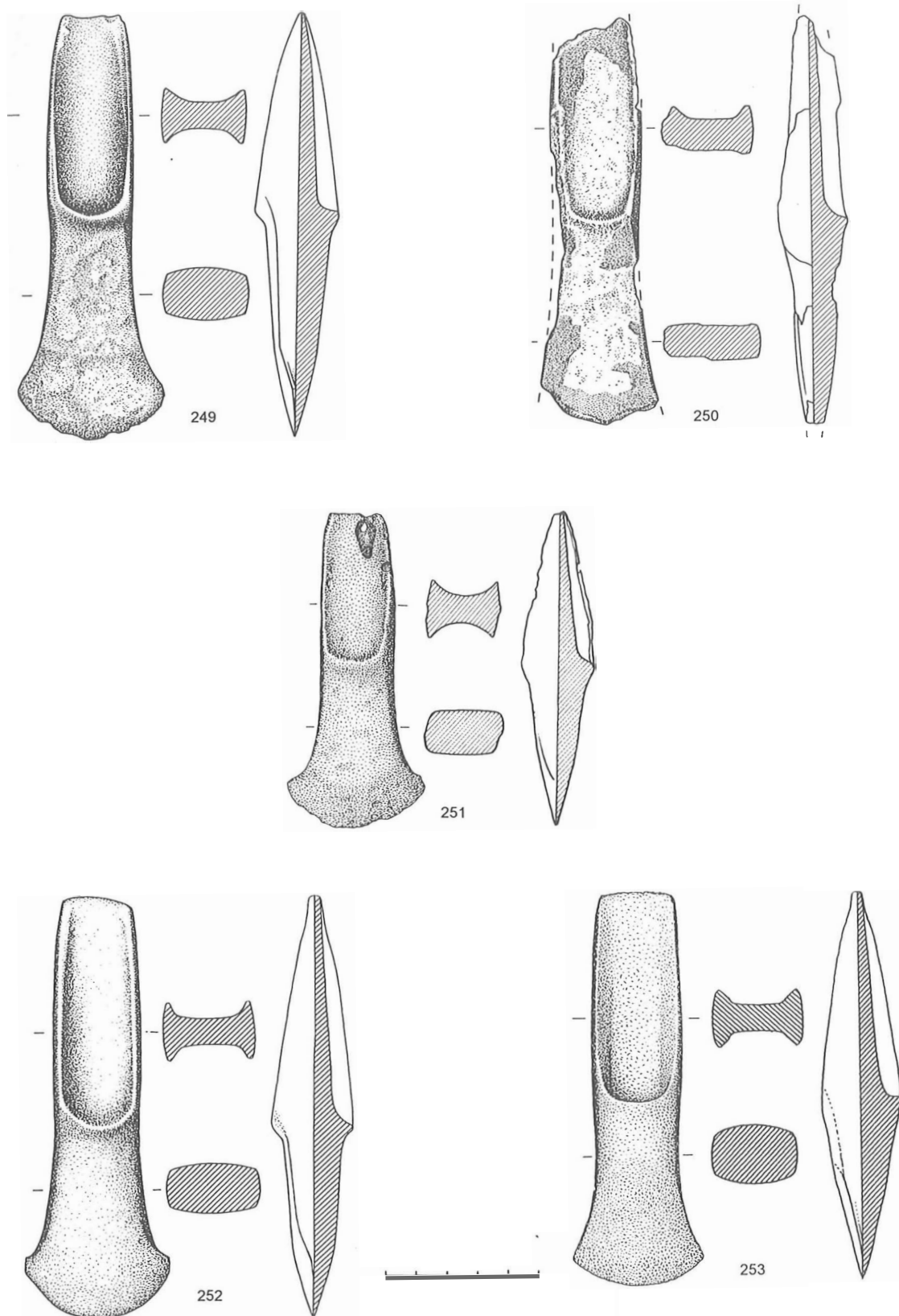


Fig. 65b. (Type AXP:PS) 249: near Someren, N-B; 250: Wijchen, Ge; 251: provenance unknown; 252: Buggenum, Li; 253: Ool, Li (see also figs 65a, 65 c-e).

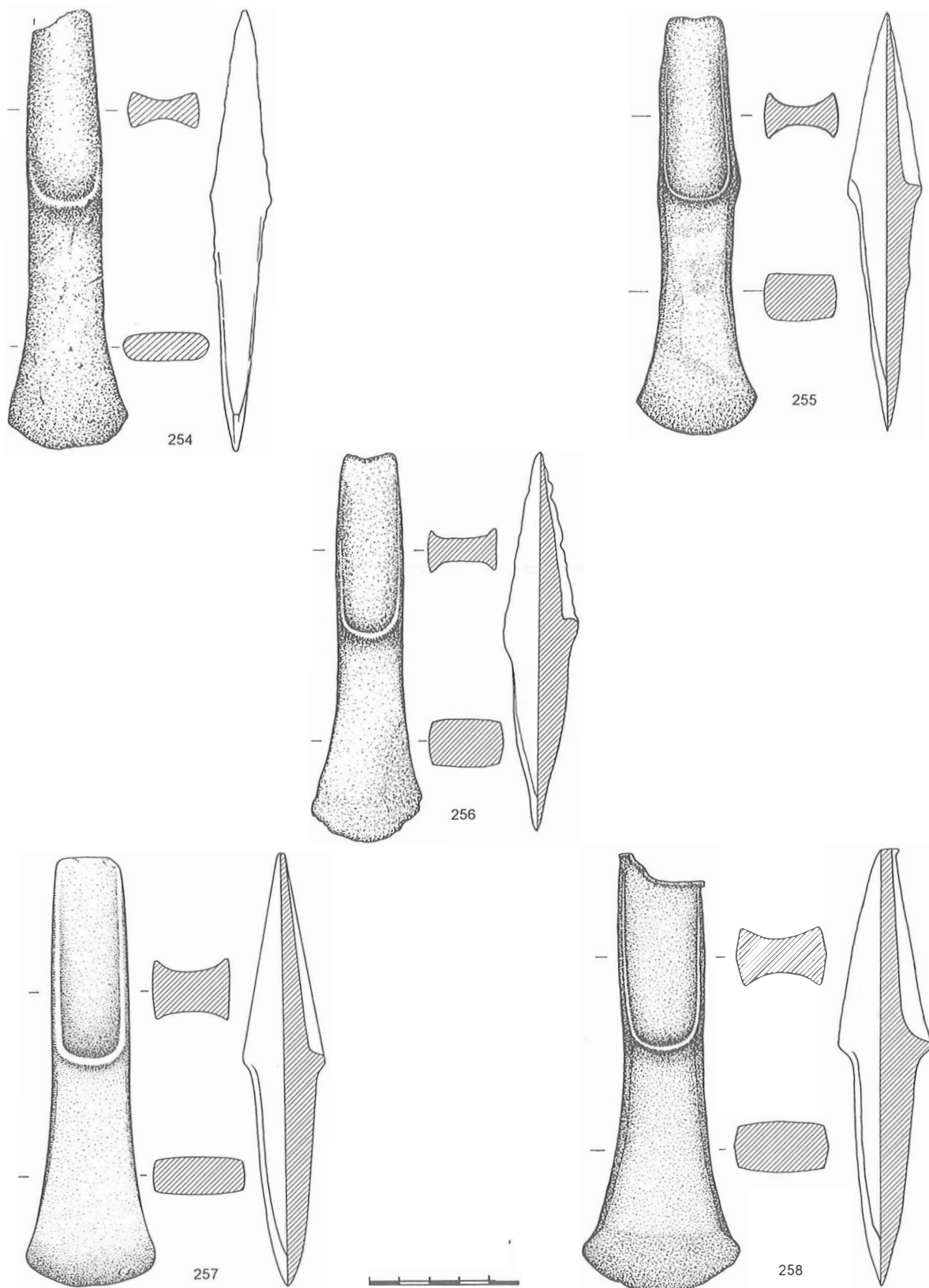


Fig. 65c. (Type AXP:PS) 254: Sellingen, Gr; 255: Veelerveen, Gr; 256: Annermoeras, Dr; 257: near Zweeloo, Dr; 258: Eindhoven, N-B (see also figs 65a-b, d-e).

field 'behind No. 13'. Museum: Assen, Inv.No. 1962/II.38, ex coll. Sneyders de Vogel, obtained from K. Harms. (DB 1020)

Reference: Verslag, 1962: No. 38.

CAT.NO. 249. SOMEREN (at or near), *GEMEENTE SOMEREN, NOORD-BRABANT*.

L. 14.1; w. 4.8; th. 2.7 cm; weight: 408 gr. Irregularly straight, thin butt; \wedge flanges; U-sectioned wedge septum; sides gently convex. Rounded stopridge. Blade part with slightly convex faces and sides; blade tips everted, slight pouches. Cutting edge sharpened, but anciently damaged. Patina: blackish brown; light green in patches. Ochreous deposit on stopridge and in some pits. Museum: Hilvarenbeek, Inv.No. H46 (older numbers: 'P 0302' on white gummed label; poorly legible number (393?) in black ink on septum); Ex coll. Lauwers of Esbeek, presented to the museum 8 December 1965 by Eysbouts, Lauwers' successor as head of the school at Esbeek. (DB 1100)

Map reference: Sheet 51H, c. 177.5/377.

Documentation: letter G. Beex to R.O.B., Amersfoort, 5 May 1967 (in R.O.B. archives).

Note: A different provenance was given by the brother-in-law of Lauwers upon inquiry by Dr. Luhe of Hilvarenbeek in 1970: according to him the axe was found on the Lange Gracht at Esbeek (reference: fax H. Schoenmaker [museum Hilvarenbeek] to Butler, 26 March 1997).

CAT.NO. 250. WIJCHEN, *GEMEENTE WIJCHEN, GELDERLAND. DE BERENDONCK*.

L. (14); w. (4.3); th. 2.8 cm. Weight 195.4 gr. Butt broken off; \wedge flanges with flat sides; \wedge /septum; slightly curved stopridge. Blade part with [] section. Blade severely damaged; the breaks are patinated. Patina: brown, heavily corroded; much of original surface has disappeared. Found 1990 with metal detector. Private possession. (DB 953)

Map reference: Sheet 46A, 181.75/424.50.

Reference: De Groot, 1990: with drawing.

CAT.NO. 251. PROVENANCE UNKNOWN.

L. 10.35; w. 4.55; th. 2.4 cm. Straight blunt butt; slightly convex \vee flanges; U stopridge. Blade part with flattish faces; the irregular sides show that the two halves of the mould were poorly aligned. Museum: Legermuseum Leiden, Inv.No. Daa-4. (DB 1120)

CAT.NO. 252. BUGGENUM, *GEMEENTE HAELEN, LIMBURG*. L. 13.9; w. 4.7; th. 2.7 cm. Slightly rounded blunt butt; \wedge flanges; \wedge /septum, round projecting stopridge. Blade part with slightly convex faces and sides. Cutting edge semi-circular, round-ground; blade tips slightly expanded. Cutting edge sharp. Patina: dark bronze. Found R. Meuse, between Well and Buggenum. Museum: Asselt, Inv.No. 83. (DB 1165)

Map reference: Sheet 58D, c. 197/360.

Documentation: Inventaire Coll. Philips, No. 83, with drawing

Reference: Wielockx, 1986: Cat.No. Hi3.

CAT.NO. 253. OOL, *GEMEENTE HERTEN (NOW GEMEENTE ROERMOND), LIMBURG*.

L. 13.1; th. 4.4; th. 2.6 cm. Straight blunt butt; \wedge flanges with slightly rounded sides; \wedge /septum; U stopridge. Blade part with convex faces and sides.

Map reference: Sheet 58D, c. 194/355.5.

References: Bloemers, 1973: pp. 19-20,afb. 4.3; Wielockx, 1986: Cat.No. Hi9. (DB 1744)

CAT.NO. 254. SELLINGEN, *GEMEENTE VLAGTWEDDE, GRONINGEN. ZUIDVELD*.

L. 14.9; w. 4.1; th. 2.6 cm. \wedge /septum; slightly () sides, shallow flanges; nearly [??] stopridge. Blade part with slightly convex faces, rounded sides. Butt was sharp, but now damaged; cutting edge slightly battered. Heavily corroded. Found 1979 on potato-harvester during levelling for re-parcelling, along the road which now forms the NE side of the new parcel. Private possession. (DB 2091)

Map reference: Sheet 13D, 273.3/550.1.

Documentation: Groenendijk, dossier Vlagtwedde No. 17.

CAT.NO. 255. VEELERVEEN, *GEMEENTE BELLINGWEDDE, GRONINGEN*.

L. 13.8; w. 4.0; w. 2.5 cm. Weight 281.5 gr. Nearly straight, sharp butt; flanges with \wedge outline; U septum; rounded, overhanging stopridge. Narrow blade with slightly concave outline. Faces and sides nearly flat; slightly expanding cutting edge, sharp. Several small blow-holes on septum. Patina: brownish; heavily corroded; much of the original surface eroded, leaving irregular surface. Has also been heavily-handedly scrubbed; deep scratches on septum. Found 1946/47 by F. Kuiper and W. Swarts, during drainage of a field on the grounds of the potato factory 'Westerwolde', east of the sports field. The axe lay beneath the peat, one spit deep in the underlying pale sand. Museum: Groningen, Inv.No. 1973/I.24; previously (from 1949, when purchased from W. Swarts) in the study collection of the B.A.I., Groningen, without inventory No. (DB 655)

Map reference: Sheet 13B, 273.08/564.17.

Documentation: Correspondence J.J. Swarts, B.A.I. 1948-1949; Groenendijk, dossier Bellingwedde No. 30.

CAT.NO. 256. ANNERMOERAS, *GEMEENTE ZUIDLAREN, DRENTHE*.

L. 12.8; w. 3.75; th. 2.5 cm. Weight 279.9 gr. Palstave: butt U-shaped, sharp; \wedge flanges, \wedge /septum, flat sides; rounded stopridge. Blade part with slightly convex [] cross-section; pouched. Edge sharp, but battered. Surface pitted. Patina: mostly black, partly fresh bronze (has been heavily scrubbed). Found 1996 by owner. Private possession. (DB 2239)

Map reference: Sheet 12E, c. 247/565.

CAT.NO. 257. ZWEELOO (near), *GEMEENTE ZWEELOO, DRENTHE*.

L. 14.55; w. 4.3; th. 3.2 cm. Weight: 391.7 gr. Slightly rounded blunt butt; \wedge flanges, U septum, slightly rounded sides. Shallow U, slightly overhanging stopridge. Blade part with flattish faces and sides; slightly expanding outline. Cutting edge sharp. Patina: brown, partly glossy, part dull; where surface peeled off, dull green. Found while sorting potatoes presumably from neighbourhood of Zweeloo. Museum: Assen, Inv.No. 1993/X.1 (old mark: EP 1/8, in black ink). Purchased 1993 from finder, after return from former collection Oudheidkamer Emmen. (DB 667)

Map reference: Sheet 17G, c. 246/535.

CAT.NO. 258. EINDHOVEN (district STRATUM), *GEMEENTE EINDHOVEN, NOORD-BRABANT*.

L. 14.3; w. 5.3; th. 3.0 cm. Weight 426.7 gr. Butt heavily damaged (part modern damage); the break exposes a porous, green-corroded interior. \wedge flanges, \wedge /septum, round overhanging stopridge. Fan-shaped blade part, crescent-ground; cutting edge slightly everted, edge sharpened, but blunted. Faces and sides slightly convex in section. Casting seams visible. Patina: mottled blackish/greenish. File scratches on faces and sides. Found in heath. Collection: B.A.I. Groningen, Inv.No. 1929/VII.1; purchased from Van Zon (Helmond), via mediation of H. Lijn (Stratum). (DB 2252)

Documentation: Correspondence H. Lijn to Van Giffen, in B.A.I.

Map reference: Sheet 51G, c. 162.3/382.3.

CAT.NO. 259. VELD, *GEMEENTE GRAVE, NOORD-BRABANT*.

L. 12.45; w. 4.2; th. 2.4 cm. { } profile; straight blunt butt; U septum, slightly rounded sides; straight stopridge. Blade part with slightly convex faces, < sides; slightly expanded blade tips. Cutting edge sharp. Found together with Inv.No. h.1932/6.2 (sherds of thick-walled pot). Museum: R.M.O. Leiden, Inv.No. h.192/6.1. Obtained through mediation of F. Bloemen of Wijchen. (DB 449)

Map reference: Sheet 45B, c. 177/418.5.

CAT.NO. 260. ROSWINKEL, *GEMEENTE EMMEN, DRENTHE*.

L. 12.55; w. 3.8; th. 2.8 cm. \wedge flanges; wedge U septum; narrow blade of rectangular section with slightly convex faces; very slight blade

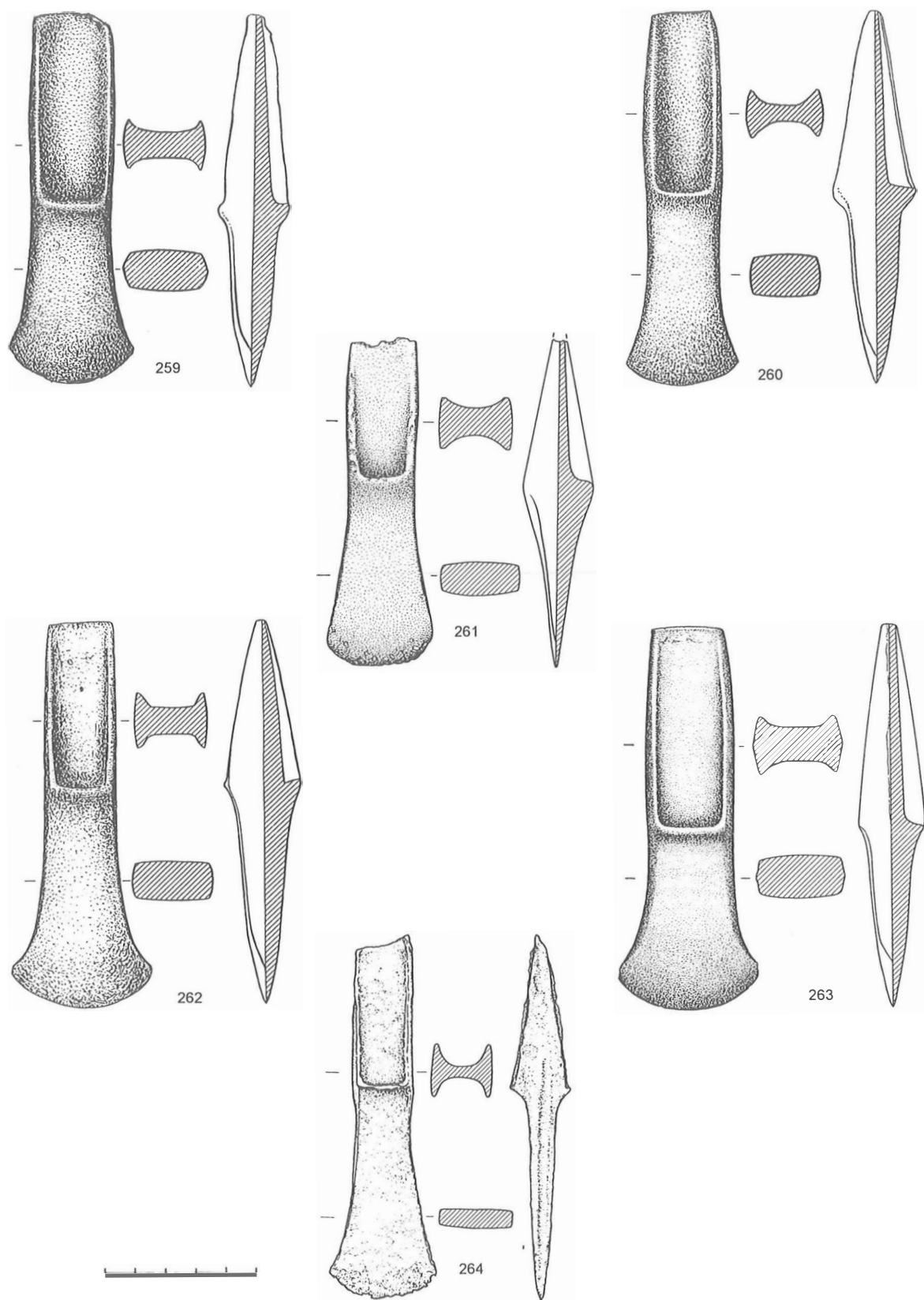


Fig. 65d. (Type AXP:PS) 259: Velp, N-B; 260: Roswinkel, Dr; 261: Hees, Ge (dealer's provenance); 262: Ees, Dr; 263: Woezik, Ge; 264: Hoogkarspel, N-H (drawing I.P.P.) (see also figs 65a-c,e).

expansion. Cutting edge sharp. Patina: dark bronze (originally black). Dug up by H. Jonker of Roswinkel. Museum: R.M.O. Leiden, Inv.No. c.1936/12.1. Obtained through mediation of A. Middelveld of Emmen. (DB 463)

Map reference: Sheet 18A, c. 266/540.5.

Documentation: Letters in R.M.O.: 9-10-1936, 12-10-1936, 12-10-1936.

References: Butler, 1963b: p. 21 I, IV.A.5; Sprockhoff, 1941: Taf. 23:3.

CAT.NO. 261. HEES, GEMEENTE NIJMEGEN, GELDERLAND (dealer's provenance.)

L. 11.0; w. 3.6; th. 2.4 cm. Weight: 236.1 gr. Butt irregular, roughly broken off. \wedge flanges with flattish sides, χ septum, slightly curved ledge stopridge. Blade part with slightly convex faces and sides. Cutting edge sharpened but battered. Patina light green, partly scraped off; surface rough. Found 1893. Museum: Nijmegen, Inv.No. AC 14 (old number: Kabinet van Oudheden, Nijmegen, E III No. 8b); donation from S.J. Grandjean. (DB 1471)

Map reference: Sheet 40C, 185/428.

Reference: Jaarverslag, 1893: p. 4, III No. 8b.

CAT.NO. 262. EES, GEMEENTE BORGER, DRENTHE.

L. 13; w. 4.7; th. 2.55 cm. \wedge flanges, \wedge wedge septum; nearly straight, inwardly sloping stopridge. Blade part with \square cross-section, with very slightly convex faces; everted blade tips. Cutting edge sharp. Patina: bronze colour (originally blackish). Well-preserved. Museum: Assen, Inv.No. 1897/V.1. Found by H. Ottens of Ees, purchased from finder. (DB 92)

Map reference: Sheet 17F, 250-251/544-547.

Reference: Verslag, 1897: p. 9, No. 21.

CAT.NO. 263. WOEZIK, GEMEENTE WIJCHEN, GELDERLAND. DE KRUISBERG.

L. 12.7; w. 4.6; th. 2.56 cm. Weight 328.9 gr. Blunt straight butt (has been hammered: recently?); \wedge flanges, \square septum, convex sides; nearly straight slightly overhanging stopridge. Blade part with flat faces, convex sides, expanded blade edges. Cutting edge sharp. No pouches. Patina: black. Modern file marks on one face, otherwise well-preserved. Museum: Wijchen, ex coll. P. Franssen, XVIII-1. (DB 2125)

Map reference: Sheet 39H, 178.55/425.25.

CAT.NO. 264. HOOGKARSPEL, GEMEENTE DRECHTERLAND, NOORD-HOLLAND.

L. 12.6; w. 3.7; th. 2 cm. Irregular U butt; irregular \wedge flanges with flat sides; χ septum, \square stopridge. Blade part with \square section. Casting seams visible. Cutting edge sharpened but battered. Found May 1989 by E. Bakker (Westvood) in onion field, on sandy-clay ridge. Museum: Hoorn, Inv.No. 1989/X1.c. (Photo and drawing I.P.P. Amsterdam) (DB 616)

Map reference: Sheet 19F, 139.78/522.96.

Reference: De Jager & Woltering, 1990: pp. 298-299, photo and drawing.

CAT.NO. 265. LOTTUM?, GEMEENTE GRUBBENVORST, LIMBURG.

L. 14.6; w. 4.5; th. 2.5 cm. Weight 300.7 gr. Blunt butt with slight saddle; \wedge flanges with flat sides; U septum; \square shelf stopridge, under which slight V-shaped depression. Blade part with χ sides, \square section. Cutting edge sharp. Patina: original patina c. half peeled off, dark brown, with brownish loamy encrustation; the rest dull light green. Blowhole on one side. Discovered in the tool box of one Zegers after his death in Lottum. Presumably acquired by Zegers from the farm where he was employed. Private possession. (DB 2327)

Map reference: Sheet 52G, c. 209.3/386.5.

Distribution, Type AXP:PS: About equal in north and south (including the Nijmegen area), with one stray in the Northwest (Map 26).

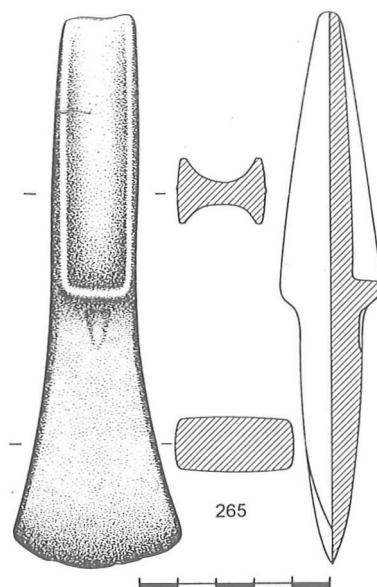


Fig. 65e. (Type AXP:PS) 265: Lottum? Li (see also fig. 65a-d).

Parallels Type AXP:PS: Kibbert (1980: pp. 248-250) classifies comparable palstaves under the heading of *Var. Andernach* (his Nos 638-671, plus a few 'related' specimens, his Nos 672-677). The *Var. Andernach* falls within his more general group *Form Paderborn-Andernach*, which in turn is part of his wider category 'Northwest German plain palstaves' (*nordwestdeutsche schlichte Absatzbeile*).

Kibbert's *Var. Andernach* includes, however, palstaves of rather varied outline; and at least for analytical purposes it would perhaps be useful to subdivide his *Var. Andernach* palstaves along the lines which we here propose for the palstaves of the Netherlands.

Among the 33 Kibbert *Var. Andernach* palstaves (plus 6 *Angeschlossen*) we would consider 11 examples (Kibbert's Nos 646, 648, 649, 656, 657, 661, 662, 666, 667, 674, 675) as comparable with our AXP:PS group. Of the nine of these West German examples with known find-spot, all but one are in the northern part of Kibbert's area, between the Rhine and the Weser. One can presume that these will link onto a distribution in the area of *Niedersachsen* just to its north.

(For our reassignment of the remaining *Var. Andernach* palstaves, see also below under our varieties AXP:PSW, PSJ, PHJ, and PS \wedge).

Our Netherlands AXP:PS distribution (Map 26) would thus be the western part of the spread of a type characteristic of the eastern and northern parts of the Netherlands and the adjacent region of Northwest Germany.

Dating: Close datings are non-existent in the Netherlands; nor does Kibbert cite datable finds on his side of the border (cf. section 4, below).

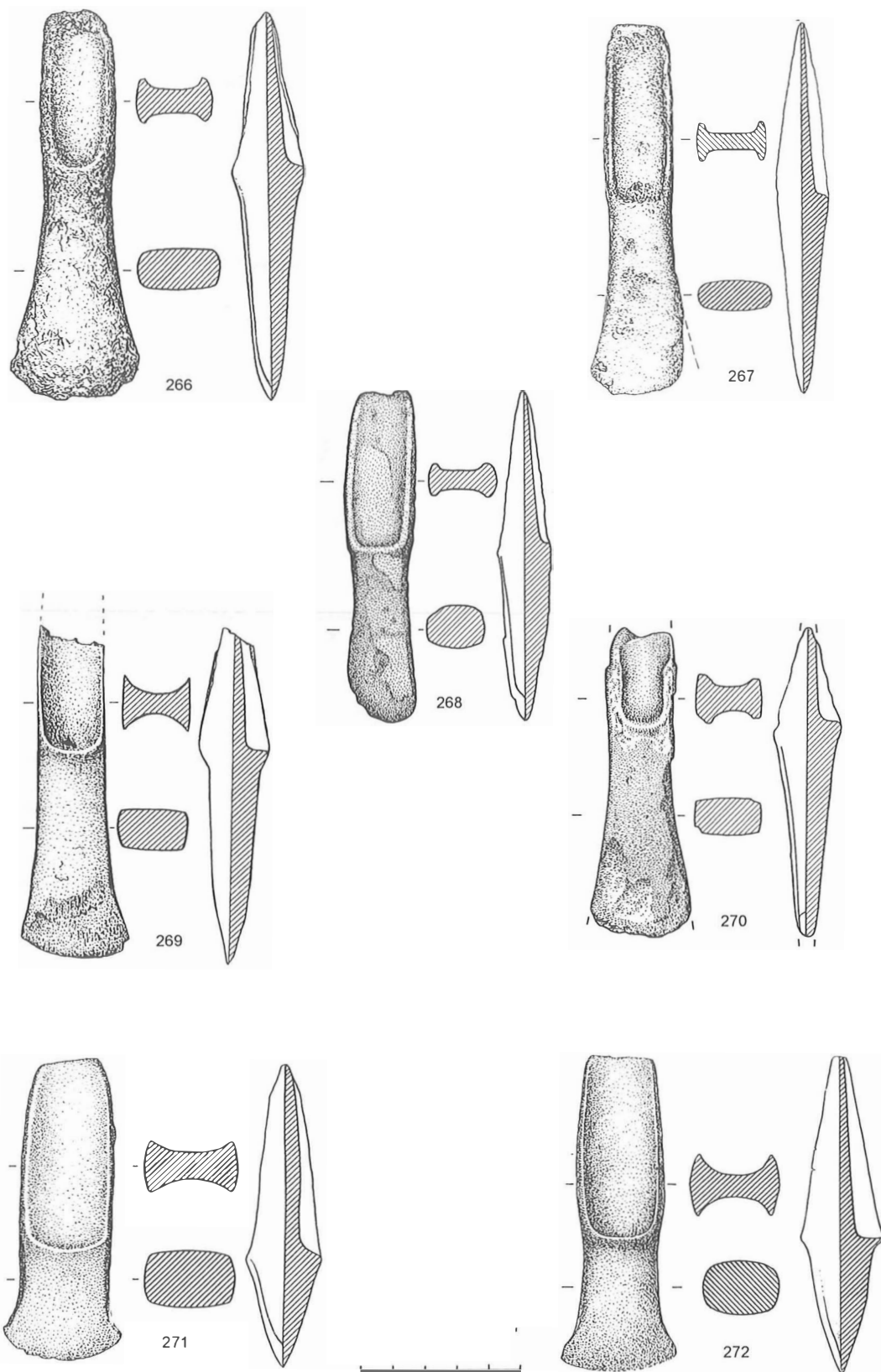


Fig. 66. (Type AXP:PS<) 266: nr. Havelterberg, Dr; 267: 'Drenthe'; 268: Aanscot, N-B; 269: gemeente Enschede, Ov (dealer's provenance); 270: Gemonde, N-B; 271: gemeente Emmen, Dr; 272: Jipsingboertange, Gr.

a:1) *Plain palstaves with sinuous outline, small variety* (AXP:PS<) (fig. 66)

Seven examples in the Netherlands (Cat.Nos 266-272): five (four with provenance) in the north, two in the south (Map 26).

We list separately here a small number of plain palstaves with sinuous outline, distinguished especially by their small size (the complete specimens measure 9.6 to 12.4 cm in length, with blade widths of 3.5 to 4.1 cm). Two of those in the north (Cat.Nos 271, 272) have a disproportionally and absurdly short blade-part length (3.5 and 4 cm). The others are narrower, and have more normal palstave proportions.

CAT.NO. 266. HAVELTE, *GEMEENTE* HAVELTE, DRENTHE. L. 12.4; w. 4.1; th. 2.3 cm. Weight 244 gr. Butt somewhat damaged. U septum; U sloping stopridge. Blade part with slightly convex faces and sides. Flanges abraded; cutting edge damaged. Patina: mostly bright mottled green; originally leathery brown. Surface severely pitted and damaged. Found in the surroundings of the Havelterberg. Museum: Assen, Inv.No. 1920/XI.34. (DB 120)

Map reference: Sheet 16H, c. 212/533

References: Verslag, 1920: p. 17, No. 84; Butler, 1963b: p. 211, IV.A.7.

CAT.NO. 267. PROVINCE OF DRENTHE (exact provenance unknown).

L. (11.8); w. (2.85); th. 1.6 cm. Weight 139 gr. Straight sharp butt, [U] septum, flat sides; slight 'ledge' stopridge. Blade part with () faces and sides. Cutting edge damaged, partly recently re-sharpened. Patina: partly glossy green, partly dull grainy brownish; in part heavily pitted. Museum: Assen, Inv.No. 1967/II.19. Acquired from heirs of J.J.M. Jansen, forester for Staatsbosbeheer (National Forest Administration) Drenthe. (DB 1320)

Reference: Jaarverslag, 1967 (in *Nieuwe Drentse Volksalmanak*, 1969: pp. 245-246).

CAT.NO. 268. AANSCHOT, *GEMEENTE* EINDHOVEN, NOORD-BRABANT.

L. 10.5; w. (2.3); th. 1.6 cm. Irregular straight, sharp butt; ^ flanges with () sides, _ / septum, sides, nearly straight stopridge. Blade part with () faces and sides. Cutting edge severely damaged. Found 8 April 1997 with metal-detector by D. Vlasblom (Eindhoven), in a field. Original surface, surviving only in patches, smooth dull blackish; mostly peeled off, mottled green and heavily blistered. Collection: *Archeologisch Depot* Eindhoven; presented by finder 1997. (DB 2346)

Map reference: Sheet 51E, 161.15/389.15.

Documentation: Letter N. Arts (*provinciaal-archeoloog* Eindhoven) to Butler 27 Aug. 1997.

Reference: *Nieuwsbrief Archeologie Kempen- en Peelland* 1997, I:2, p. 11 with drawing.

CAT.NO. 269. *GEMEENTE* ENSCHEDE, OVERIJSEL (dealer's provenance).

L. 10.1; w. 3.5; th. 2.25 cm. Part of butt end broken off and missing. ^ flanges, U septum, U stopridge. Blade part of rectangular cross-section. Cutting edge damaged. Blowhole above stopridge. Severely corroded. Patina: blackish. Museum: R.M.O. Leiden, Inv.No. d.95/10.1. Purchased from J. Grandjean, Nijmegen. (DB 359)

CAT.NO. 270. GEMONDE, *GEMEENTE* BOXTEL (NOW *GEMEENTE* SINT-MICHIELSGESTEL), NOORD-BRABANT.

L. (9.7); w. (3.1); th. 2.1 cm. Weight 129.2 gr. Butt end heavily damaged. Probably ^ flanges, with flat sides; U septum, U stopridge. Faces and sides slightly convex. Patina black. Butt and cutting edge severely damaged; much of the original surface has peeled off and

porous, but smooth-surfaced where preserved. Found March 1991 by owner, in a field, with metal detector. Private possession. (DB 904)

Map reference: Sheet 45D, 153.075/402.625

Reference: Verwers, 1991: p. 116, afb. 10b.

CAT.NO. 271. *GEMEENTE* EMMEN, DRENTHE.

L. 9.6; w. 3.8; th. 2.4 cm. Weight 212 gr. Irregular blunt butt, ^ flanges with () sides, U septum, U stopridge. Remarkably short blade part with slightly convex faces. Slightly expanded blade tips; cutting edge sharp. Patina: blackish, heavily pitted. Museum: Assen, Inv.No. 1962/II.181. (DB 1016)

CAT.NO. 272. JIPSINGBOERTANGE, *GEMEENTE* VLAGT-WEDDE, GRONINGEN.

L. 10; w. 3.7; th. 2.7 cm. Straight blunt butt, ^ flanges with () sides, U septum, U stopridge. Blade part remarkably short, with oval section, slightly expanding blade tips. Cutting edge sharp. Patina: glossy dark brown; dull brown where surface peeled off. Found c. 1930 by one Veldman of Wollinguizen at a depth of c. 0.65 m, under 20 cm undisturbed yellow sand, above which differently coloured ground with diameter of c. 1 m; in which something seems to have decayed ("onder 0.20 m. vast geelzand, waar boven anders gekleurde grond met middellijn van c. 1 m. waarin iets door rotting leek te zijn vergaan"). Museum: Groningen, Inv.No. 1955/IX.1. (DB 181)

Map reference: Sheet 13D, 270/554.5.

Documentation: Report W. Glasbergen, 24 June 1956.

Parallels Type AXP:PS< in the Netherlands: obviously closely related to this type are the small palstaves, similar but with parallel sides (Type AXP:PH<) and the group of small plain sinuous looped palstaves (AXPL:PS<).

Distribution: like Type AXP:PS, fairly evenly divided between north, centre and south, with an outlier each in the NW and SW (Map 26).

a:2) *Plain palstaves with sinuous sides and widely expanded blade* (AXP:PSW) (figs 67a-67d)

19 examples in the Netherlands (Cat.Nos 273-291). Fairly evenly spread between north, centre and south, with an outlier each in the northwest and southwest (Map 26). These palstaves differ from those of AXP:PS principally in that they have a wider blade expansion (4.9 to c. 6 cm). Four examples have a { } profile; most have ^ hafting part flanges. Some have a more or less sharply everted cutting edge.

CAT.NO. 273. ZWAAG, *GEMEENTE* ZWAAG, NOORD-HOLLAND.

L. 16.5; w. 5.8; th. 2.7 cm. { } profile. Straight blunt butt; ^ flanges, U septum. Blade part with flat faces, () sides. Straight stopridge. Cutting edge sharpened but battered. Patina: has been treated for conservation. Surface heavily pitted. Found early 1982 by P. Diepen, bulb grower at Westwoud, while cleaning a ditch in a bulb field, in a field on the north side of the village street. Museum: Hoorn, Inv.No. N.1982/V.a. (DB 852)

Map reference: Sheet 19F, 134.76/520.72.

Reference: Van de Walle-van der Woude, 1983: pp. 223-224, 226-227, with photo and drawing.

CAT.NO. 274. TWEDE EXLOOËRMOND, *GEMEENTE* ODOORN, DRENTHE.

L. 16.5; w. 5.5; th. 3.15 cm. Weight 485 gr. { } profile. Straight blunt butt; U septum; flattened-U stopridge. Blade part with slightly convex faces and sides. The curved sides are faintly faceted, and bear traces of hammer finishing. Patina: black. Found 1920 during peat cutting,

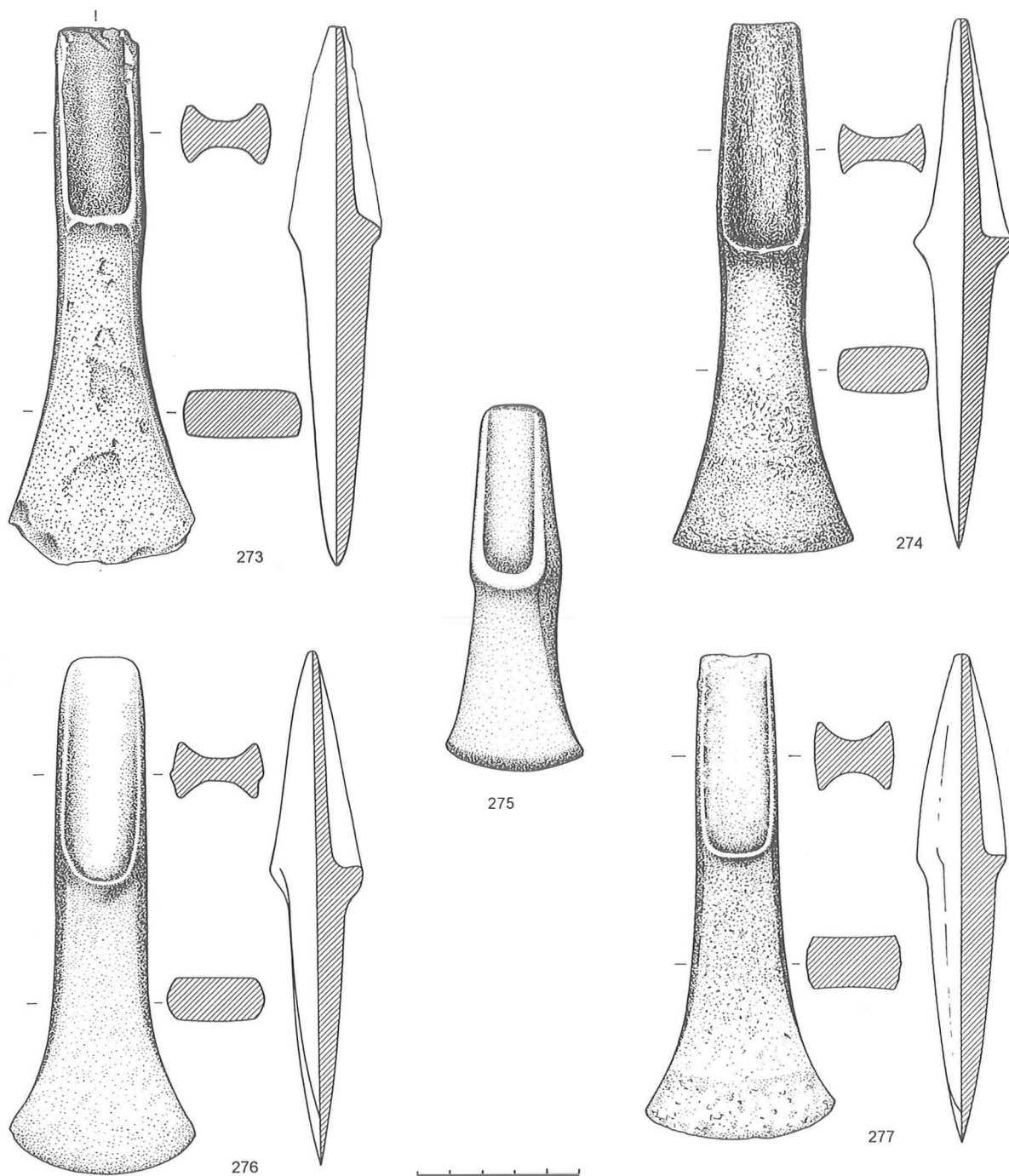


Fig. 67a. (Type AXP:PSW) 273: Zwaag, N-H; 274: 2e Exloërmond, Dr; 275: 'Tonden' (Tonderen?), Ge; 276: Eext, Dr; 277: Hardenberg, Ov (see also figs 67b-d).

on the sand ("bij het veengraven op het zand"). Museum: Assen, Inv.No. 1923/V.1. Presented by drs. Broeker, doctor at Tweede Exloërmond. (DB 129)

Map reference: Sheet 17F, c. 259/548.

References: *Verlag*, 1923: p. 22, No. 84; Butler, 1963b: pp. 210-211, IV.A.8.

CAT.NO. 275. TONDEN, GEMEENTE BRUMMEN, GELDERLAND.

L. 11.4; w. 4.2 cm (measurements from Pleyte's illustration, which however may not be 1:1; if so it is unusually small for palstaves of this form). Rounded butt and stopridge; sinuous outline, expanded blade. Briefly cited and illustrated by Pleyte (1889), from which our illustration is copied. Pleyte cites a manuscript notation by Cannegieter

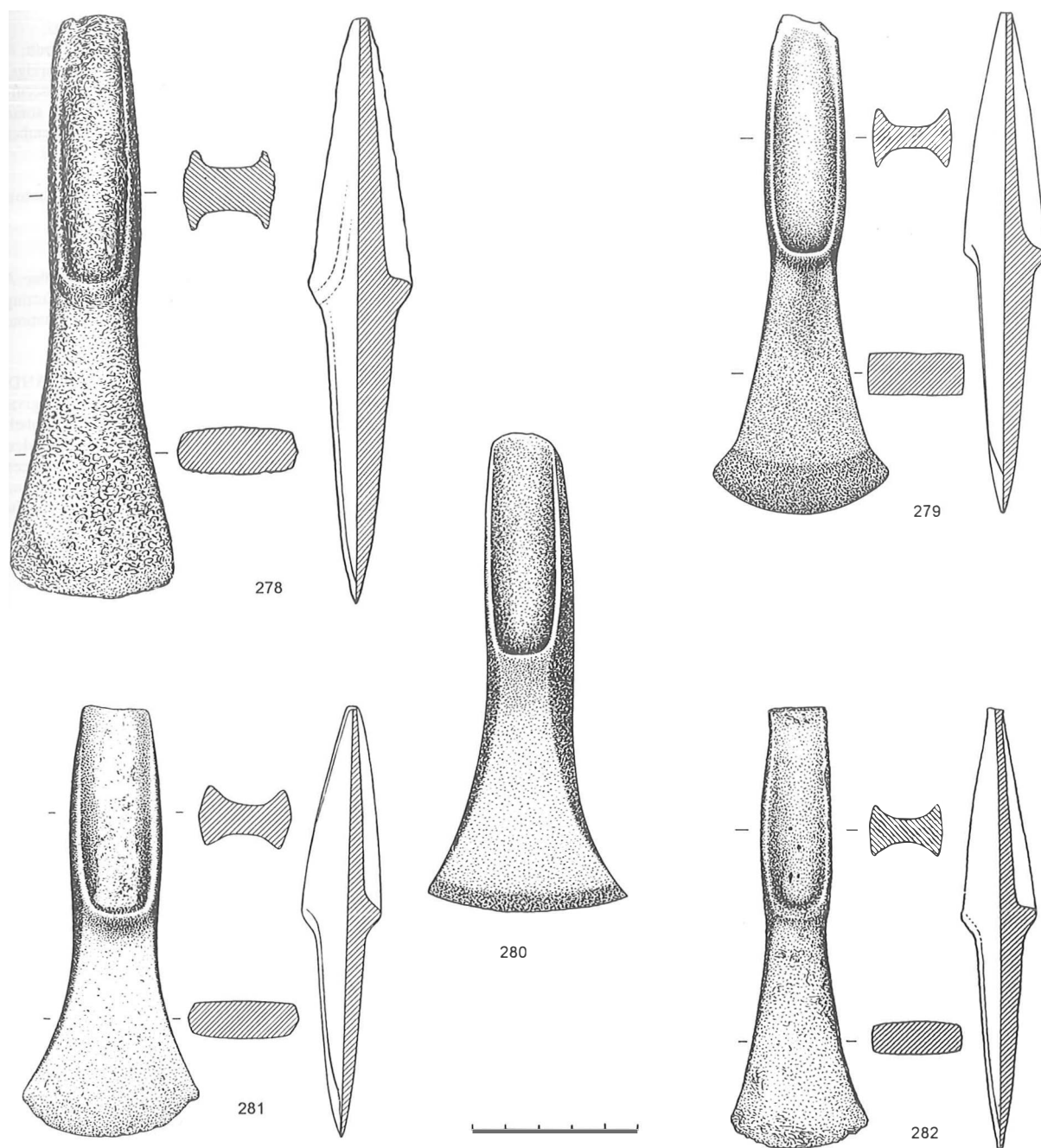


Fig. 67b. (Type AXP:PSW) 278: Augustapolder, N-B; 279: Venlo, Li; 280: Ederbosch, Ge; 281: Hattem, Ge; 282: Heeschveld, Ge (see also figs 67a, c-d).

of two bronzes (this palstave and a plain socketed axe) found at Tonderen on the Veluwe. Pleyte interprets this find-spot indication as presumably referring to Tonden. Whether the two objects were found together is unstated. (DB 2023)

Map reference: Sheet 33G, c. 207/461.

Reference: Pleyte, Gelderland, 1889: p. 50, Pl. XII:4,5.

CAT.NO. 276. EEXT, GEMEENTE ANLOO, DRENTHE.

L. 16; w. 5.7; th. 2.9 cm. Weight 435 gr. Straight blunt butt; Δ flanges with $<>$ sides; U septum (modified by hammering); shelf stopridge, sloping inwards. Blade part has one faintly convex and one faintly

concave face; sides rounded. Two halves of casting mould poorly registered. The edge is sharp, and is hardly or not at all used. Patina: dark bronze, in places light bronze; traces of an originally black patina but the whole axe has been meticulously cleaned off. Preservation excellent. Found 1982 while harvesting potatoes. Museum: Assen, Inv.No. 1982/X.2. Acquired Oct. 1982.

Remarks: According to the Museum record the find-spot was located 175 m southeast of the Anderense Weg, c. 750 m WSW from the Rotteveen, and c. 1500 m SW of Eext. (DB 661)

Map reference: Sheet 12G, 244.12/558.65.

CAT.NO. 277. HARDENBERG, *GEMEENTE HARDENBERG, OVERIJSSSEL*. 'T HOLT.

L. 15.1; w. 5.8, th. 2.8 cm. Weight: 462.6 gr. Straight blunt butt; () flange outline; U septum; U ledge stopridge, overhanging. Facetted sides, with prominent casting seams. Blade part has slightly concave faces. Cutting edge crescent-ground, sharp. Patina dull light brownish; light green where pitted; ochreous encrustation on septum. Mostly well-preserved. Sides filed recently. Found c. 1980 by H. Ribberink in low terrain, while removing an overhead electricity pole in 't Holt, Russenhoeck/Vechtdijk. Museum: Zwolle, Inv.No. 7683. (DB 876)

Map reference: Sheet 22D, 238.7/511.1.

Reference: *Jaarverslag R.O.B.*, 1993: p. 151; Verlinde, 1994: pp. 179-180, afb. 2:upper.

CAT.NO. 278. AUGUSTAPOLDER, *GEMEENTE BERGEN OP ZOOM, NOORD-BRABANT*.

L. 17.9; w. 5.05; th. 3.2 cm. Slightly rounded, blunt butt; ^ flanges with rounded, facetted sides; rounded \ / septum, overhanging rounded stopridge, blade part with slightly () faces, <> sides. Mildly 'crinoline' blade outline. Patina: partly black, patches of bright green, reddish bronze, surface rough and pitted. Edge sharpened recently, then blunted. Found 1943, in earth thrown up during the excavation of an anti-tank ditch. Museum: Bergen op Zoom, Inv.No. 49B. (DB 157)

Map reference: Sheet 49B, c. 78/387-388.

Documentation: Correspondence J.H. Mosselvelld/J.W. Boersma 25-11-'68.

Reference: Sloomans, 1974: p. 9.

CAT.NO. 279. VENLO, *GEMEENTE VENLO, LIMBURG*. HAGERHOF (near old churchyard).

L. 14.7; w. 4.9; th. 3.0. Weight 397.3 gr. Blunt irregular butt; slightly convex ^ flanges, with faintly rounded sides; U stopridge, overhanging. Blade part with [] section; with cutting edge crescent and extra expanded; no pouches. Slight depression below stopridge. Cutting edge sharp. Patina glossy, dark green to blackish. Very well-preserved, but some pitting on septum and sides. Museum: Limburgs Museum Venlo; without Inv.No. (DB 2279)

Map reference: Sheet 52G, c. 208/376.

CAT.NO. 280. *GEMEENTE EDE, GELDERLAND*. EDER BOSCH. L. 14.6; w. 6.0 cm (measurements from Pleyte's illustration, presumably 1:1). Rounded butt and stopridge. Rounded butt; U stopridge. Blade part with facetted sides? This palstave is briefly cited and illustrated (from which our illustration is copied) by Pleyte. Found 1872 during digging in sand, at a depth of three feet. Collection: unknown. (DB 2021)

Map reference: Sheet 32H, c. 175/453.

Reference: Pleyte, Gelderland, 1889: p. 54, pl. XIV:1.

CAT.NO. 281. HATTEM, *GEMEENTE HATTEM, GELDERLAND*. L. 13.1; w. 5.3; th. 2.4 cm. Butt blunt, nearly straight. Slightly convex ^ flanges with <> sides; U septum. Blade part with slightly convex faces, <> sides. Cutting edge partly battered, partly recently sharpened. Well-preserved. Patina: mottled green; partly glossy on one face (partly removed). Found in the dry valley above the Molecaten, bordering on the Leemkule, close under the surface. Museum: Hattem, Inv.No. 752. (DB 609)

Map reference: Sheet 27E, c. 200/498.

Reference: Modderman & Montforts, 1991: p. 147, afb. 6.1.

CAT.NO. 282. HEESCHEVELD, *GEMEENTE NIJMEGEN, GELDERLAND*.

L. 13.7; w. 4.25; th. 2.3 cm. Straight blunt butt; ^ flanges with slightly () sides; U septum, U shelf stopridge. Blade part with slightly convex faces and sides. Cutting edge sharpened but blunted. Patina: brown. Found 1900. Museum: Nijmegen, Inv.No. AC 24 (old No. E III. No. 15). (DB 1493)

Map reference: Sheet 40C, c. 185/428

Reference: *Jaarverslag*, 1900: p. 5, III, No. 15.

CAT.NO. 283. KESSEL, *GEMEENTE KESSEL, LIMBURG*.

L. 15.9; w. 4.9; th. 2.8 cm. Weight 439.6 gr. Straight blunt butt; ^ flanges with faintly convex sides; U septum; straight stopridge, sloping inward. Blade part with [] section. Cutting edge crescent-ground, and sharp. Patina part glossy black, part glossy green; some pitting. Mostly well-preserved, but some battering. Found September 1981 in a field after ploughing. Private possession. (DB 1943)

Map reference: Sheet 58B, 199.31/367.21.

References: Willems, 1983: pp. 209-210, afb. 7.2 (photo); Wielockx, 1986: Cat.No. Hil 3, with drawing.

CAT.NO. 284. *GEMEENTE KESSEL, LIMBURG*.

L. 15.25; w. (4.65); th. 2.5 cm. Straight blunt butt, sinuous outline: ^ flanges, U septum, U stopridge. Blade part with [] section. Cutting edge heavily battered. Patina: brown, with ochreous incrustation. Heavily corroded. Museum: 't Leudal, Haalen. (DB 2329)

CAT.NO. 285. BEEK, *GEMEENTE UBBERGEN, GELDERLAND*.

L. 15.9; w. 5.2; th. 3.4 cm. {} profile. Irregular blunt butt; ogival flanges with () sides; U septum. Prominent nearly straight shelf stopridge. Blade part with faintly ridged convex faces, <> sides. Hammer marks on blade. Patina: dark glossy green, with light green pitting. Found while building a school at the 'Oorsprong'. Museum: Nijmegen, Inv.No. AC 27 (old No. E III.8b). Presented by the Reverend F. Wemers. (DB 1496)

Map reference: Sheet 40D, c. 192/427.

Reference: *Verslag*, 1923: p. 10, E III, No. 8.

CAT.NO. 286. BUIJEN, *GEMEENTE BORGER, DRENTHE*.

L. 16.2; w. 5.2; th. 2.45 cm. Weight 369 gr. {} profile; straight blunt butt; shallow ^, slightly concave flanges; U shelf stopridge. Blade part with slightly convex faces and sides. Cutting edge anciently blunted. Patina: dark mottled green; surface recently abraded. Museum: Assen, Inv.No. 1920/VII.4. (DB 118)

Map reference: Sheet 12H, c. 252/551.

References: *Verslag*, 1920: p. 14, No. 60 (confusion: No. 60 is a battle-axe!); Butler, 1963b: p. 210, IV.1 and p. 200, fig. 11.

CAT.NO. 287. PROVENANCE UNKNOWN.

L. 16.6; w. 5.5; th. 3.1 cm. {} profile. Straight blunt butt, ogival flanges with () sides; shallow U septum; rounded ^ stopridge. Blade part with slight midrib and flanges, () sides. Cutting edge sharp. Patina: mottled light green; ochreous patches; sandy encrustation. Museum: R.M.O. Leiden, Inv.No. NS 751 (old No. I 557). Purchased from dealer Grandjean of Nijmegen. (DB 1899)

CAT.NO. 288. RUTTEN, *GEMEENTE NOORD-OOSTPOLDER, FLEVOLAND*.

L. 13.5; w. 5.2; th. 3.01 cm. {} outline, with straight, blunt butt, () septum, () sides; U stopridge. Blade part with slightly convex faces and sides. Found at parcel 39F. Museum: Schokland, Inv.No. Z 1958/ VII.34, but stolen. (DB 1129)

Map reference: Sheet 15H, 179.196/534.076

Documentation: letter G.D. van der Heide to Butler, 5 Jan. 1970.

Reference: Hogestijn, 1986; *vindplaats* 19.

CAT.NO. 289. NEAR HEESCHE POORT, *GEMEENTE NIJMEGEN, GELDERLAND*.

L. 14.5; w. (5.1); th. 3.25 cm. Irregular blunt butt. Flanges have convex outline on one edge, concave on the other, <> sides. \ / septum. Heavy shelf stopridge. Blade part with () faces and sides; slight blade expansion; cutting edge sharp but battered. Museum: R.M.O. Leiden, Inv.No. I.D.B.B.4c (old No. B.43 and I.555) acquired Nov. 1823, with Cat.Nos 229 and 320 from J. Becker of Amsterdam, ultimately from one 'In the Betouw'. (DB 311)

Map reference: Sheet 40C, c. 186/428.

CAT.NO. 290. VASSERVELD, *GEMEENTE TUBBERGEN, OVERIJSSSEL*.

According to drawing Ter Kuile, l. 16.5; w. 5.2; th. 1.4 cm. Irregularly

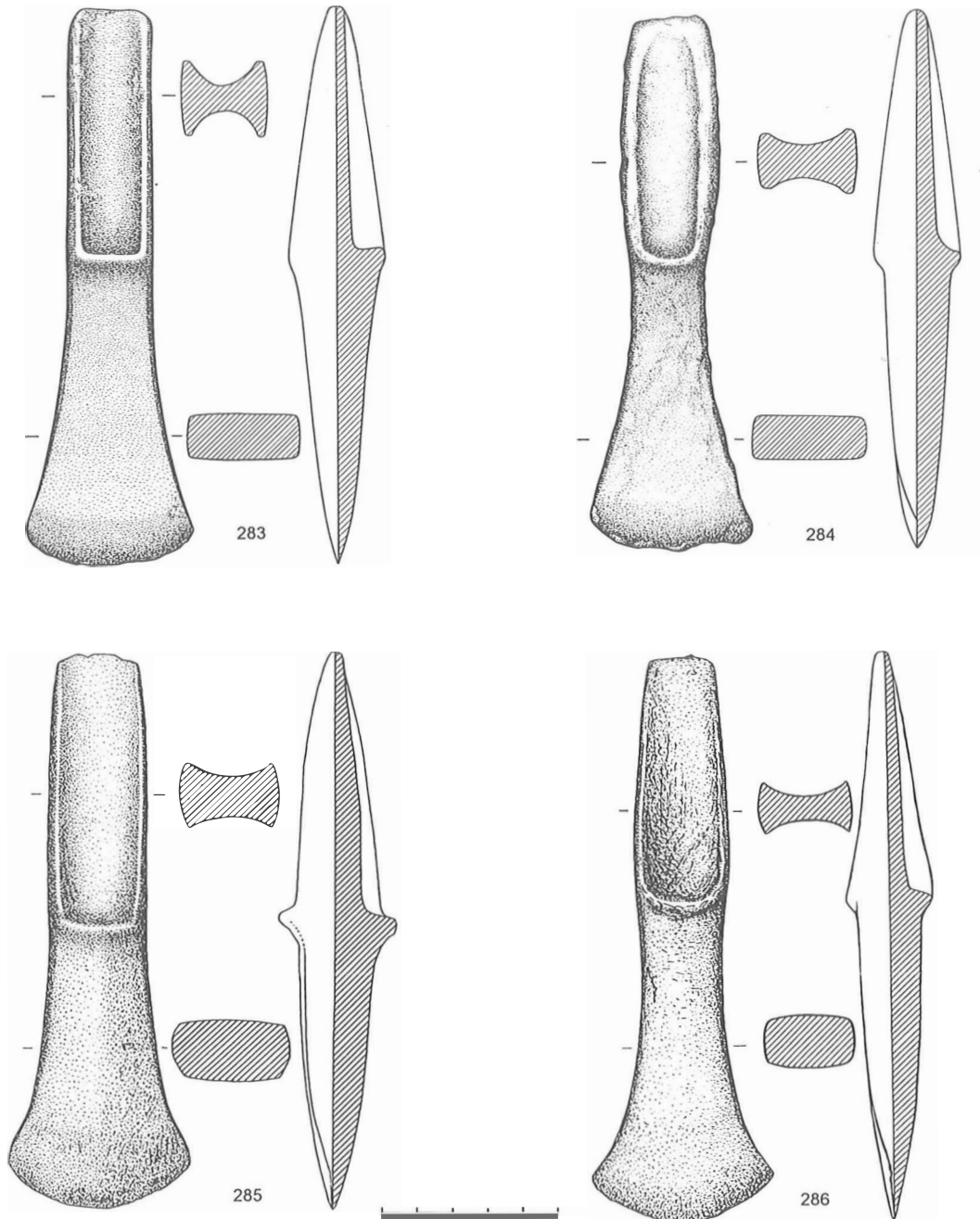


Fig. 67c. (Type AXP:PSW) 283: Kessel, Li; 284: gemeente Kessel, Li; 285: Beek, Ge; 286: Buinen, Dr (see also figs 67a-b, d).

straight thin butt; Δ flanges; shallow U septum; gradually expanding wide blade. Present locus unknown. This palstave is known only from note and drawing of Ter Kuile, who examined the palstave then in the possession of the pastor E. Geerdink (Vianen), whose collection later was preserved at the seminary Sparrendal at Rijsenburg, where it was housed in a case in the library until c. 1967, when the premises were twice occupied by students. The building was subsequently demolished. What happened to the palstave is unknown. (DB 2348)

References: Ter Kuile, 1909: p. 8; watercolour-sketch Ter Kuile in his copy of Pleyte, Overijssel (copy of this drawing made available by A. Verlinde, curator Museum Enschede).

CAT.NO. 291. MONTFORT, GEMEENTE MONTFORT, LIMBURG.

L. 13.3; w. 5 cm. Straight butt; U stopridge; cutting edge wide, sharp. Found by J. Zeelen of Montfort, at the E. side of 't Schrevenbroekje; purchased 1907 by Infantry Major E.H.G. van der Noordaa from A. van der Pol. Patina: green. Museum: R.M.O. Leiden, Inv.No.e.1976/11.408 (but now missing); ex coll. Van der Noordaa, No. 224). (DB 2011)

Map reference: Sheet 60B, c. 192/347.8.

Documentation: Notebook Van der Noordaa, with 1:1 drawing; in R.M.O. archive.

References: *Jaarverslag*, 1975: p. 255.

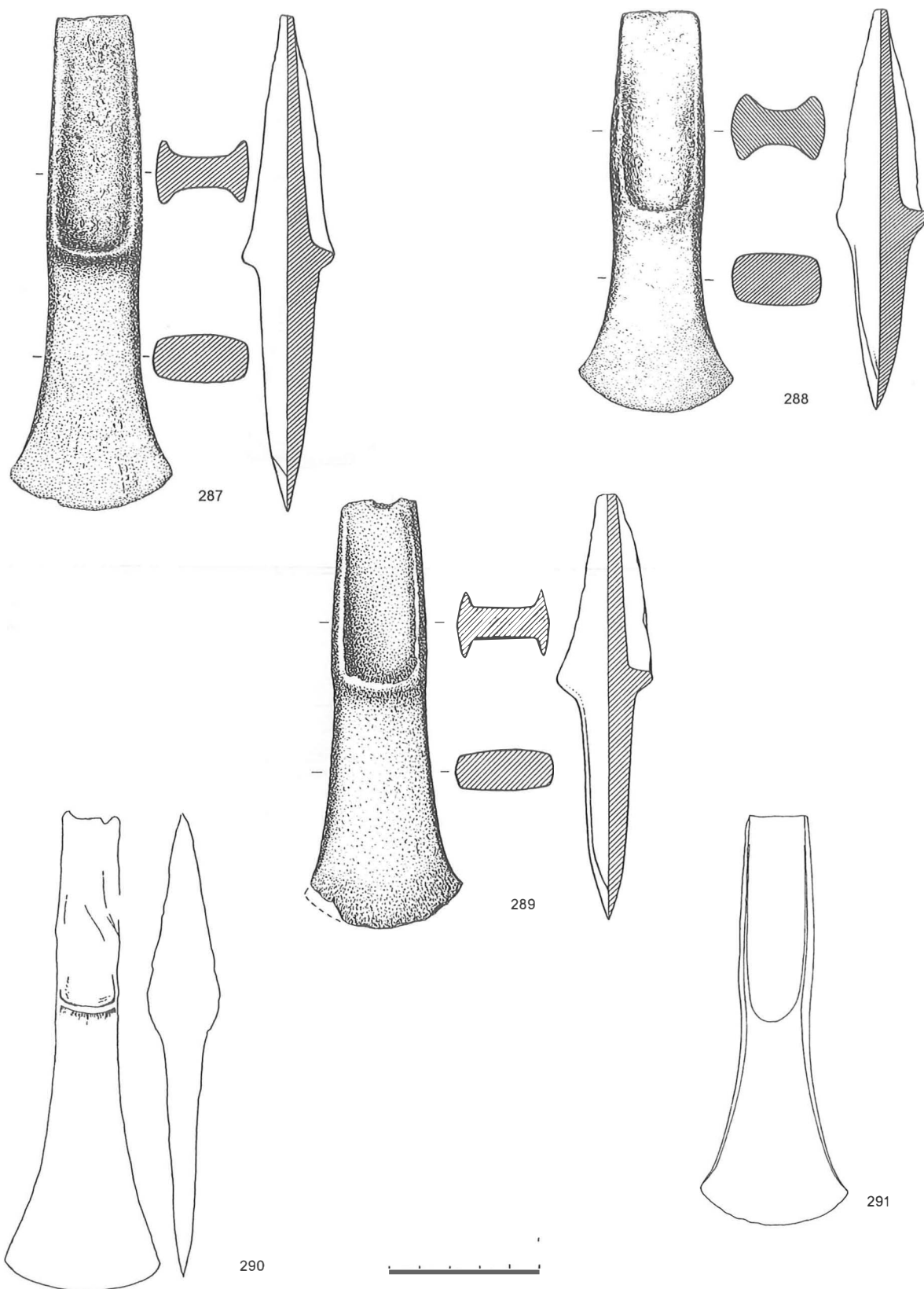


Fig. 67d. (Type AXP:PSW) 287: provenance unknown; 288: Rutten, Flevoland; 289: near Heesche Poort, Ge; 290: Vasserveld, Ov (after watercolor-sketch Ter Kuile); 291: Montfort, Li (after old photograph) (see also figs 67a-c).

Parallels Type AXP:PSW: Within Kibbert's *Var. Andernach* (as already explained above under Type AXP:PS) we can recognize four examples as resembling our Type AXP:PSW (Kibbert's Nos 641, 645, 651, 653). The three of these with known find-spots are all along the Rhine (Andernach; Uedem, Kr. Kleve; and Leverkusen-Rheindorf).

Three palstaves found in northern Britain, and identified by Schmidt & Burgess (1981: pp. 143-144, Nos 843-845) as *schlichte Absatzbeile*, would be by no means unhappy among our AXP:PSW series, especially amidst those examples with a rounded stopridge. One is from Churwell in western Yorkshire, the other two from Scotland.

Dating: No close datings are known (cf. section 4, below).

b) *Plain palstaves with parallel (H) sides, small (AXP:PH<)* (fig. 68)

Four scattered examples in the Netherlands (Cat.Nos 292-295; Map 27). These small palstaves, with blade widths of 2.3 to 2.6 cm and lengths, where fully preserved, of 10.5 and 9.3 cm, are, functionally considered, presumably chisels rather than axes, though in form they are palstaves. Three examples have a {} profile.

CAT.NO. 292. DE MEENT, *GEMEENTE RHENEN, UTRECHT*. L. 9.3; w. 2.55; th. 2.0 cm. {} profile; sharp irregular butt;)(septum; straight stopridge. Blade part of () section; edge sharp. Patina: mottled green; rolled and corroded. Museum: Rhenen, Inv.No. A.a.10. (DB 239)

Map reference: Sheet 39E, c. 168/444.50.

CAT.NO. 293. VASSE, *GEMEENTE TUBBERGEN, OVERIJSEL*.

L. 10.5; w. 2.6; th. 1.9 cm. {} profile; irregular sharp butt; nearly straight stopridge; flattened-|| septum; very weak flanges. Blade part with oval cross-section. Blade dulled. Patina: mottled green; surface rough. Museum: Zwolle, Inv.No. 117. Gift of E. Geerdink, Vianen. (DB 246)

Map reference: Sheet 28F, c. 254.5/493.1

CAT.NO. 294. SEVENUM, *GEMEENTE SEVENUM, LIMBURG*.

L. (9.3); w. 2.3; th. (0.9) cm. Weight 71.6 gr. {} profile; butt end severely damaged and irregular; U stopridge. Blade part with parallel sides, rectangular section. Cutting edge sharp. Patina: dull green. Severely abraded; one side virtually flattened. Recent break at butt end. Found in garden in the Dorperweiden (street). Presented by finders to Heemkundige Vereniging Sevenum. (DB 883)

Map reference: Sheet 52G, c. 200/380.

Reference: *Jaarverslag R.O.B.*, 1993: p. 203.

CAT.NO. 295. PANDIJK, *GEMEENTE ODOORN, DRENTHE*.

L. (8.1); w. 2.3; th. 1.65 cm. Weight (95) gr. Most of hafting part broken off and missing. U septum, U stopridge. Blade part with roughly rectangular section. Cutting edge expands slightly. Patina: dull mottled green. Corroded surfaces. Break is patinated. Found c.

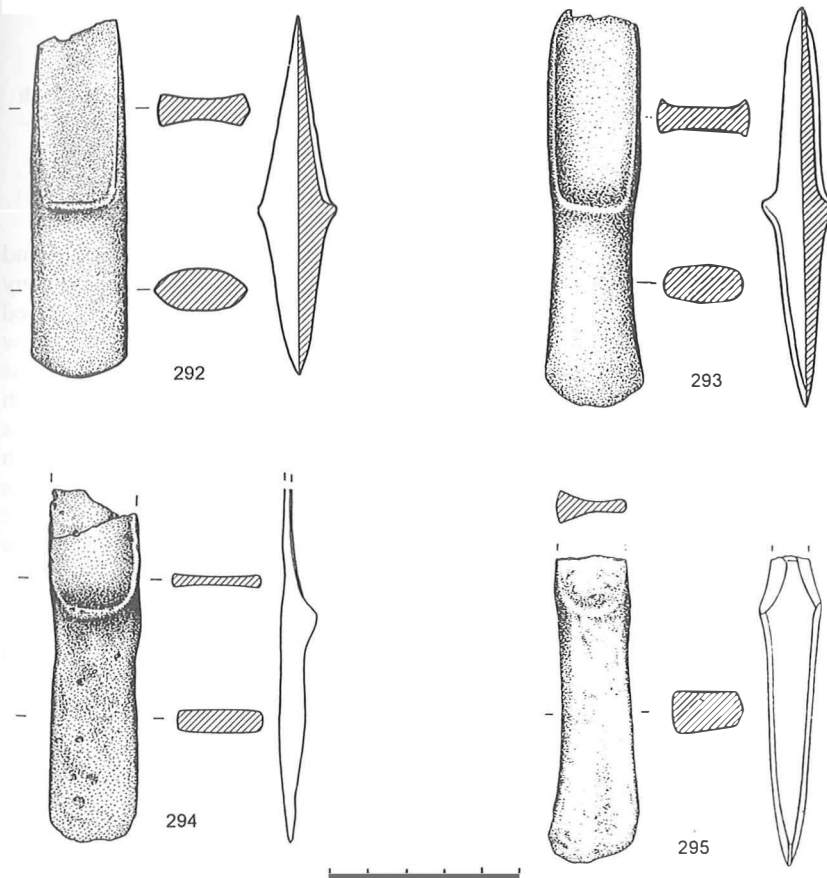


Fig. 68. (Type AXP:PH<) 292: Rhenen, Ut (drawing I.P.P.); 293: Vasse, Ov; 294: Sevenum, Li; 295: Pandijk, Dr.



- with J-tips (3x) (PHJ)
- with J-tips (PHJ)
- * sec (PH)
- × crinoline outline (PHC)
- + looped, small (AXPL:PH<)

Map 27. Regional palstaves, plain, with parallel sides: Types AXP:PH, AXPL:PH<.

1982 by E. Drenth in a field; possibly from a tumulus with stone packing or periphery. Museum Assen, Inv.No. 1991/II.1. (DB 2092)
Map reference: Sheet 17F, 254.52/537.50.

Parallels: There are no really good parallels for these in Kibbert (1980). The nearest approximations would be his Nos 710 and 714, which he includes among his *Form Kamen-Mönchengladbach* (his pp. 258-260); most of the palstaves he assigns to this group are, however, sinuous rather than parallel-sided in outline. Within the Netherlands, our AXP:PH< palstaves are sensibly to be grouped with our Type AXP:PS<, which are similar but with sinuous outline.

Dating: No close datings are known (cf. section 4, below).

b:1) *Plain palstaves with parallel (H) sides, but abruptly expanded (J) blade tips (AXP:PHJ)* (figs 69a-69b)

Nine examples in the Netherlands (Cat.Nos 296-304), almost all in the north (Map 27). These give the impression of being narrow-bladed palstaves, the cutting

edges of which have been re-worked by hammering and grinding. The traces of such re-working are in many cases clearly evident, in the form of what we have called 'pouches' on the sides of the cutting edge (the hollow formed by hammering, enclosed by what Kibbert has named *Schneideneckrandleisten*); a blade portion which has evidently been shortened, resulting in an obvious disproportion between a hafting part of normal length and an abnormally short blade part; and grinding facets on the faces at the blade end (cf. fig. 40). On the other hand, it is possible that some of these axes were originally cast with abruptly out-turned blade tips.

CAT.NO. 296. ZUIDBARGE, GEMEENTE EMMEN, DRENTHE. L. 13.8; w. 4; th. 2.3 cm. Weight 306 gr. Butt damaged. A flanges with () sides; flattened-U septum; sloping, slightly overhanging U stopridge. Blade part with subrectangular blade cross-section, very slight blade-tip expansion. Found 1899 in the Zuidbargerstrubben. Museum: Assen, Inv.No. 1899/XI.19. (DB 99)

Map reference: Sheet 17H, c. 255.5/530.7.

References: Verslag, 1899: p. 129, No. 1558; Butler, 1963b: p. 211, IV.A.3.

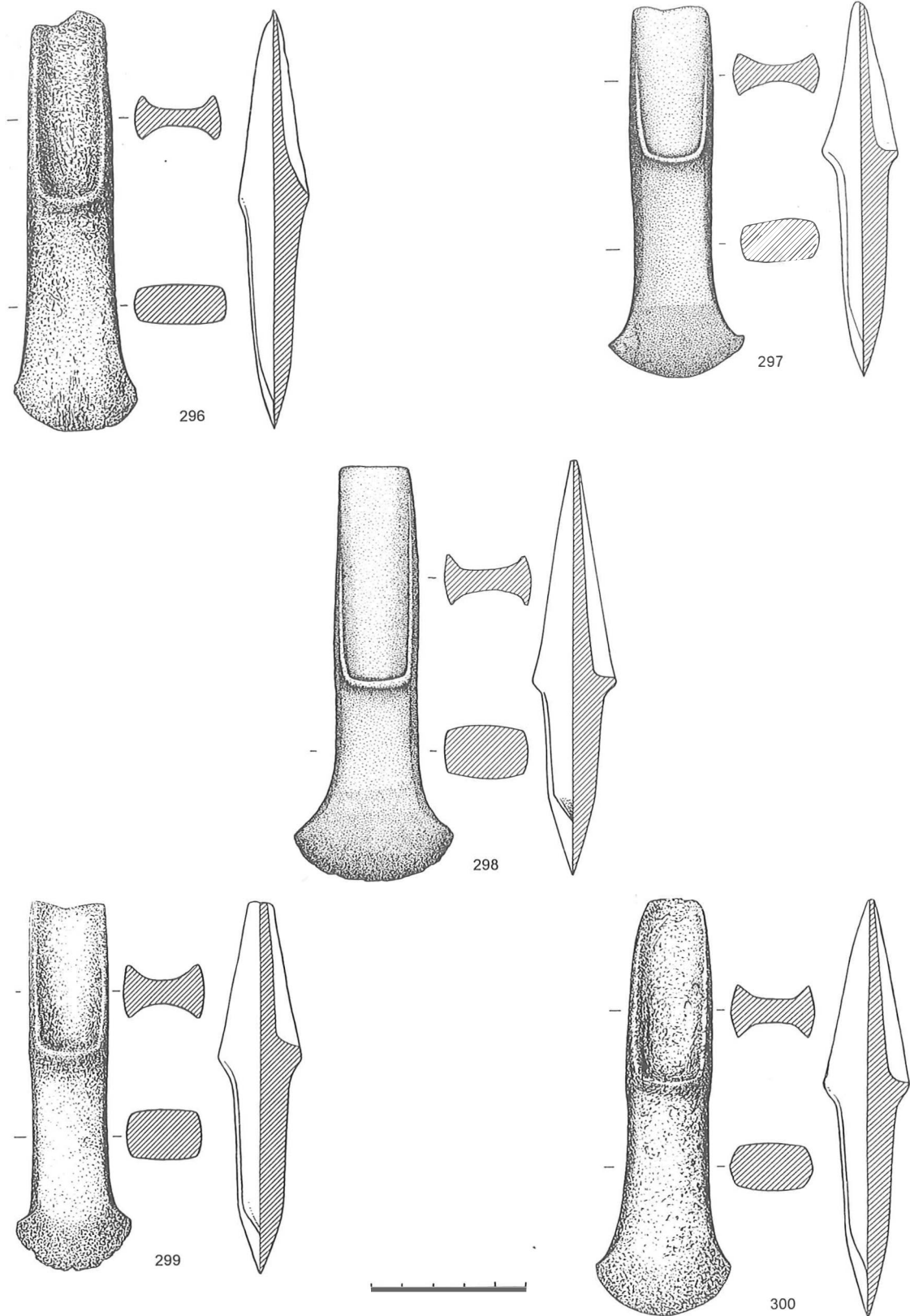


Fig. 69a. (Type AXP:PHJ) 296: Zuidbarge, Dr; 297: Noordbarge, Dr; 298: Borger, Dr; 299: Gasselternijveen, Dr; 300: Roderveld, Dr (see also fig. 69b).

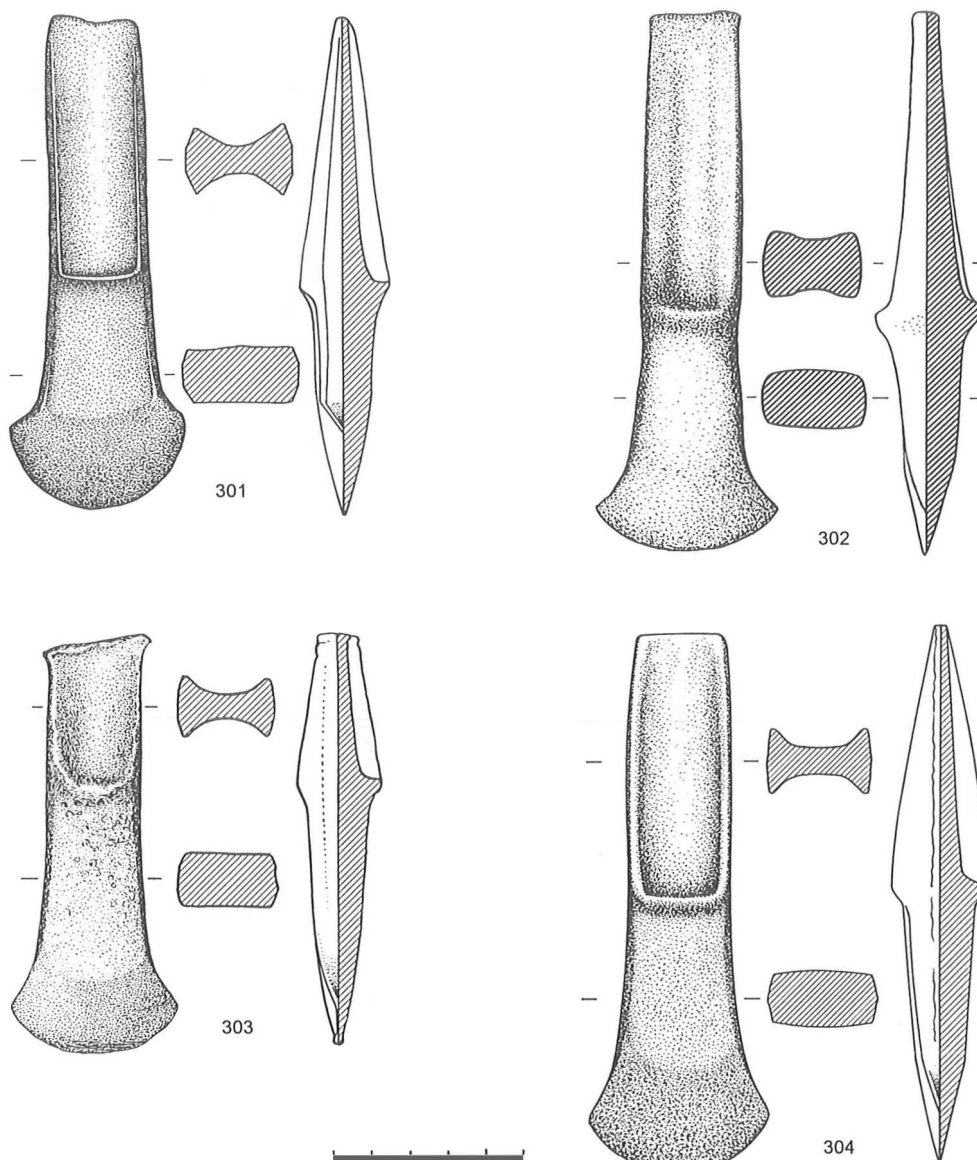


Fig. 69b. (Type AXP:PHJ) 301: Klazienaveen, Dr; 302: Onstwedderholte, Gr; 303: Oudleuscn, Ov; 304: Berlicum, N-B (see also fig. 69a).

CAT.NO. 297. NOORDBARGE, GEMEENTE EMMEN, DRENTHE. NOORDBROEKMADEN.

L. 12.0; w. 4.3; th. 2.45 cm. Butt concave, blunt. Δ flanges with () sides; U septum, U ledge stopridge. Blade part with convex faces and sides; straight ground. Slight casting seams. Cutting edge sharp. Patina: black, but largely removed; now mostly bronze colour. Well-preserved; some pitting. Found 1974 by one Nijhof along the boundary between the Noordbarger Bos and the Oude Delft. Private possession. (DB 676)

Map reference: Sheet 17H, 254.48/530.90.

CAT.NO. 298. BORGER, GEMEENTE BORGER, DRENTHE. DE VORRELS (turning off the Strengerveg toward Schoonloo).

L. 13.4; w. 5.2; th. 2.7 cm. Straight blunt butt; Δ flanges with () sides; rounded \searrow septum; nearly straight, overhanging stopridge. Blade part with slightly convex faces and sides. Straight ground, pouched. No casting seams visible. Cutting edge sharp. Patina: brown; some pitting, but generally well-preserved. Found August or September

1991 by owner while harvesting potatoes. Private possession. (DB 703)

Map reference: Sheet 17E, 247.9/549.5.

Reference: *Nieuwe Drentse Volksalmanak*, 1994: p. 93(185).

CAT.NO. 299. GASSELTERNIJVEEN, GEMEENTE GASSELTE, DRENTHE.

L. 12.1; w. 4; th. 2.7 cm. Weight 301 gr. Blunt butt (damaged); Δ flanges with () sides; U septum; overhanging, slightly rounded stopridge with angular corners. Blade part with slightly convex faces and sides. Cutting edge crescent-ground, slightly battered. Patina: bronze colour; traces of original peat-patina. Found in peat, in the 'Hambroeken', c. 0.25 m deep under the surface. Museum: Assen, Inv.No. 1901/X.1. (DB 100)

Map reference: Sheet 12H, 252.30/555.30.

References: *Verslag*, 1901: p. 10, No. 3; Butler, 1963b: p. 211, IV.A.6.

CAT.NO. 300. RODERVELD, *GEMEENTE* RODEN, DRENTHE. L. 13.6; w. 4.5; th. 2.85 cm. Weight 347 gr. Straight blunt butt; \wedge flanges with () sides; wedge U septum; sloping, overhanging rounded stopridge with angular corners. Blade part with slightly convex faces, $\lt \gt$ sides. Cutting edge crescent-ground, sharpened. Patina: bronze colour. Found while digging peat. Museum: Assen, Inv.No. 1904/VI.1. (DB 101)

Map reference: Sheet 12A, 223.25/572.75.

References: *Verslag*, 1904: p. 10, No. 5; Butler, 1963b: p. 211, IV.A.10.

CAT.NO. 301. KLAZIENAVEEN, *GEMEENTE* EMMEN, DRENTHE (near football field).

L. 13.0; w. 4.7; th. 2.3 cm. Concave, blunt butt; \wedge flanges with 3-faceted sides; straight ledge stopridge. Blade part with flat faces, 3-faceted sides. Crescent-ground; semi-circular expanded cutting edge; pouched. Patina: mottled black/light green. Well-preserved, but somewhat pitted. Private possession. (DB 692)

Map reference: Sheet 18C, 263.5/528.3.

CAT.NO. 302. ONSTWEDDERHOLTE, *GEMEENTE* STADSKANAAL, GRONINGEN.

L. 14.8; w. 4.8; th. 2.8 cm. {} profile. Straight blunt butt; very shallow slight flanges which appear to have been hammered down, with slightly () sides; very shallow U septum. Straight stopridge. Blade part with slightly convex faces and sides. Pouched. Cutting edge sharp. Patina: blackish. Museum: Groningen, Inv.No. 1907/VI.2. (DB 170)

Map reference: Sheet 13A, c. 265.7/564.

Reference: *Verslag*, 1907: p. 8, No. 1.

CAT.NO. 303. OUDLEUSEN, *GEMEENTE* DALFSEN, OVERIJSSEL.

L. (10.9); w. 4.4; th. 2.25 cm. Butt recently battered (has been used as chisel). \wedge flanges with () sides; U septum; U ledge stopridge. Blade part with flat faces and sides. Cutting edge expanded; crescent-ground. Cutting edge sharp; pouched. Patina: very dark, dull brown. Well-preserved. Museum: Enschede, Inv.No. 972 (old No. 675). (DB 1066)

Map reference: Sheet 21H, 218/505.

CAT.NO. 304. BERLICUM, *GEMEENTE* BERLICUM, NOORD-BRABANT.

L. 14.2; w. 4.6; th. 2.5 cm; weight 375 gr. Straight blunt butt; \wedge flanges with flattish sides, $\backslash \ /$ septum. Straight ledge stopridge. Blade part with slightly convex faces, $\lt \gt$ sides with broad (hammer-flattened) casting seams; Crescent-ground sharpening facet on faces; pouched. Cutting edge sharp. Patina: bright to dark bronze; but traces of original black patina; very well-preserved. Museum: Stein, Inv.No. 11B5; ex coll. Beckers, formerly in Museum Beek. (DB 1328)

Map reference: Sheet 45D, c. 156/410.

Reference: Beckers & Beckers, 1940: p. 174, afb. 59:5 (photo), p. 176.

Parallels: Within Kibbert's *Var.* Andernach are five examples resembling our AXP:PHJ: his Nos 642, 660, 663, 664, 665. Four of these are in the Weser-upper Lippe area, and only one in the Rhine-Lippe area.

Dating: No close datings are known (cf. section 4, below).

b:2) *Plain palstaves with parallel (H) sides, but with crinoline-shaped blade tips (AXP:PHC)* (fig. 70)

Three examples in the Netherlands (Cat.Nos 305-307); two in the south, one of which with province only, one unprovenanced (Map 27). Within our AXP:PHJ group, a small subgroup. Has blade tips sinuously expanded,

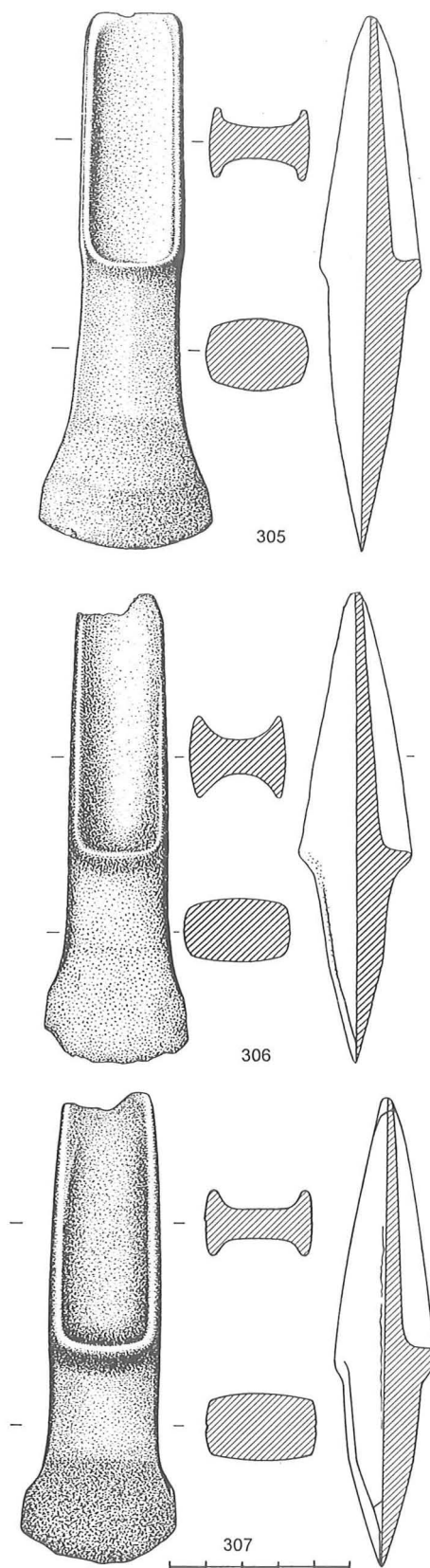


Fig. 70. (Type AXP:PHC) 305: 'De Peel', N-B; 306: *gemeente* Echt, Li; 307: provenance unknown.

giving the lowest part of the blade a sort of crinoline-shape.

In view of the small number of such specimens it seems probable that this sort of blade treatment was not an original design feature, but simply an alternative method of re-sharpening. The short blade part of two of the specimens also points in this direction.

CAT.NO. 305. 'DEPEEL', NOORD-BRABANT' (exact provenance unknown).

L. 14.9; w. 4.8, th. 2.8 cm. Straight blunt butt. Slightly convex \wedge flanges, with slightly convex sides. Flattened-U stopridge. Blade part with convex faces and sides. Two re-grinding facets (straight above, crescentic below). Patina: dark bronze. Private possession. (DB 607)

CAT.NO. 306. GEMEENTE ECHT, LIMBURG.

L. 13.1; w. 4.05; th. 3.15 cm. Irregularly broken butt; high \wedge flanges with slightly rounded sides; wedge U septum. Straight shelf stopridge. Blade part with slightly convex faces and sides. Straight ground; lower part of blade of S-shaped outline. Blade part has been shortened by re-sharpening. Patina: fine glossy dark green, but pitted. Museum: Bonnefantenmuseum Maastricht, Inv.No. 202 (old No. 2056A). (DB 207)

Documentation: fax M. de Grooth (Bonnefantenmuseum) to Butler, 22 July 1997.

References: Byvanck, 1942/1946; Wielockx, 1986: Cat.no. Hi.4, with drawing.

CAT.NO. 307. PROVENANCE UNKNOWN.

L. 13.1; w. 4.3; th. 2.8 cm. Blunt butt with irregular damage; \wedge flanges, with nearly flat sides; $_$ /septum; slightly U-shaped shelf stopridge. Blade part short, with convex faces and sides. Straight ground; cutting edge re-hammered to crinoline shape. 'Negative casting seams' (groove where normally a rib is found). Two halves of mould in exactly matched. Patina: glossy green, with black parts. Some abrasion. In white ink on septum: 2; paper label: E.III.No.2. Museum: Nijmegen, Inv.No. AC 2 (old No. E.III.2), ex coll. Guyot (acquired before 1864). (DB 929)

Parallels: The 'crinoline' shaping of the lowest part of the blade occurs also on palstaves of the types AXP:MSC (below); in the Netherlands a southern feature. In the north of France a well-known example is a plain palstave in the hoard of Anzin (59 Nord) (Blanchet, 1984: pp. 228-230, p. 501, fig. 122; dated by Blanchet to the phase *Bronze final 1*). This shaping of the blade end is not, however, typical of the palstaves that Kibbert assigns to his *Var.* Anzin (his pp. 245-247, Nos 613-629, *angeschlossen* Nos 630-635), though it appears occasionally on palstaves of various types in Middle West Germany.

Probably this blade treatment is not a type feature, but rather an alternative manner of re-sharpening (certainly the case with Kibbert's greatly blade-shortened Westphalian No. 631!). In the Netherlands, however, where drastic re-sharpening is common, this distinctive blade form has a very restricted distribution.

The 'crinoline' shape of the whole blade part is of course a quite different matter, certainly formed in the casting rather than by subsequent hammering. In the Netherlands the crinoline blade occurs especially on the British-type palstave from the Epe hoard (Butler, 1990, pp. 91-92, Find No. 18, fig. 23; present paper Cat.No. 217) and on the flanged stopridge axe from Oeken,

gemeente Brummen, Gelderland (Butler, 1995/1996: Cat.No. 171, fig. 37d:171).

Dating: No close datings are known (cf. section 4, below).

c) *Plain palstaves with trapeze (\wedge) outline, or with parallel-sided hafting part and blade part with trapeze outline (AXP:PA)* (figs 71a-71d)

15 examples in the Netherlands (Cat.Nos 308-322). This distinctive variant is found almost exclusively in the south, with an occasional outlier in north and west (Map 28).

The hafting part is parallel-sided, or very nearly so, and this, combined with the more or less straight sides of the blade part (some have, however, slightly everted blade tips) and the straight stopridge, give the palstave a rather stiff form. Most examples have a {} profile. Exceptionally, there is a U stopridge (Berg-en-Terblijt, Limburg, Cat.No. 322).

Cf. also the related Type AXPL:PA, with two examples: Cat.No. 339: near Emmen, Drenthe; Cat.No. 340: Belfeld, Limburg.

CAT.NO.308.SCHEVENINGEN, GEMEENTE 's-GRAVENHAGE, ZUID-HOLLAND.

L. 17; w. 5.4; th. 2.2 cm. Trapeze outline, {} profile. Irregular blunt butt; $_$ /septum with \lt sides; slightly U, outwardly sloping ledge stopridge. Blade part with convex faces, \lt sides. Poor casting; a number of blowholes on face and septum. Cutting edge damaged recently. Patina: mottled blue-green, rather glossy. Found in (or before) 1926 at Scheveningen (Nieboerweg), on *vierde strandwal* (fourth dune ridge). Museum: Den Haag, Inv.No. HH 281. (DB 1358)

Map reference: Sheet 30 West ('s-Gravenhage) c. 78.5/458.5

References: Verslag, 1926: p. 4; De Wit, 1964: fig. I; Van Heerlingen, 1983: p. 105, afb. 10-11.

CAT.NO. 309. SEVENUM, GEMEENTE SEVENUM, LIMBURG. HET HEITJE.

L. 15.8; w. 5.2; th. 2.8 cm; weight 543.2 gr. {} profile. Straight blunt butt; slight flanges with () sides; U septum. Straightish shelf stopridge. Blade part with \wedge outline, slightly flaring toward cutting edge; flat faces, slightly rounded sides; faint crescentic sharpening facet; faint pouches on sides. Cutting edge sharp. Patina: bronze colour; remnants of black patina in depressions. Heavy specimen. Museum: Bonnefantenmuseum, Maastricht, Inv.No. 3322A. (DB 846)

Map reference: Sheet 52G, c. 200/380.

Reference: Wielockx, 1986: Cat.No. Hi27, with drawing.

CAT.NO. 310. PEPINUSBRUG, GEMEENTE ECHT, LIMBURG.

L. 16.5; w. 5; th. 2.7 cm. {} profile. Blunt shallow U butt; straight, outwardly sloping shelf stopridge. Shallow U septum. Blade part with flat faces, slightly convex sides. Cutting edge sharp, nearly straight. Poor mould alignment. Patina: dull light green; part orange-red; encrusted with sand. Museum: R.M.O. Leiden, Inv.No. I.1906/3.30 (old No. I.559). Ex coll. Geradts, Major of Posterholt. (DB 373)

Map reference: Sheet 60B, 192.6/444.3.

CAT.NO. 311. WEITEMANSLANDEN, GEMEENTE VRIEZENVEEN, OVERIJSEL.

L. 16.1; w. 4.6; th. 2.9 cm. {} profile. Thin butt, straight but with slight saddle. U septum; \lt sides. Straight, strongly projecting shelf stopridge. Blade part with \wedge outline, flat faces, \lt sides; no cutting-edge flare. Cutting edge sharp. Museum: Enschede, Inv.No. 907 (old No. 500-232), ex coll. G.J. ter Kuile. Found before 1935, at the margin of the

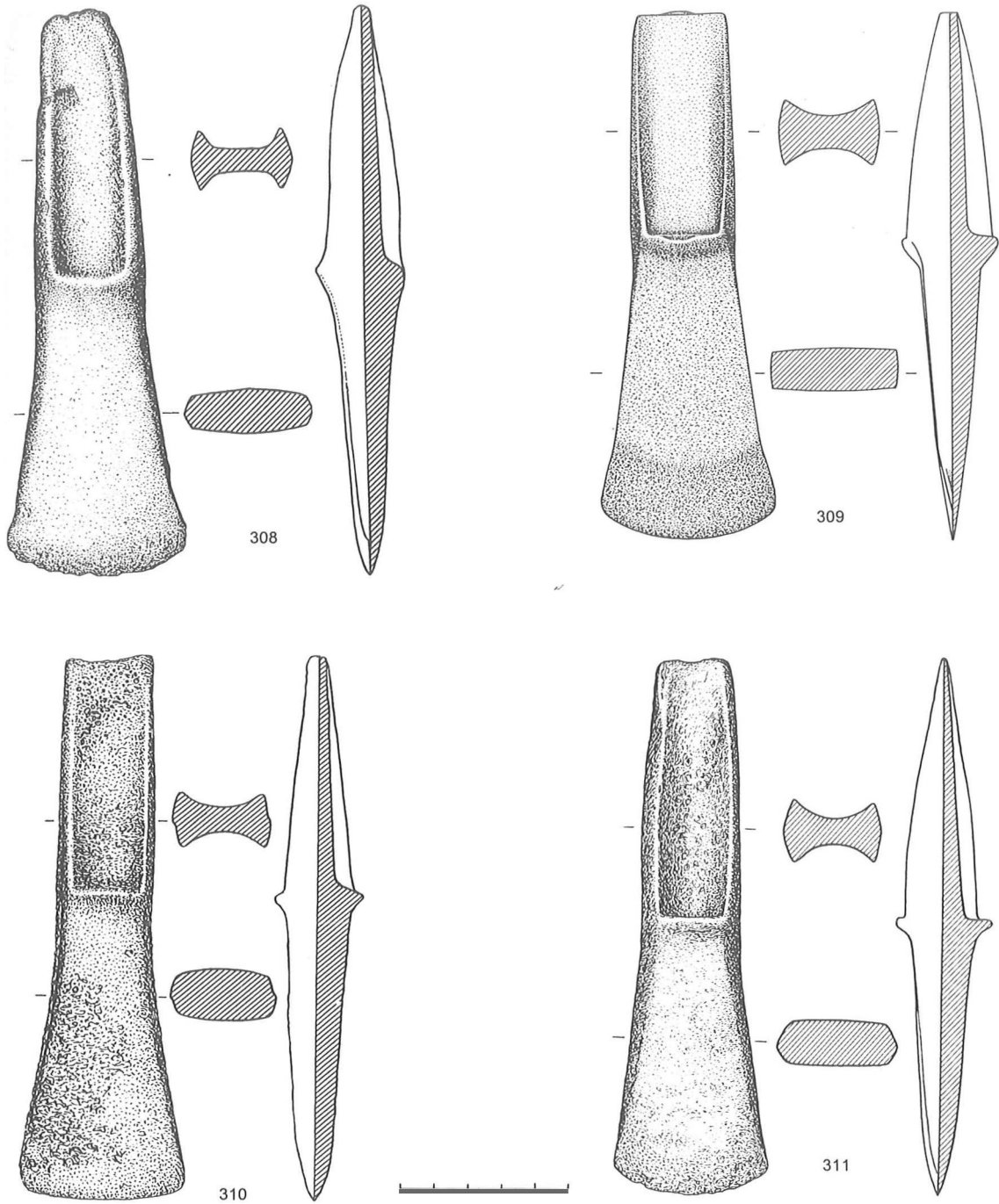


Fig. 71a. (Type AXP:PA) 308: Scheveningen, Z-H; 309: Sevenum, Li; 310: Pepinusbrug, Li; 311: Weitemanslanden, Ov (see also figs 71 b-d).

bog ("op de grens van het veen"). Patina dark brown, slightly glossy; surface rather pitted. (DB 1055)

Map reference: Sheet 28E, c. 243/491.

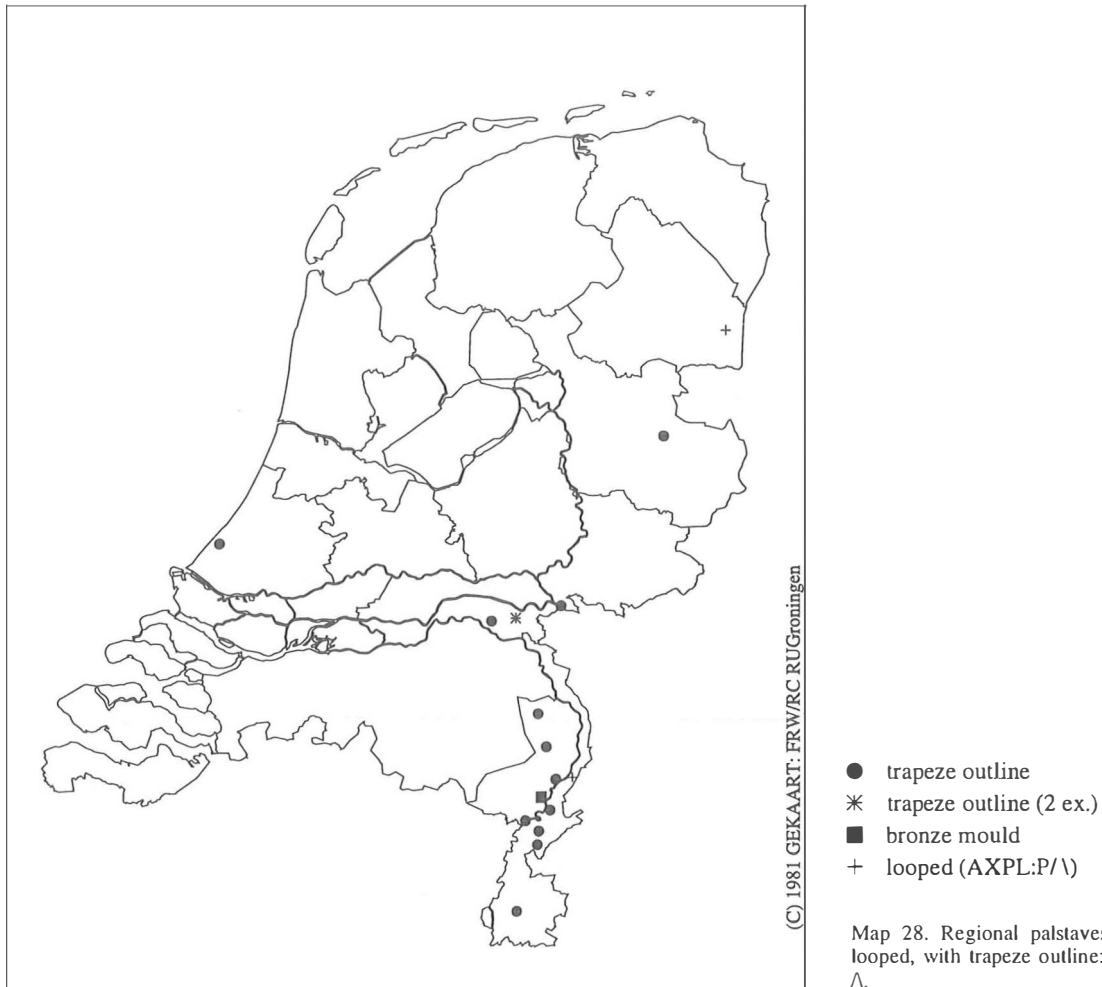
CAT.NO. 312. PROVINCE OF UTRECHT (exact provenance unknown).

L. 13.8; w. 4.0; th. 2.4 cm (width butt 2.0, width at stopridge 3.0 cm). {} profile; slightly rounded blunt butt; slight flanges with U sides. Blade part with convex faces; sides show poor mould alignment,

Surface heavily pitted. Patina: bronze colour; small patches of black in some pits. Edge blunted. Found in barge containing sludge dredged up either from the River Eem near Amersfoort or the Amsterdam-Rhine Canal, south of Utrecht. Private possession. (DB 621)

CAT.NO. 313. LEUNEN, GEMEENTE VENRAY, LIMBURG. 'OP DE STEEG'.

L. 14.5; w. 4.1; th. 2.1 cm. Thin {} profile. Straight butt, secondarily hammered flat. Hafting part with parallel sides; very slight ^ flanges



Map 28. Regional palstaves, plain, un-looped, with trapeze outline: Type AXP: Λ.

with flat sides; shallow U septum; slight straight stopridge. Blade part with faintly convex trapeze outline, slightly rounded faces and sides. Cutting edge sharpened, but recently blunted. Rather severely corroded, pitted; modern file marks. Patina mottled green/brown, traces of ochreous encrustation. Found 1952 by M. Jenniskens, during excavating activity, at a depth of 30 cm. Museum: Venray, without Inv.No. (DB 1146)

Map reference: Sheet 52B, 195.3/390.8.

CAT.NO. 314. MONTFORT, GEMEENTE AMBT MONTFORT, LIMBURG.

L. 12.9; w. 4.9; th. 2.7 cm. Thin asymmetrical-U butt; Λ flanges, with flat parallel sides; U septum; U stopridge, overhanging. Blade part with sinuous outline, extra-expanded blade tips; slightly convex faces and sides. Cutting edge sharp; has been recently re-sharpened. Patina dark green to nearly black, recently filed. Museum: Museon, the Hague; without inventory number; purchased 1992, ex coll. A. Wouters (old marks: AW 6/2 [?] in black ink on septum; round white paper label 'Montfort'). (DB 902)

Map reference: Sheet 60B, c. 194/348.

CAT.NO. 315. FROM RIVER RHINE OR WAAL (exact provenance unknown, possibly Bijland).

L. 15.4; w. 3.7; th. 2.44 cm. Slender {} profile. Straight blunt butt; flanges with biconcave outline, flat but with casting seams on sides; [septum, flattened-U shelf stopridge. Narrow, trapeze-shaped blade part, with convex faces. Cutting edge sharp.

Patina: black, partly removed. Surface pitted; original surface largely missing. Museum: Allard Pierson, Amsterdam, Inv.No. 6511; purchased May 1943 from B.A.I. Groningen (Inv.No. there: 1938/IV.7). (DB 756)

The B.A.I. had acquired it in 1938, through purchase of the collection of H. Blijdenstein, harbour-master at Nijmegen, via the dealer J. Esser of Nijmegen (also from the Blijdenstein collection are the palstaves Cat.Nos 238 and 386).

CAT.NO. 316. GEMEENTE ROERMOND, LIMBURG.

L. 15.9; w. 4.7; th. 3.1 cm. Slightly rounded blunt butt (with ancient damage);)(septum, () sides, with casting seams hammered flat. Straight shelf stopridge. Blade part with slightly Λ outline, flat faces, slightly convex sides. Blade tips lightly expanded. Crescentic grinding facet on faces. Cutting edge sharpened, but with partial recent blunting. Patina mostly glossy green, but pitted in places. Museum: Bonnefantenmuseum, Maastricht, Inv.No. 2923A, but on loan since 1984 in Museum Roermond. (DB 969)

Reference: Wielockx, 1986: Cat.No. Hi26 (with drawing).

CAT.NO. 317. BATENBURG, GEMEENTE WIJCHEN, GELDERLAND. From the Maas (dealer's provenance).

L. 15.25; w. 5; th. 2.1 cm. {} profile. Straight blunt butt (slightly damaged); [septum, slightly convex sides (not quite symmetrical); slightly rounded shelf stopridge. Blade part with plain flat faces; moderate cutting-edge tip expansion. Cutting edge sharp. Patina: clean (originally black). Museum: R.M.O. Leiden, Inv.No. e.1938/

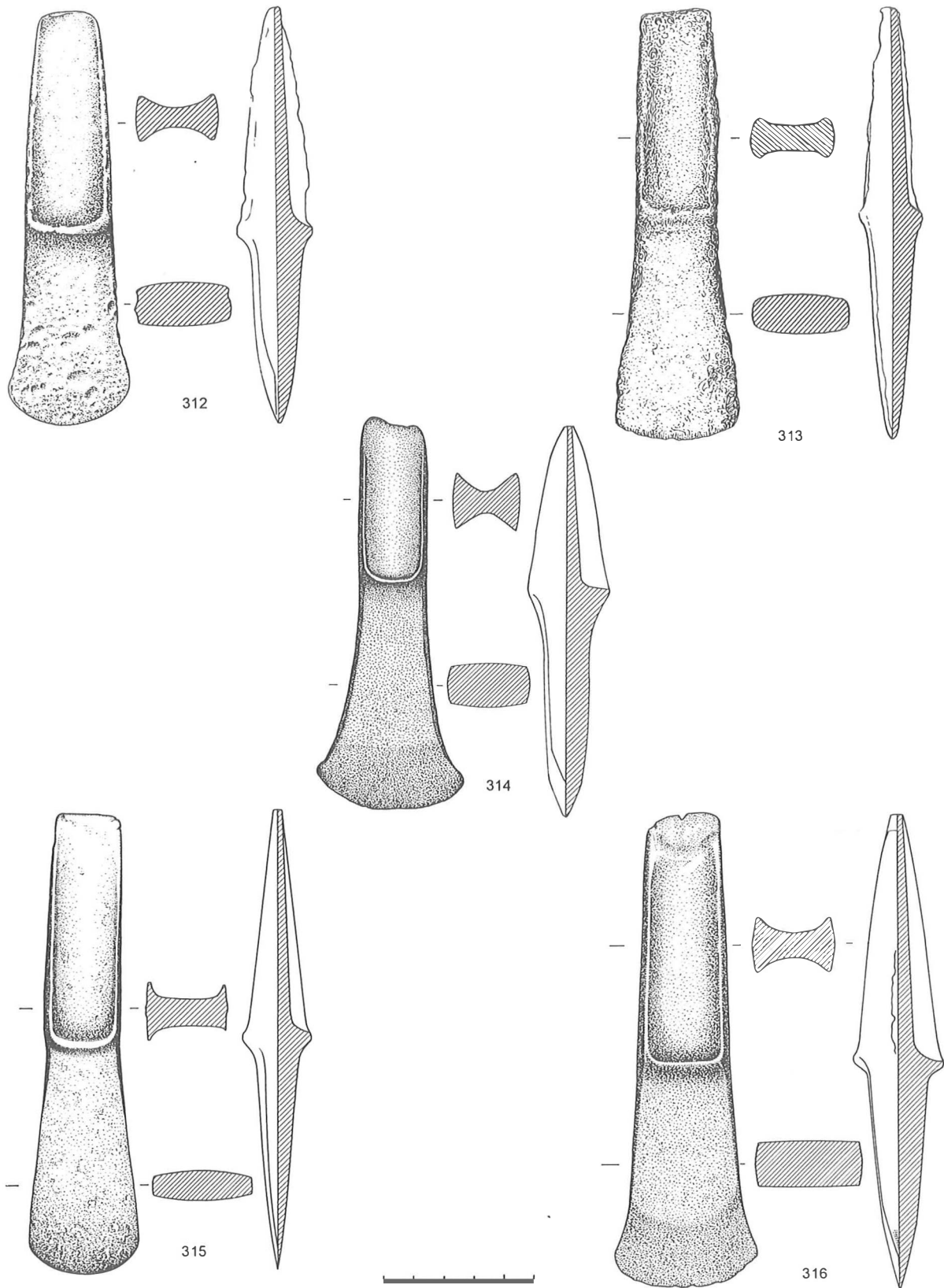


Fig. 71b. (Type AXP:PA) 312: 'Utrecht'; 313: Leunen, Li; 314: Montfort, Li; 315: from 'River Rhine or Waal'; 316: gemeente Roermond, Li (see also figs 71a,c,d).

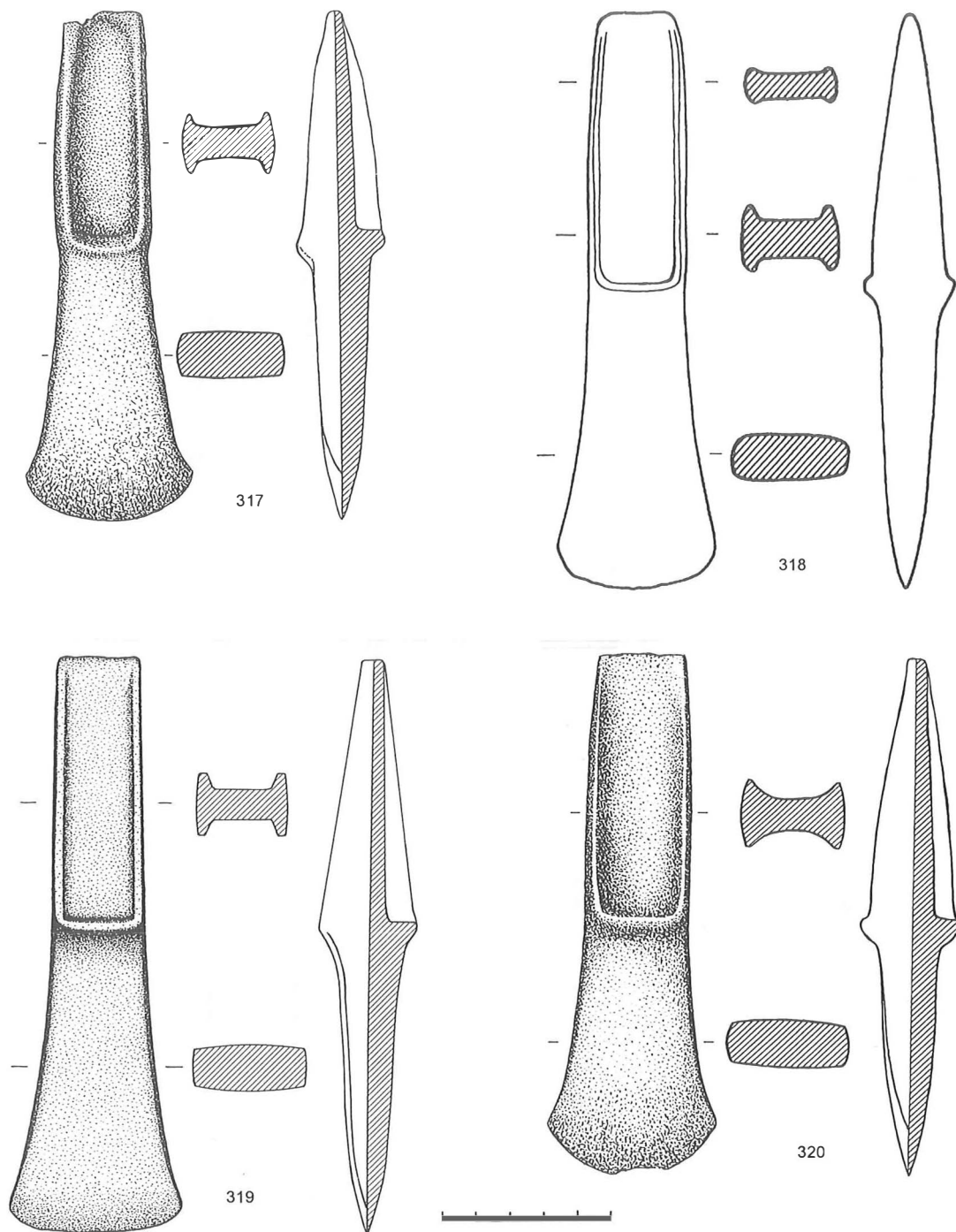


Fig. 71c. (Type AXP:PA) 317: Batenburg, Ge (dealer's provenance); 318: gemeente Kessel, Li (drawing R.O.B.); 319: gemeente Nijmegen, Ge (dealer's provenance); 320: near Heesche Poort, Ge (see also figs 71a,b,d).

9.1. Purchased from A. Sprik, Zaltbommel. (DB 478)

Map reference: Sheet 39H, c. 171.8/425.7.

Reference: Van Heemskerck Düker & Felix, 1942: Pl. 96.

CAT.NO. 318. GEMEENTE KESSEL, LIMBURG.

L. 17.1; w. 4.6; th. 3.2 cm. {} profile; parallel-sided hafting part, slightly concave-trapeze-shaped blade part. Slight flanges with () sides; _ / septum; straight stopridge. Blade part with convex faces

and sides. Found by L. van Wylick (Kessel) during or soon after World War II during clearing of a wooded parcel north of the road Kessel-Helden; at same place, but not at same time, as the palstave Cat.No. 365 (similar, but with a narrow midrib). 'Fine patina' according to Bloemers. Private possession. R.O.B. drawing. (DB 2033)

Map reference: Sheet 58E, 200.4/368.8

Documentation: Letter J.H.F. Bloemers to Butler, 22 March 1971,

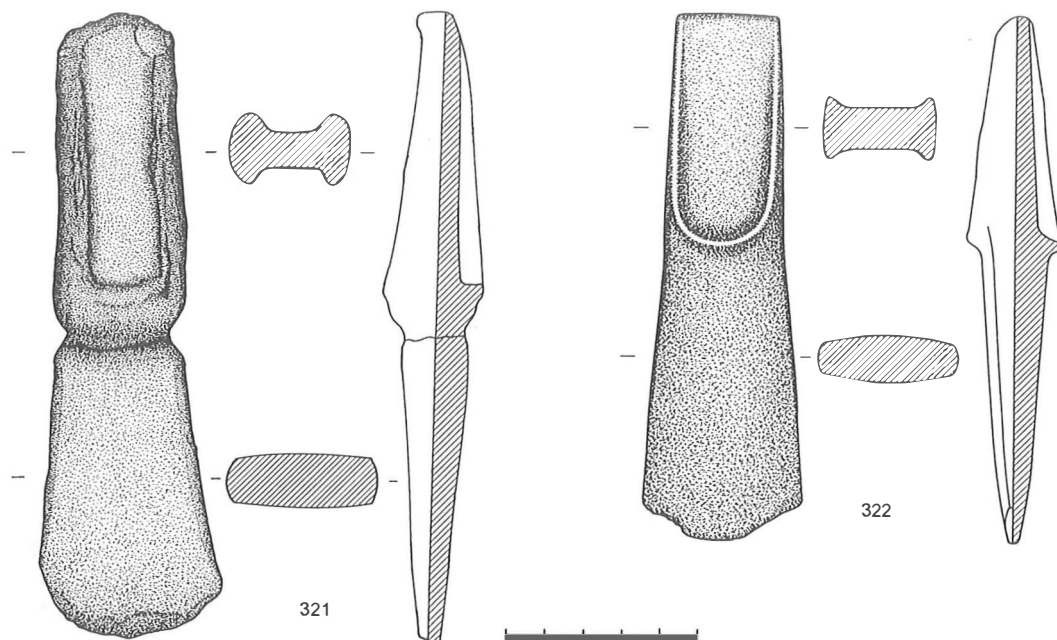


Fig. 71d. (Type AXP:P\A) 321: Wessem, Li; 322: Berg en Terblijt, Li (see also figs 71a-c).

enclosing R.O.B. documentation; R.O.B. database printout.

References: Bloemers, 1973: pp. 19-20, afb. 4:4 (left). [Wielockx, 1986: Cat.no. Hi12, is the palstave with midrib].

N.B.: we have not seen this palstave. The drawing is from the R.O.B. Amersfoort, after Bloemers, 1973.

CAT.NO. 319. GEMEENTENIJMEGEN?, GELDERLAND (dealer's provenance).

L. 17.3; w. 5.0; th. 2.9 cm. Straight blunt butt; \wedge flanges, with flat sides, \backslash septum. Straight, overhanging stopridge. Blade part with slightly concave \wedge outline, slightly convex faces, flat sides. Cutting edge sharp. Somewhat corroded. Patina: brown, traces of black; sandy encrustation. Original surface eroded and scraped; otherwise well-preserved. Museum: Enschede, Inv.No. 1978-32 (old No. E 43), ex coll. Eshuis (who had purchased it from antique dealer Tielkens in Delden). (DB 1920)

CAT.NO. 320. NEAR HEESCHE POORT, GEMEENTE NIJMEGEN, GELDERLAND.

L. 15.55; w. 5.05; th. 3 cm. $\{\}$ profile; straight blunt butt; U septum; slightly rounded sides; straight shelf stopridge. Blade part with slightly convex faces and sides; slight blade tip expansion. Cutting edge sharp but damaged. Patina: dark green to blackish. Museum: R.M.O. Leiden, Inv.No. I.D.B.B.4b (old No. B.42 and I.554); acquired Nov. 1823, with Cat.Nos 229 and 289 from J. Becker of Amsterdam, ultimately ex coll. In the Betouw. (DB 310)

Map reference: Sheet 40C, c. 186/428.

CAT.NO. 321. WESSEM, GEMEENTE WESSEM, LIMBURG (River Maas).

L. (16.3); w. (4.9); th. 2.5 cm. Heavily damaged palstave. Butt severely battered; \wedge flanges with secondary flattening; $[\]$ septum, nearly straight ledge stopridge. Blade part with \wedge outline, slightly convex faces and sides. Patina: now dark bronze. Severely damaged by rock crusher. Dredge find from R. Maas. Private possession. (DB 2306)

Map reference: Sheet 58C, c. 189/152.

CAT.NO. 322. VILT, BERG EN TERBLIJT, GEMEENTE VALKENBURG AAN DE GEUL, LIMBURG.

L. 13.9; w. 4.0; th. 2.2 cm. Weight 417.6 gr. Straight blunt butt; flattish

septum, with \wedge flanges with slightly convex sides; U shelf stopridge. Blade part with \wedge outline, convex faces and sides. Cutting edge severely damaged. Patina: very dark bronze, blackish in part. File marks on faces. Museum: Bonnefantenmuseum, Maastricht, Inv.No. 2926A. (DB 967)

Map reference: Sheet 62A, c. 184/318.

References: Mariën, 1952: p. 224, Afb. 208 (photo), p. 226; Butler, 1973a: fig. 14a/b, pp. 336-337, p. 342 note 13; Wielockx, 1986: III: pp. 449-450; Cat.No. Hi1 (with photo).

Note: This palstave has been attributed to the large Late Bronze Age hoard from Berg-en-Terblijt (Mariën, 1952: p. 224; Wielockx, 1986: pp. 449-450). The attribution can be considered dubious: apart from the chronological discrepancy, the palstave's patina is quite different from that of the other objects attributed to the hoard. It could perhaps be interpreted as a stray find from the area in which the hoard was found, but stray finds of Bronze Age bronzes are almost unknown in South Limburg. Admittedly, the palstave's deviant patina could be the result of modern treatment, and it could be a residual Middle Bronze Age object in a Late Bronze Age hoard.

Mould for AXP:P\A palstave (fig. 72):

CAT.NO. 323. BUGGENUM, GEMEENTE HAELEN, LIMBURG (River Maas).

Fragment of bronze half-mould; present l. (12.5), w. (6.4) cm. Blade width of negative: 5.2 cm. The fragment of the bronze half-mould has a negative for a palstave with a nearly trapeze-shaped blade (actually faintly S-curved) with a straight cutting edge. There is a remnant of a slight lug for keying into a corresponding hole on the missing partner half-mould. On the external face are four radial thin ribs, connected by a thin rib at the base. Museum: Roermond, Inv.No. 1897 (gift J. Rumen of Haelen). (DB 1124)

Map reference: Sheet 58D, c. 197.5/360.5.

References: Butler, 1973a: p. 322, afb. 1 (right); Brongers & Woltering, 1978: p. 84, De Laet, 1982: p. 430-431; Wielockx, 1986: Cat.no. Hi2b (with drawing).

Comment: The shape of a blade produced by casting in this mould would probably be modified somewhat in the finishing and sharpening processes, so that our assignment of the mould to Type AXP:P\A is with reserve.

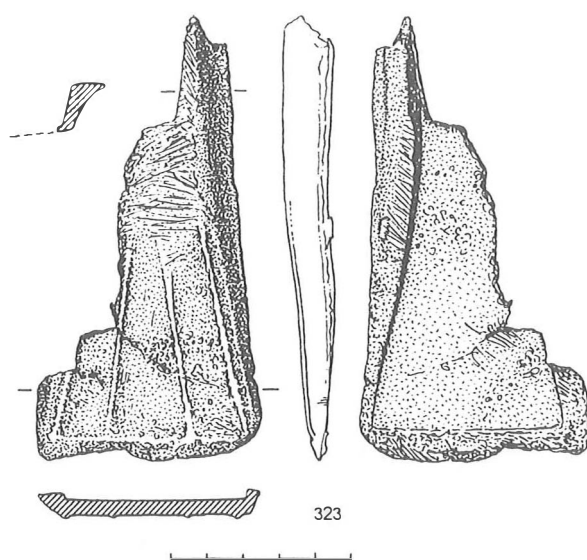


Fig. 72. (Bronze half-mould) 323: Buggenum, Li.

Parallels Type AXP:PΛ: Palstaves reasonably corresponding to our type AXP:PΛ occur in some numbers in western Germany, but are divided by Kibbert among a variety of his types, and it is far from obvious where the boundary lines between them are to be drawn. Some are evidently present among Kibbert's *Var.* Andernach; especially his Nos 638, 639, 640, 652, 655, 671, 672. The six of these with known find-spot are, however, widely scattered, so that a possible centre does not emerge. Others are certainly present amidst his *Form* Kamen-Mönchengladbach: i.e. his Nos 717, 718, 719, 720, occurring especially in the North Rhine area adjoining our Netherlands Limburg concentration. A few related examples are known in Belgium: River Maas at Quincampoix, Prov. Luik (= Angleur: Mariën, 1952; fig. 181:3); Molenbeersel, Belg. Limburg (Museum Brussels, B. 1430; has U stopridge, 'crinoline' blade outline). Thus we seem to have to do with a special Maas-Rhine group, although the German material still requires further sorting out.

Dating: No close datings are known (cf. section 4, below).

d) *Plain looped palstaves (AXPL:P...)* (fig. 73)

CAT.NO. 324. 'Near DIDAM, GEMEENTE DIDAM, GELDERLAND' (dubious authenticity; dealer's provenance). L. 16.7; w. 4.65; th. 3.2 cm. Rounded butt; slightly convex Λ flanges, U septum; heavy overhanging stopridge. Faintly ridged blade; high-placed loop. Patina: black. Museum: Arnhem, Inv.No. GAS 162; purchased 1955 in Nijmegen. (DB 22)

Comment: The finish of this specimen – including the wholly atypical rounded butt, the obtuse angle of the cutting edge, and the absence of signs of wear or weathering – give it the appearance of a recent rather than a Bronze Age casting.

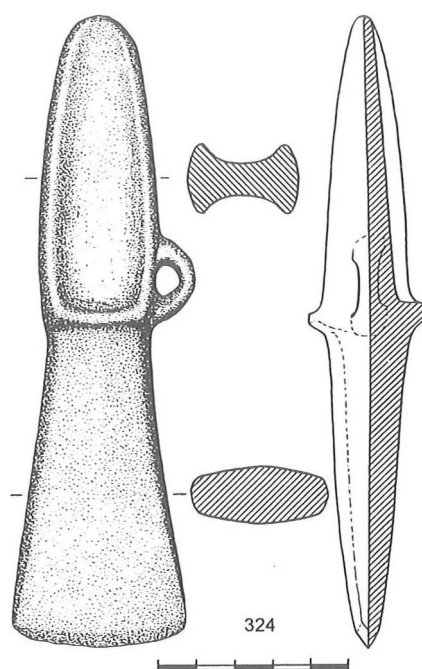


Fig. 73. 324: 'Didam, Ge' (dubious authenticity).

In fact, it greatly resembles museum-made castings based on the bronze palstave mould attributed to the River Lippe by Werne, Kr. Lüdinghausen, Nordrhein-Westfalen (Museum Münster; Brandt, 1960, II: Abb. 12-13; Kibbert, 1980: Nos 526, 526a, with further references). We have studied in the museum at Herne (Nordrhein-Westfalen) a specimen virtually identical to 'Didam', with similarly atypically rounded butt, and labelled as an *Abguss* from the Werne mould. It therefore seems likely that the 'Didam' palstave is a recent museum-copy, made for exhibition. Perhaps it may somehow have strayed from a German museum in the chaotic period toward the end of World War II.

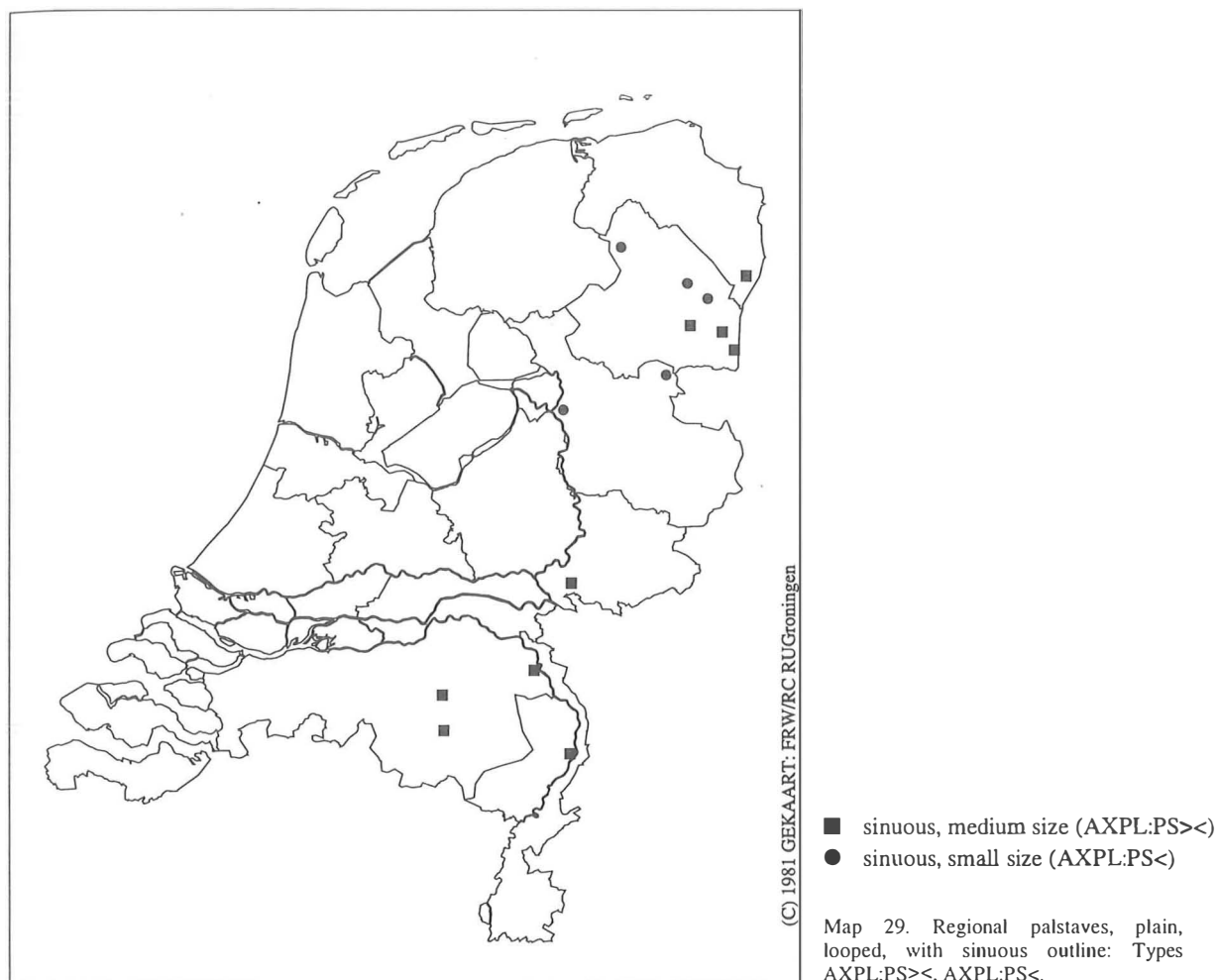
d: 1) *Plain looped palstaves with sinuous outline (AXPL:PS...)*

14 examples in the Netherlands (Cat.Nos 325-338). These include eight normal-sized examples (Cat.Nos 325-332: four north, four south), and six examples (AXPL:PS<, Cat.Nos 333-338) with a very short blade part, all in the north (Map 29).

Plain looped palstaves with sinuous outline, medium size (AXPL:PS><) (figs 74a-74b): Eight examples in the Netherlands (four in the north, four in the south; Cat.Nos 333-338, Map 29).

CAT.NO. 325. TER APEL, GEMEENTE VLAGTWERDE, GRONINGEN.

L. 11.2; w. 4.0; width at stopridge (without loop) 2.2 (with loop 3.0); septum increases in thickness from 0.6 at butt to 1.3 cm at stopridge;



Map 29. Regional palstaves, plain, looped, with sinuous outline: Types AXPL:PS><, AXPL:PS<.

thickness at stopridge 3.1, at base of stopridge 2.0 cm. Slightly {} profile; irregularly rounded blunt butt (recent damage). Slightly sinuous flanges with () sides; \ / septum; straight shelf stopridge. Blade part with slightly () faces, flat sides, gradually widening body. One blade tip anciently damaged. D loop. Cutting edge sharp. Surface corroded. Patina: dark brown, partly mottled light green. Patina has been partly removed. Found Sept. 1967 by J. Potze, while harvesting potatoes by machine on a parcel of land near the crossing Kruisheerweg-Nachtegaallaan. Museum: Groningen, Inv.No. 1967/XII.2. (DB 188)

Map reference: Sheet 18A, 269.87/544.52.

Documentation: Corr. Mrs. Potze to Butler, 6 Oct. 1967; G.P. Rodenburg to Butler, 5 Oct. 1967; Groenendijk, dossier Vlagtwedde No. 43.

CAT.NO. 326. GEMEENTE EMMEN, DRENTHE.

L. 13; w. 4.7; th. 2.95 cm. Weight 338 gr. Strongly {} profile. Nearly straight, blunt (5 mm) butt; slight, J-shaped flanges with nearly flat sides. Shallow U septum. Straight, markedly protruding shelf shelf stopridge, sloping slightly inwards. Blade part with gradually expanding sides, slightly convex faces and sides. Two crescentic sharpening facets on faces. On each side, at stopridge level, a step separates hafting and blade parts. Edge sharpened, but with slight modern battering. High-placed loop of J shape, the lower end of which joins the side at stopridge level. Patina: bright glossy green (laboratory treated?). Well-preserved, but the loop has been thinned by corrosion. Find circumstances unknown. Museum: Assen, Inv.No. 1962/II.186. (DB 674)

CAT.NO. 327. SLEEN (NEAR), GEMEENTE SLEEN, DRENTHE. L. 11.7; w. 4.2; th. 3.3 cm. Straight, very blunt butt (anciently shortened); ^ flanges with <> sides; wedge U septum; U ledge stopridge. Blade part with gently and gradually expanding body, slightly () faces and sides. Patina: dark green. Found (according to dr. Lodewijks of Nieuw-Amsterdam) in the surroundings of Sleen. Museum Assen, Inv.No. 1923/VIII.3. Acquired by exchange with unnamed person. (DB 131)

Reference: Verslag, 1923: p. 22, No. 85.

CAT.NO. 328. NOORDVEEN, GEMEENTE EMMEN, DRENTHE. L. 11.3; w. 4.1; th. 3 cm. Weight 288 gr. Straight blunt butt, ^ flanges with slightly convex sides; J] septum; somewhat rounded shelf stopridge. Blade part with slightly convex faces and sides. On blade faces two shallow arc-grooves. High-placed D loop. Cutting edge sharp. Patina: blackish, with greenish patches. Well-preserved, but some pits. Museum: Assen, Inv.No. 1962/II.37. Ex coll. J. Sneyders de Vogel, presented by Aaldert Liebe. (DB 1019)

Map reference: Sheet 17F, c. 259/540.

Reference: Verslag, 1962: p. 275.

CAT.NO. 329. DUBBROEK/BLERICK, GEMEENTE MAASBREE/ VENLO, LIMBURG.

L. 12.45; w. 5.1; th. 3.5 cm. {} profile. Straight blunt butt; ogival flanges with <> sides, hammered down toward a flat septum (see drawing). Nearly straight shelf stopridge. Blade part with ogival outline, convex faces, <> sides. Crescent-ground. Cutting edge

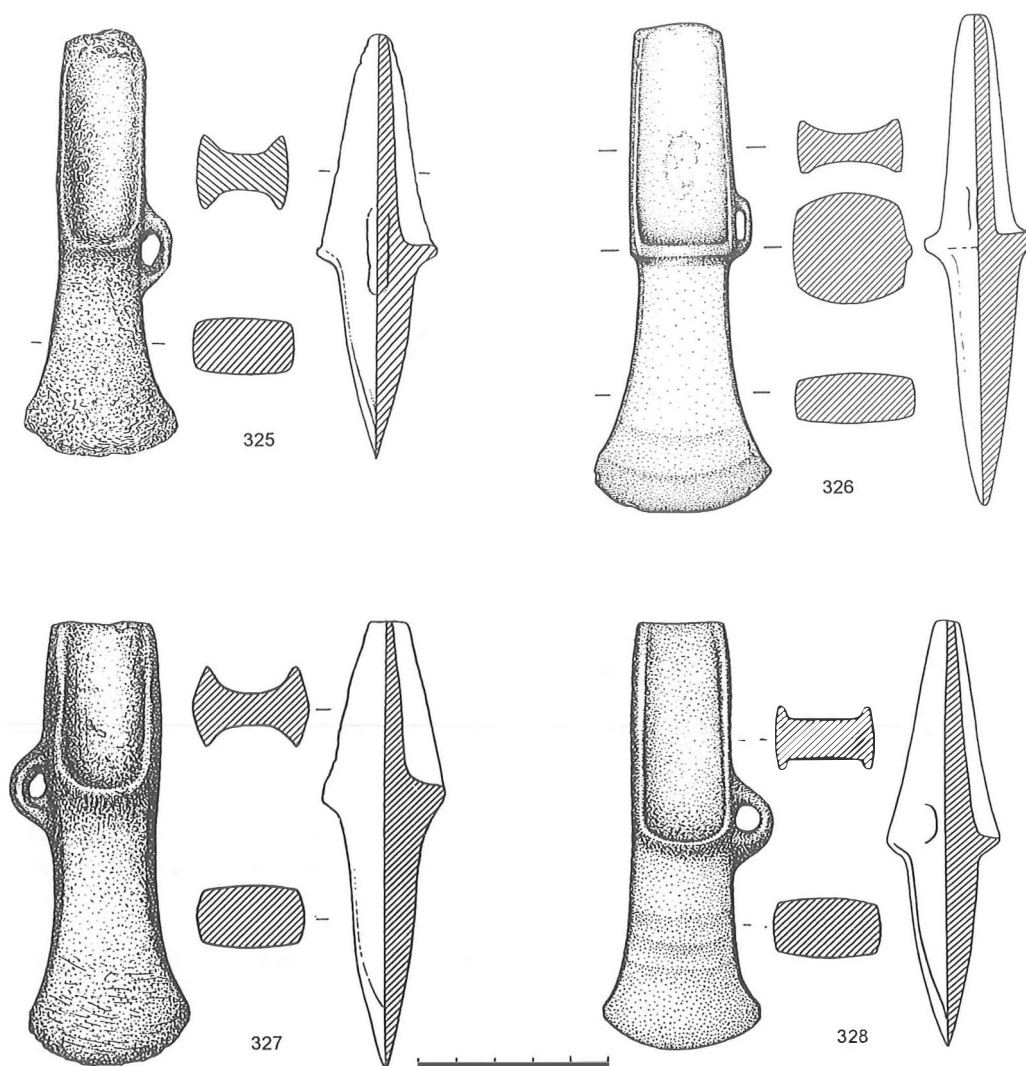


Fig. 74a. (Type AXPL:PS><) 325: Ter Apel, Gr; 326: *gemeente Emmen*, Dr; 327: near Sleen, Dr; 328. *gemeente Emmen*, Dr (see also fig. 74b).

sharpened, but battered. High-placed D loop. Found c. 1969 during building of a hothouse. Patina: light green (mostly scraped off) to dark bronze. Private possession. Acquired through mediation of one Hansen (Kessel). Patina: glossy dark green, dull light green where damaged. (DB 1817)

Map reference: Sheet 58E, c. 204/374.

CAT.NO. 330. ST.-OEDENRODE, *GEMEENTE ST.-OEDENRODE*, NOORD-BRABANT.

L. 11; w. 4.1; th. 2.4 cm. Straight sharp butt; convex \wedge flanges; U stopridge. Low-placed D loop. Found c. 1940 along the road to Best. Collection unknown. (DB 915) (N.B. we have not seen this palstave)

Map reference: Sheet 51E, c. 159/396.

Reference: Beex, 1970, with drawing by Wiro Heesters.

CAT.NO. 331. EINDHOVEN (district Stratum), *GEMEENTE EINDHOVEN*, NOORD-BRABANT.

L. 12; w. 3.9; th. 2.4 cm. Weight 316.7 gr. Butt irregular (damaged); slightly convex \wedge flanges (sides); flattened-U septum; ledge stopridge. Blade part with slightly convex faces and sides, prominent casting seams; high-placed D band loop (2.4x0.9 cm). The blade part has been drastically shortened by re-sharpening (straight ground). Cutting

edge battered. Patina: dark brown, mostly glossy; many greenish corrosion pits; ochreous loam in depressions. Museum: Venray, no Inv.No. (DB 1145)

Map reference: Sheet 51G, c. 162/382.

Documentation: Fax G. Verlinden (Museum Venray) to Butler, 1 August 1997.

CAT.NO. 332. BOXMEER, *GEMEENTE BOXMEER*, NOORD-BRABANT.

L. 11.8 cm; w. 4.35; th. 3.2 cm. Weight 295 gr. {} profile. Slightly rounded blunt butt. Slightly convex \wedge flanges with flat sides; \wedge septum, [stopridge. Blade part with convex faces, somewhat expanded blade tips. Re-sharpened with straight grinding. {} side view. D loop (2.1x0.7 cm). Patina dull dark green; wax treated. Found 1984 near AC restaurant, with metal detector. Private possession. (DB 2350)

Map reference: 46D, 193.62/409.02

Documentation: letter D. Reynen to Butler, October 1997.

Parallels: Related are two unlooped axes in the north (Cat.No. 271, *gemeente Emmen*; Cat.No. 272, Jipsing-boertange, Groningen) and the six smaller looped palstaves of Type AXPL:PS< (Cat. Nos 333-338).

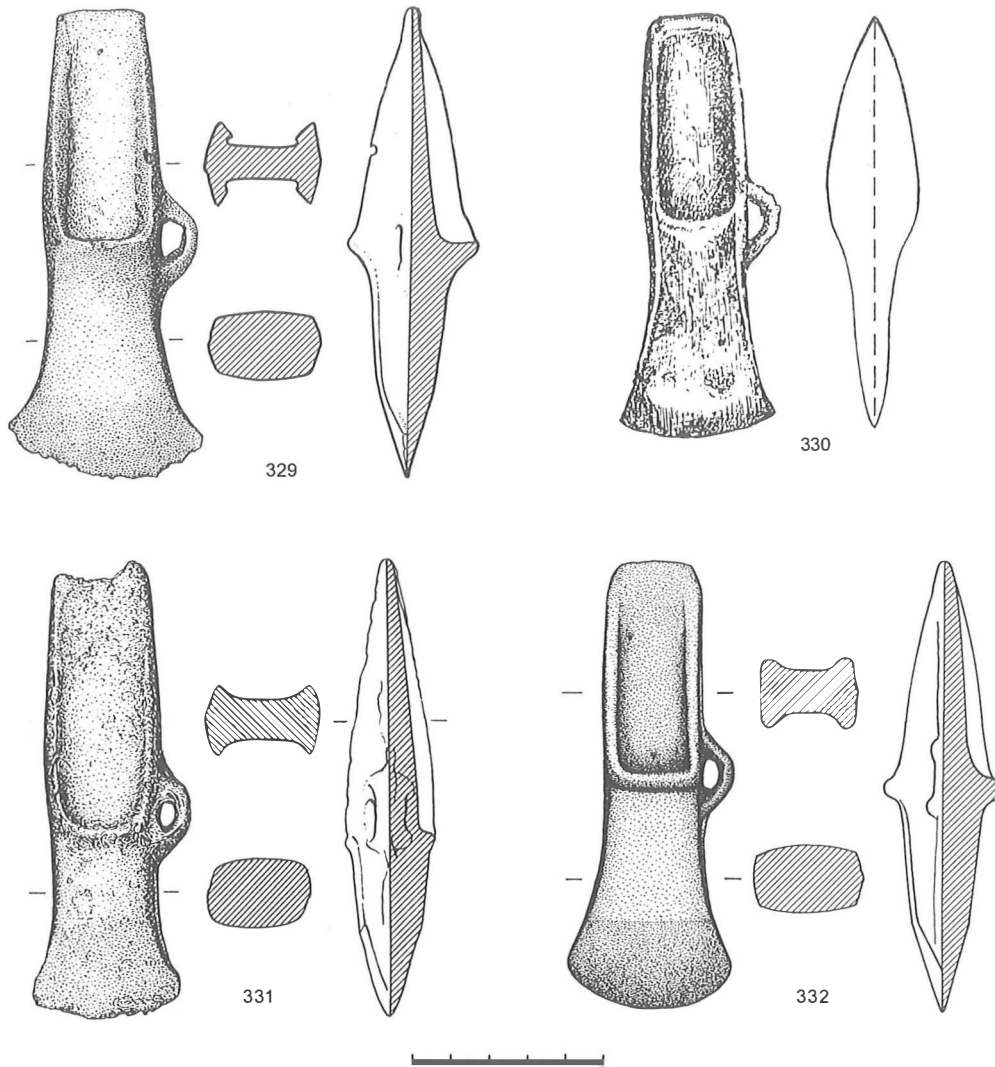


Fig. 74b. (Type AXPL:PS><) 329: Dubbroek/Blerick, Li; 330: St.-Oedenrode, N-B (drawing Wiro Heesters); 331: Eindhoven, N-B; 332: Boxmeer, N-B (see also fig. 74a).

Dating: No close datings are known (cf. section 4, below).

Plain looped palstaves with sinuous outline and extra-short blade (AXPL:PS<) (fig. 75): Six examples in the Netherlands (Cat.Nos 333-338), all in the north (Map 26).

These looped palstaves have in common a very short blade part. On some of the examples the disproportion in length between the very short blade part and the longer hafting part suggests that these palstaves were originally longer, but have been drastically shortened by re-sharpening. Against this, however, are the absence of strong blade-re-sharpening facets and side pouches. All except Cat.No. 334 have a more or less pronounced {} profile. The length varies from 8.1 to 9.7 cm; the blade width from 3.2 to 3.8 cm.

CAT.NO. 333. VALTHE, *GEMEENTE ODOORN, DRENTHE*.

L. 9; w. 3.5; th. 2.85 cm. Strong {} profile. U septum, straight shelf stopridge. Blade part with convex faces and sides, very short, with sharply everted blade tips. High-placed D loop. Cutting edge sharp; rough surface. Patina: brown. Museum: R.M.O. Leiden, Inv.No. c.1919/1.2. Purchased from A. Middelveld. (DB 395)

Map reference: Sheet 17F, c. 256/540.

CAT.NO. 334. NORGERVEEN, *GEMEENTE NORG, DRENTHE*.

L. 10.2; w. 3.8; th. 2.4 cm. Weight 180 gr. Straight, blunt butt. Flattened-U septum, weak flanges with rounded sides. U shelf stopridge, slightly sloping inwardly. Very short blade part with () faces and sides. Sharply everted blade tips. High-placed D loop. Crack on looped side. Sharp cutting edge. Patina: bronze colour; patches of light green and black. Found in peat. Museum: Assen, Inv.No. 1878/V1.9. (DB 81)

N.B. This axe was for a time erroneously inventorized under the number 1855/I.56. See J.D. van der Waals, in Butler, 1960: *Bijlage II*, pp. 228-231.

Map reference: c. 228.3/558.3.

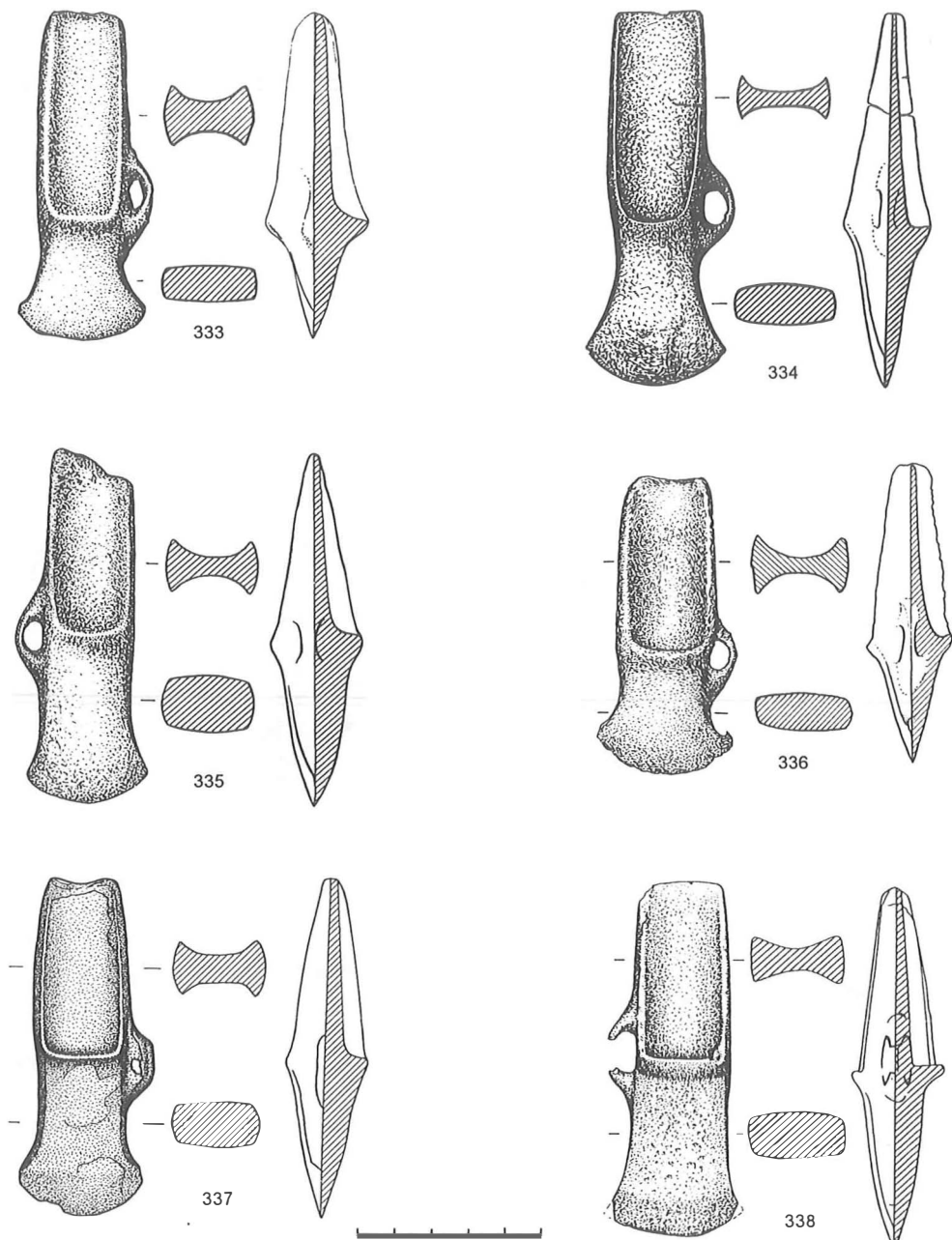


Fig. 75. (Type AXPL:PS<) 333: Valthe, Dr; 334: Norgerveen, Dr; 335: near Drouwen, Dr; 336: Ane, Ov; 337: Wijthmen, Ov; 338: Ter Apel, Gr.

References: *Verslag*, 1878: p. 8; Pleyte, Drenthe, 1882: I, p.74, II Pl. LXXI:3; Butler, 1960: pp. 215-216, 228-231.

CAT.NO. 335. DROUWEN (NEAR), *GEMEENTE BORGER, DRENTHÉ*.

L. 9.7; w. 3.2; th. 2.55 cm. Weight 179 gr. Slightly {} profile. Butt irregular; ^flanges with () sides; U septum; U ledge stopridge. Blade part with () faces and sides; slightly evert blade tips. Low-placed D loop and looped; small. Patina: dark green. Found March 1927 by P. Krul of Drouwen, east of the road Rolde-Borger and west of Drouwen. Museum: Assen, Inv.No. 1927/III.1. Purchased from the finder via J. Lanting. (DB 139)

Map reference: Sheet 12G, 249/552.

Reference: *Verslag*, 1927: p. 14, No. 23.

CAT.NO. 336. ANE, *GEMEENTE GRAMSBERGEN, OVERIJSSEL*.

L. 8.1; w. 3.7; th. 2.3 cm. Slightly {} profile. Blunt, nearly straight butt; ^flanges, flattened-U septum; slightly rounded 'shelf' stopridge, slightly sloping inwardly. Blade part very short, with () faces and sides; recurved blade tips. Low-placed D loop. Patina: dark brown. Found before 1940 at De Meene (the Waagkolk or Bisschopskolk). Museum: Enschede, Inv.No. 406. (DB 1045)

Map reference: Sheet 22E, c. 242.3/515.7.

CAT.NO. 337. WIJTHMEN, *GEMEENTE ZWOLLE, OVERIJSSEL*. BOSCHWIJK (golf course).

L. 9.1, w. 3.5, th. 2.3 cm. {} profile. U-shaped blunt butt (slightly damaged); ^flanges with () sides. _ / septum; slightly rounded ledge

stopridge. Blade part with convex faces and sides, slightly expanded blade tips; D loop (2.1x0.85 cm); straight-ground sharpening facet. Cutting edge sharp. Dark brown, ochreous, sandy surface, part peeled off showing light powdery green. Heavily corroded. Metal-detector find, in stream valley (old loop of R. Vecht). Collection: *depot gemeente-archeoloog* Zwolle. (DB 2123)

Map reference: Sheet 21 G, 206.250/501.650.

Reference: Hamming, 1995: afb. 3 (photo).

CAT.NO. 338. TER APEL, *GEMEENTE VLAGTWEDDE*, GRONINGEN.

L. 9.8; w. 2.6; th. 2.6 cm. {} profile. Straight blunt butt; ^ flanges with slightly rounded, nearly parallel sides; U septum; straight shelf stopridge. Blade part with () faces and sides. Blade tips slightly expanded (but damaged). Crescent-ground. Cutting edges sharp. Low-placed D loop, partly broken out. Found March 1985 with metal-detector, in replaced sand adjacent to the Netherlands boundary building Ter Apel-Rietenbroek, but derived from a parking place created south of the restaurant Het Boschhuis in Ter Apel. Private possession. (DB 622)

Map reference: Sheet 18A, 268.77/544.57.

Documentation: Groenendijk, *dossier Vlagtwedde* No. 90.

Parallels Type AXPL:PS<: A few very similar palstaves are illustrated by Kibbert with his small group (which he himself describes as non-homogeneous) under the rather non-committal heading *schlichte Ösenabsatzbeile* (plain looped palstaves), his Nos 696-703, 1980: pp. 256-258. At least his Nos 698 and 700, both from Kr. Steinfurt (Westfalen, but close to the boundary with Niedersachsen) would seem very similar to our AXPL:PS< group; the others are larger (Nos 696, 697, 701) or have a trapeze-shaped blade part (Nos 702-703). The parallels cited by Kibbert have more relationship to his larger, heavier examples than to our small AXPL:PS< variety, but may rather be analogous with our Type AXPL:PS><, Cat.Nos 325-332.

Dating: No close datings are known (cf. section 4, below).

d:2) *Plain looped palstaves with parallel sides (AXPL:PH)* (fig. 76)

Two examples in the Netherlands (Cat.Nos 339-340); one north, one south (Map 27).

CAT.NO. 339. EMMEN (NEAR), *GEMEENTE EMMEN*, DRENTHE.

L. 12.7; w. (3.2); th. 2.4 cm. Weight 226 gr. {} profile. Straight blunt butt (recently hammered). Extremely shallow flanges with () sides; flat septum; U stopridge with V profile. Nearly parallel (slightly trapeze-shaped) blade part with flat faces, <> sides. Loop broken off. Cutting edge straight, sharpened. Patina: brownish; surface pitted and rough; butt and cutting edge damaged recently. Found in the neighbourhood of Emmen. Museum: Assen, Inv.No. 1928/II.1. Ex coll. ds. H. de Groot, Emmen, acquired from G.J. Dijkstra of Klazienaveen. (DB 141)

Documentation: Museum Assen, 182 Collection ds. H. de Groot, Emmen.

Reference: *Verslag*, 1928: p. 13, No. 19.

CAT.NO. 340. BELFELD, *GEMEENTE BELFELD*, LIMBURG (Kurstensbos).

L. 12.1; w. 2.5; th. 2.3 cm. Rounded butt; U septum; straight stopridge. Blade part with parallel sides. Loop recently broken off; cutting edge damaged. Patina: dark bronze, surface pitted. Found during cultivation of a parcel in the Meelderbroek. Private possession. (N.B. We have not seen this axe; re-drawn from a good photo, kindly made available by the Heemkundevereniging Maas-en Swalmdal) (DB 2129)

Map reference: Sheet 58E, 206.1/367.4.

Reference: Luys, 1987, with photo.

Comment: Both these specimens are badly battered, which may have affected their form to some degree. The Emmen axe (Cat.No. 339) has a {} side view; possibly also Cat.No. 340, but its side view is unknown to us.

Parallels Type AXPL:PH: Very similar are Kibbert's Nos 702-703, both from Westfalen; No. 702 (Quetzen) has a {} profile, No. 703 (Hagen-Helfe) may have lost such a profile through abrasion. Kibbert assigns them to his small, non-homogeneous group of *schlichte Absatzbeile mit Öse* (his pp. 256-258) and dates them to

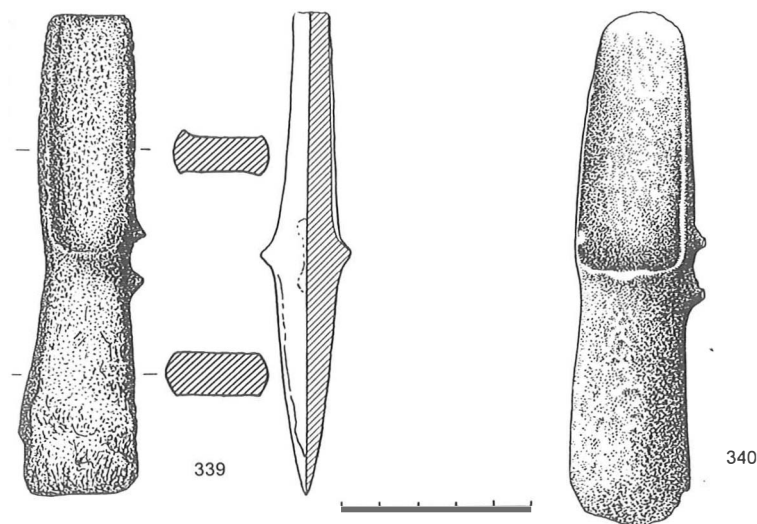
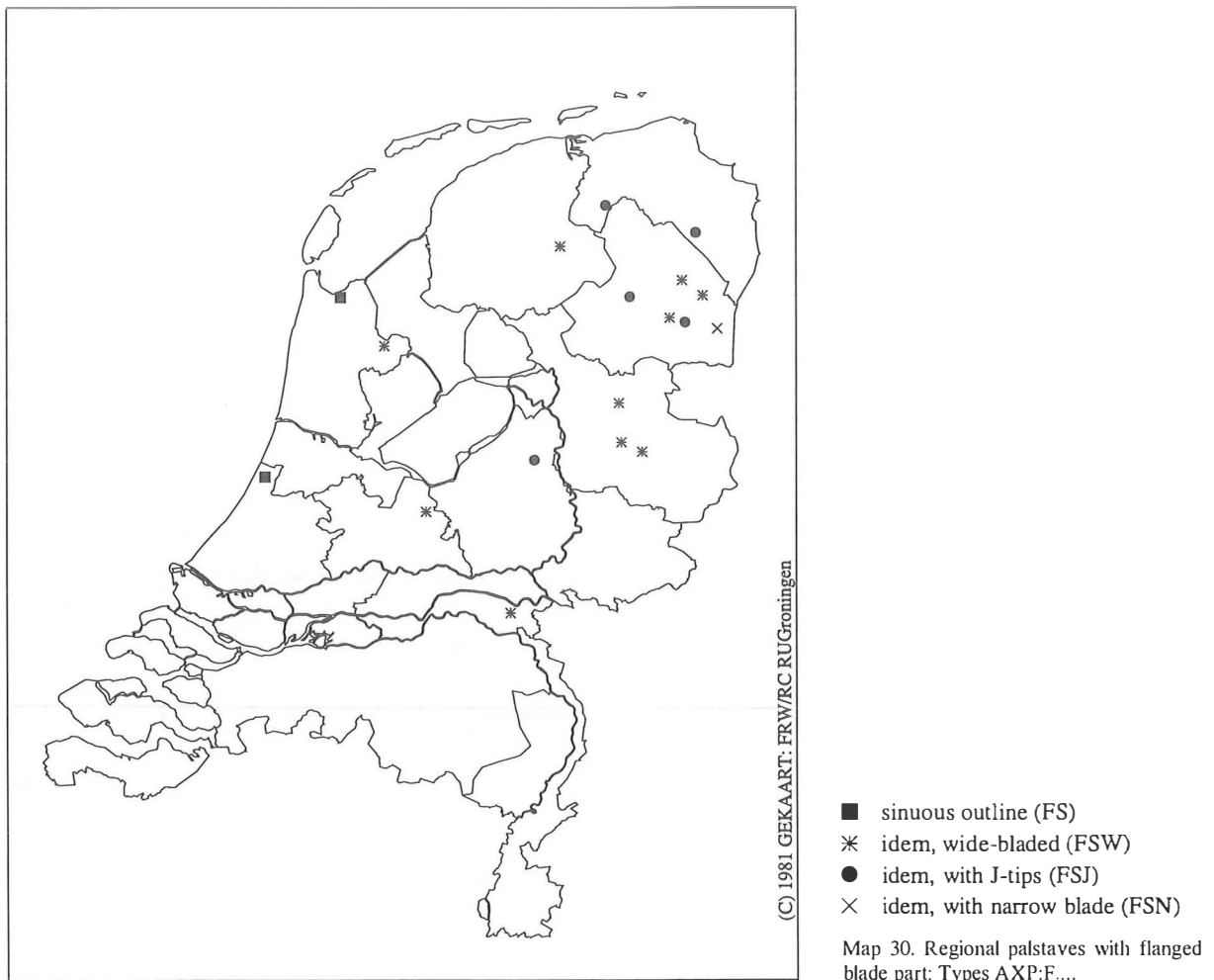


Fig. 76. (Type AXPL:PH) 339: near Emmen, Dr; 340: Belfeld, Li.



the *jiingere Urnenfelderzeit* by reference to the British Type Worthing – a comparison which is certainly not justified. In view of the scarcity of the type, and its rather debased character, one must view this late dating with reserve.

Similar, more or less related unlooped palstaves occur as our AXP:P^ group (above, Cat.Nos 308-322) in the south of the Netherlands, and among a variety of Kibbert's types in middle West Germany.

Dating: No close datings are known (cf. section 4, below).

3.4.2. *Palstaves with flanged blade part and sinuous outline (AXP:FS...)*

19 examples in the Netherlands (Cat.Nos 341-359), all in the north except two in the west (Cat.Nos 342-343; Map 30).

The flanges of the blade part are generally rather slight; sometimes merely slightly raised edges of the blade. The flanges of the hafting part are in outline triangular or slightly convex; the cross-section is septum

is)(in section (except Cat.Nos 348 and 352, with _/_ section); the stopridge is U-shaped. Four examples have some facetting of the sides.

Despite many common features, the palstaves of this type vary rather in the outline of the blade: in one case (FSN) nearly parallel-sided; in four cases (FSJ) nearly parallel-sided but with sharply J-tips; in five cases (FSW) with gradually widening blade, having widths of from 5.3 to 6.4 cm. The palstave from the Sleenerzand grave (Cat.No. 359), one of the few richer warriors' graves in the Netherlands, has an atypical outline, the edges forming a continuous rather than a sinuous curve. We nevertheless regard the palstaves with these differences in outline as variants of a single regional type.

a) *Palstave with blade flanges and sinuous outline, narrow-blade (AXP:FSN) (fig. 77)*

Only one example in the Netherlands, in the north (on Map 30).

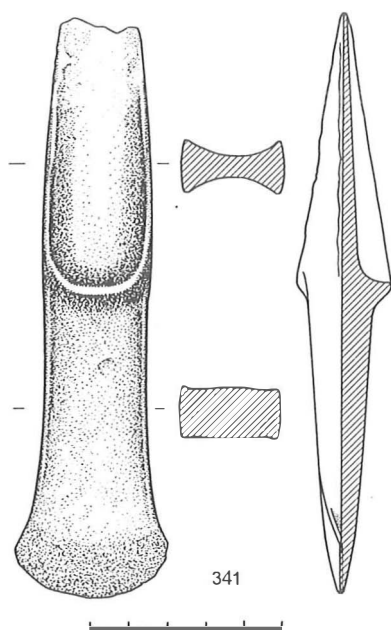


Fig. 77. (Type AXP:FSN) 341: Zuidbarger Es, Dr.

CAT.NO. 341. ZUIDBARGER ES, *GEMEENTE EMMEN*, DRENTHE.

L. 15.3; w. 4.0; th. 2.6 cm. Weight 341 gr. Sharp, irregular butt; Δ flanges, with nearly flat sides; U septum. Rounded shelf stopridge. Blade part parallel-sided, with very slight blade expansion. Faces faintly convex, with flat sides; very slight side-flanges. Cutting edge sharpened, but slightly blunted recently; crescent-ground, pouched. Patina: dull dark green, but traces of black. Has been scrubbed, with many scratches on faces. Found at the potato-flour factory Nieuw-Amsterdam, among potatoes derived from the Zuidbarger Es. Private possession. (DB 2257)

Map reference: Sheet 17H, c. 257.5/530.5

Parallels: No close parallels in the Netherlands, nor in

Kibbert; but with affinities are clearly with our northern AXP:FS series.

Dating: No close datings are known (cf. section 4, below).

a:1) *Palstaves with blade flanges and sinuous outline (AXP:FS)* (fig. 78)

Two examples (Cat. Nos 342-343), both in the west.

CAT.NO. 342. WIERINGERMEERPOLDER (SECTION H.21), NOORD-HOLLAND.

L. 12.8; w. 4.6; th. 2.2 cm. {} profile. Straight thin butt, with small eccentric depression; \backslash / septum, $\langle \rangle$ sides; [shelf stopridge; body faces faintly concave, with prominent flanges, $\langle \rangle$ sides. Straight ground; slightly everted blade tips. Cutting edge sharp. Patina: grey-green. Surface very severely corroded. Museum: R.M.O. Leiden, Inv.No. g.1941/10.1; Purchased from H. Staal of Slootdorp. (DB 493)

Documentation: Letter Museum to Staal, 24 Oct. 1941.

Reference: Butler, 1963b: p. 211, IV.B.8.

CAT.NO. 343. DE ZILK, *GEMEENTE NOORDWIJKERHOUT*, ZUID-HOLLAND. RUIGENHOEK.

L. 13.2; w. 4.9; th. 2.75 cm. Slightly U-shaped blunt butt; Δ flanges (slightly convex on one side), with $\langle \rangle$ sides; \backslash / septum, [shelf stopridge. Blade part with flat faces, prominent flanges, $\langle \rangle$ sides. Slightly everted blade tips; straight ground, cutting edge sharp. Two halves join irregularly. Patina: dark bronze, with some black patches, especially at butt, similar the patina of the spearhead from the same find-spot (found together?), except that the surface is full of very fine pits. Otherwise very well-preserved. Found on a terrain north of Ruigenhoek by one Dibbits (Hillegom) while clearing away dunes. Museum: R.M.O. Leiden, Inv.No. I 1929/5.1; ex coll. Van der Wal. Acquired with spearhead h.1929/5.2 (associated find?) (DB 1827)

Map reference: Sheet 24H, c. 97/479.

Documentation: I.P.P., notes W. Glasbergen; R.O.B. Amersfoort

References: Holwerda, 1929: p. 16, afb. 10 (photo); Appelboom, 1953: p. 39.

Parallels: No close parallels in Kibbert.

Dating: No close datings are known (cf. section 4, below).

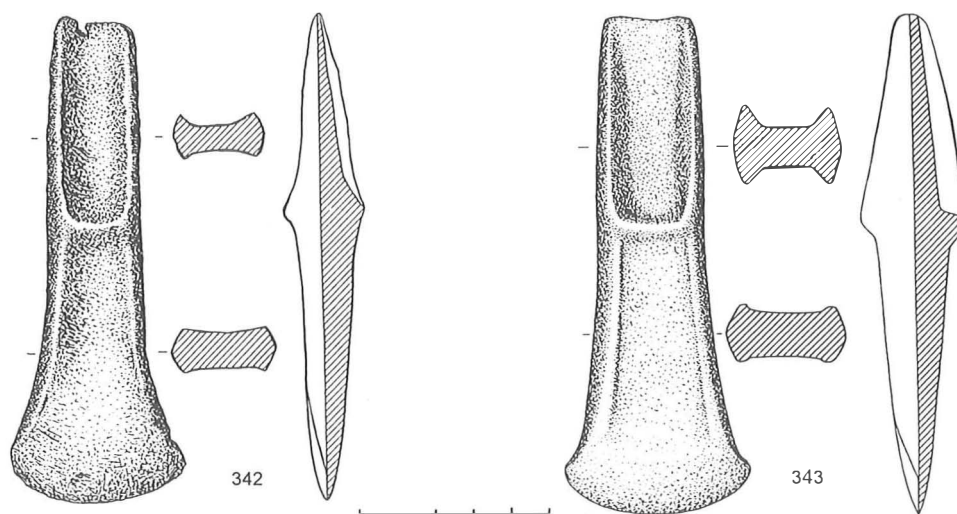


Fig. 78. (Type AXP:FS) 342: Wieringermeerpolder, N-H; 343: De Zilk, Z-H.

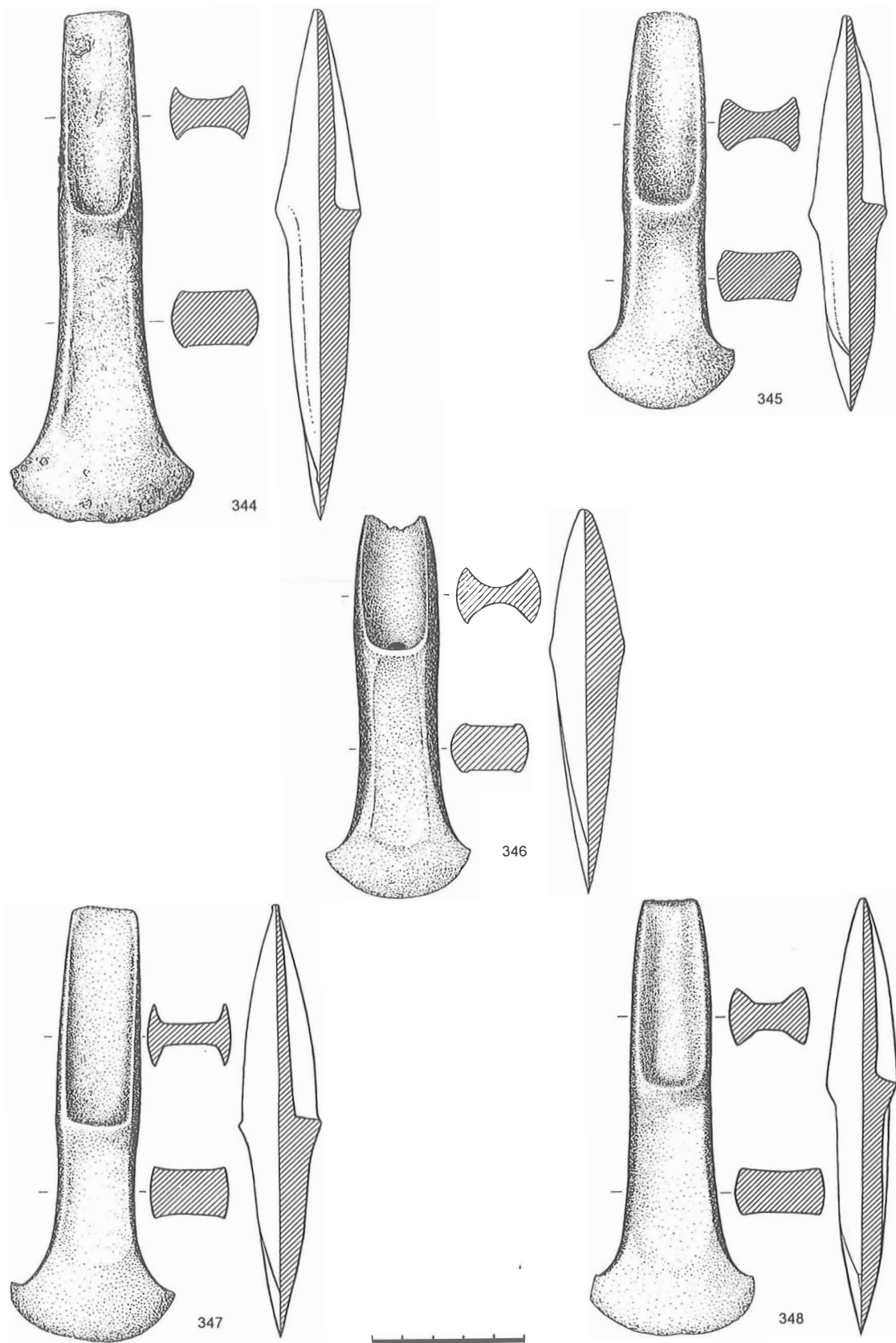


Fig. 79a. (Type AXP:FSJ) 344: Holsloot, Dr; 345: Tolbert, Gr; 346: Hooghalen, Dr; 347: 'Friesland'; 348: Wildervank, Gr.

a:2) *Palstaves with blade flanges and sinuous outline, J-tips (AXP:FSJ) (figs 79a-79b)*

Six examples (Cat. Nos 344-349): five in the north, one in Gelderland (Map 30).

CAT.NO. 344. HOLSLOOT, *GEMEENTE SLEEN*, DRENTHE.
L. 16.9; w. 6.05; th. 2.85 cm. Weight 530 gr. Straight blunt butt; \wedge flanges with () sides; U septum. Blade part with slightly () faces, slightly () sides, slight flanges; sides faintly faceted. Cutting edge sharp, but slightly battered. Patina: originally leathery brown; most of which has peeled away, leaving lighter yellowy green, with orange patches and light green corrosion-blisters in places. Cutting edge corroded. Found December 1954 in section F, N.324-327, by A. Eizen of Holsloot. Museum: Assen, Inv.No. 1956/VII.1. (DB 155)
Map reference: Sheet 17H, 250.07/528.55
References: Butler, 1963b: p. 211, IV.B.6 and p. 201, fig. 12.

CAT.NO. 345. TOLBERT, *GEMEENTE LEEK*, GRONINGEN.
L. 13.15; w. 4.8; th. 2.6 cm. {} profile. Slightly rounded blunt butt; ogival flanges with 3-faceted sides; U ledge septum. Blade part with slightly concave faces, 3-faceted sides. Cutting edge sharp; crescent-ground. Pouched. Patina: mechanically removed; traces of black. Found in peat north of Tolbert. Museum: Groningen, Inv.No. 1906/I.5. (DB 172)
Map reference: Sheet 6H, c. 219/577.

References: Verslag, 1906: p. 19, No. 6; Butler, 1963b: p. 211, IV.B.3.

CAT.NO. 346. HOOGHALEN, *GEMEENTE BEILEN*, DRENTHE.
L. 12.6; w. 4.8; th. 2.45 cm. Slightly {} profile. Butt with irregular U depression; slightly ogival \wedge flanges with () sides; U septum; U stopridge, with blowhole at base of septum. Blade part with flat faces, () sides, slight flanges. Cutting edge sharp, crescent-ground. Found c. 1950 by A. Bergsma, while picking potatoes, in a field at the Geelbroekerweg, close to the boundary between *gemeenten* Beilen and Assen, just east of the railway line (see map in Museum Inventory). Original in private possession (now in Canada); plaster cast (made 1961 in B.A.I.) in museum: Assen, Inv.No. 1961/I.51. (DB 156)
Map reference: Sheet 12D, 233.4/551.1.

References: Museum bulletin, 1962: p. 215, B:7; Butler, 1963b: p. 211, IV.B.7, p. 317(141).

CAT.NO. 347. PROVINCE OF FRIESLAND (exact provenance unknown).
L. 14.3; w. 5.5; th. 2.7 cm. {} profile. Straight sharp butt; ogival \wedge flanges with slightly () sides; rounded \wedge septum. Slightly rounded ledge stopridge. Blade part with slightly concave faces, slight flanges, slightly () sides. Crescent-ground; cutting edge sharp. Pouched. No casting seams. Cutting edge sharp. Patina: blackish, surface rough. Museum: Leeuwarden, Inv.No. 87-4. (DB 199)

References: Boeles, 1951: Pl. VI-5; Butler, 1963b: p. 211-IV.B.2; Fries Museum/Stichting RAAP, 1994: p. 5, photo 3 (wrongly attributes find to Oosterwolde).

CAT.NO. 348. WILDERVANK, *GEMEENTE VEENDAM*, GRONINGEN.
L. 14.35; w. 5.4; th. 2.5 cm. Thin, slightly concave butt; convex \wedge flanges with () sides; \wedge septum. Blade part with slightly () faces, () sides. Ledge stopridge, with slight outward slope. Cutting edge sharp; crescent-ground. Patina: ochreous red-brown encrustation. Found 1867, five feet under the solid undisturbed peat (5 *voet onder het vaste veen*). Museum: Zwolle, Inv.No. 115, on loan in Veenkoloniaal Museum Veendam. (DB 1607)

Map reference: Sheet 12F, c. 254/566.

Reference: Butler, 1963b: p. 211-IV.B.4.

CAT.NO. 349. OENE, *GEMEENTE EPE*, GELDERLAND.
L. 13.5; w. 5.3; th. 2.7 cm. Thin, sharp, straight butt. \wedge flanges with slightly () sides; flattened-U septum, [shelf stopridge. Blade part with

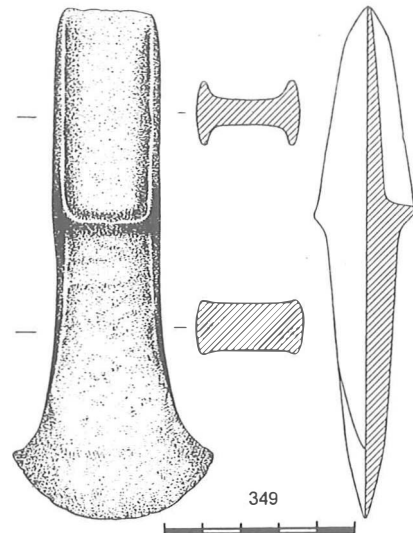


Fig. 79b. (Type AXP:FSJ) 349. Oene, Ge.

flat faces, slight side-flanges; sides slightly convex. Hammer marks on faces. J blade tips; crescent-ground. Slightly pouched. Cutting edge recently re-sharpened. Patina: blackish, well-preserved. Found behind a house on an unpaved road branching off from the road Oene-Nijbroek. Acquired from R. van Beek (Hattem), who had it from antique dealer Ruitenbergh (Zwolle), who had bought it c. 1958 from an unnamed farmer of Oene/Epe, Gelderland. Museum: Arnhem, Inv.No. GAS 1971.10.1. (DB 2096)

Map reference: Sheet 27G, c. 200.5/483.

Comment: Our type AXP:FSJ differs from type AXP:FSW only in the outline of the blade part, and these two types could readily be combined. The actual blade width of the FSJ axes is, thanks to their extra blade expansion, more or less comparable to the blade width of AXP:FSW palstaves.

Dating: No close datings are known (cf. section 4, below).

a:3) *Palstaves with flanged blade part and sinuous outline, wide blade (AXP:FSW) (figs 80a-80c)*

Nine examples in the Netherlands (Cat. Nos 350-358); of which six in the north, one in the northwest, one in Utrecht, one in the Nijmegen area (Map 30).

CAT.NO. 350. ODOORN, *GEMEENTE ODOORN*, DRENTHE.
L. 16; w. 5.5; th. 2.8 cm. Weight 484 gr. Straight blunt butt; \wedge flanges with () sides; \wedge septum. U ledge stopridge. Blade part with faintly convex faces, very slight flanges; rounded sides with faint vertical faceting. Straight ground; cutting edge sharp. Patina: dark green; corrosion pits on face and sides. Found 2 Sept. 1858 by J. Kaspers of Odoorn, two feet below the surface, in cadastral parcel Odoorn Sect. A.2046. Museum: Assen, Inv.No. 1858/IX.1. (DB 72)

Map reference: 17F, 253.20/540.75.

References: Butler, 1963b: p. 211-IV.B.5 and p. 201, fig. 12.

CAT.NO. 351. EESERVEEN, *GEMEENTE BORGER*, DRENTHE.
L. 16; w. 5.8; th. 2.7 cm. Weight 486 gr. Nearly straight, blunt butt; slightly convex \wedge flanges, slightly () sides, U shelf septum. U

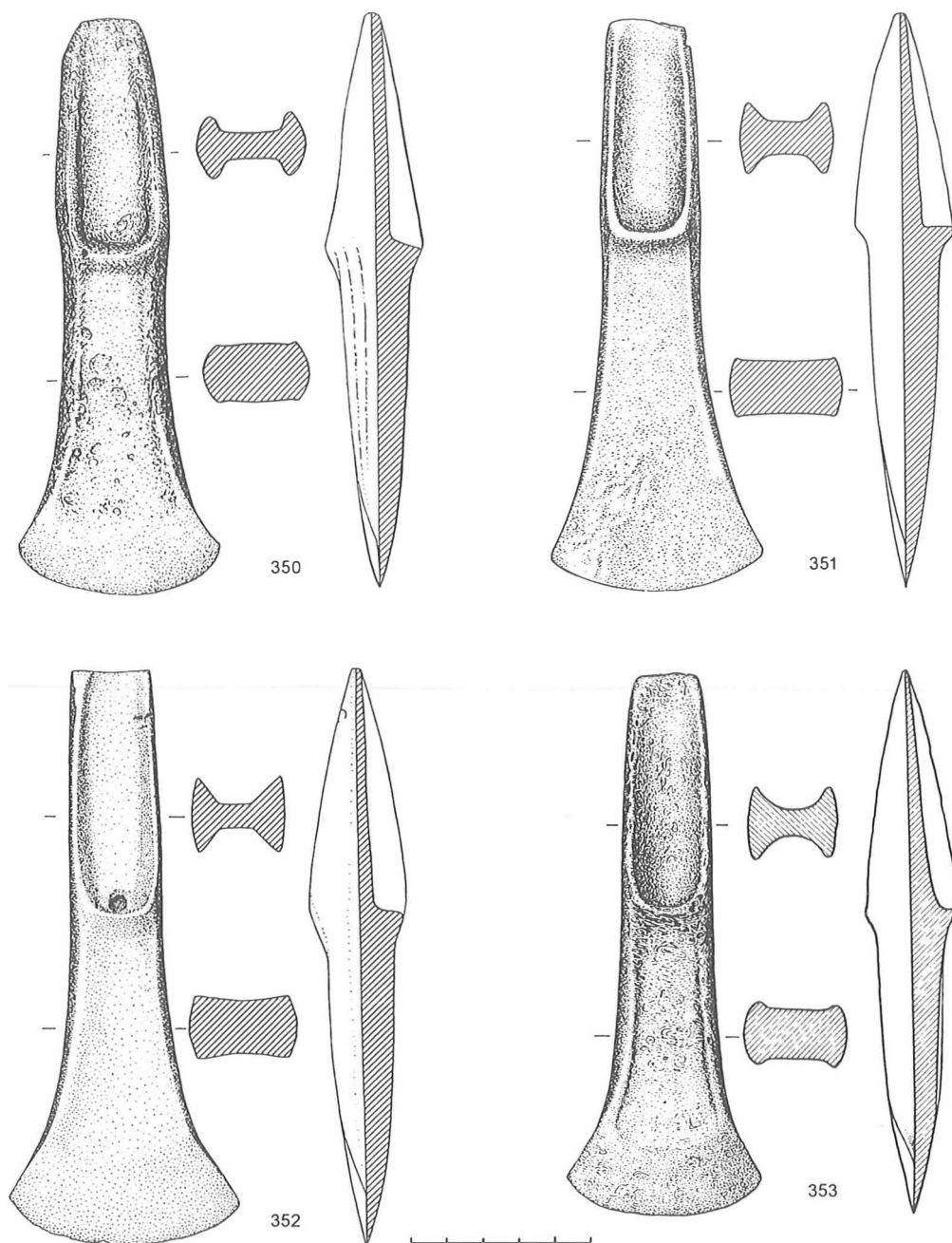


Fig. 80a. (Type AXP:FSW) 350: Odoorn, Dr; 351: Eeserveen, Dr; 352: *gemeente* Ommen, Ov; 353: Rectum, Ov (see also figs 80b,c).

stopridge, sloping inwards slightly. Blade part with faintly concave faces, () sides, slight side-flanges. Straight ground; cutting edge sharp. Patina: black; some modern file damage on faces. Found by labourer in the Eeserveen. Museum: R.M.O. Leiden, Inv.No. c.1910/4.1 (old No. B1.560a). (DB 383) Purchased via Tiesing of Borger.

Map reference: Sheet 17E, 249/549.

CAT.NO. 352. *GEMEENTE OMMEN, OVERIJSSSEL.*

L. 16; w. 6.4; th. 2.7 cm. Slightly concave blunt butt; slightly convex \wedge flanges with slightly () sides; strongly \searrow septum, U ledge stopridge, sloping outwards, with small blowhole at base of septum.

Blade part with faces slightly concave; sides with 3 facets. Cutting edge sharp; crescent-ground. Blowhole on one flange. Patina: brownish. Found before 1969. Museum: Enschede, Inv.No. 409. (DB 1046)

Map reference: Sheet 22C, 226/503.

CAT.NO. 353. *RECTUM, GEMEENTE WIERDEN, OVERIJSSSEL.*

L. 14.8; w. 5.3; th. 2.5 cm. Thin straight butt; slightly convex \wedge flanges with () sides; U septum; slightly projecting U stopridge. Blade part with flat faces; pronounced side-flanges, with () sides. Cutting edge sharp; crescent-ground; pouched. Found 1910 while digging a ditch

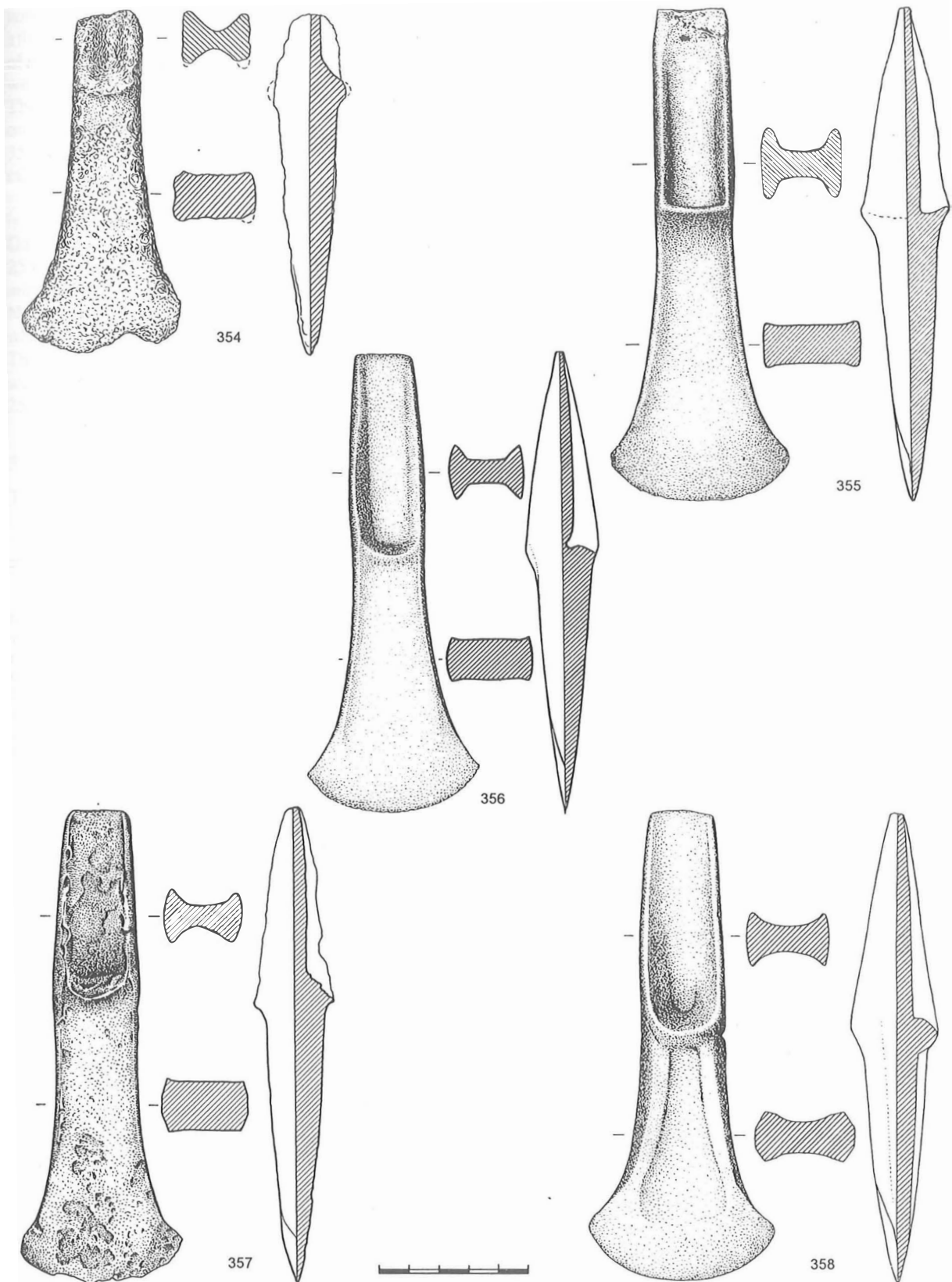


Fig. 80b. (Type AXP:FSW) 354: Wijnjewoude, Fr; 355: Achterveld, Ge; 356: Daarlerveen, Ov; 357: Wervershoof, N-H (drawing I.P.P.); 358: gemeente Nijmegen, Ge (see also figs 80a,c).

near the outer fosse of the castle. Museum: Enschede, Inv.No. 942 (old No. 500-233). Patina: very dark brown, dull to moderately glossy; well-preserved. (DB 1056)

Map reference: Sheet 28D, 236.0/482.3.

CAT.NO. 354. WIJNJEWOUE, *GEMEENTE* OPSTERLAND, FRIESLAND.

L. 11.7; w. 5.3; th. 2.4 cm. {} profile. Portion of hafting part broken off and missing. ^ flanges, deep U septum; U shelf stopridge. Blade part with flat faces and sides, expanding edge; faint flanges. Cutting edge sharp but battered. Heavily corroded and pitted; original surface (with glossy black patina) survives only in places. Found about 1930 c. 1 km NE of the village and south of the road Bakkeveen-Duurswoude. Private possession, bought for the price of f 2.50 from a farmer. (DB 1825)

Map reference: Sheet 11F, c. 210/564.

Reference: Pleyte, Friesland, 1877: Pl. XLV:6.

CAT.NO. 355. ACHTERVELD, *GEMEENTE* STOUTENBURG (NOW *GEMEENTE* LEUSDEN), GELDERLAND.

L. 16.6; w. 6.0; th. 3 cm. {} profile; straight blunt butt; slightly ogival flange outline. _ / septum; slightly () sides. Slightly U stopridge, ledge/shelf, strongly undercut. Blade part with flat faces and flat sides, with slight horizontal ridge at level of stopridge. Widely expanded blade. Cutting edge sharp. Slight casting defects. Patina: brown, glossy, well-preserved. Museum: Amersfoort, Inv.No. Ca.42. Found 1879. Acquired from G.R. Kilian of Amersfoort. (DB 1157)

Documentation: In R.O.B. data-base as *beitel* (chisel).

Map reference: Sheet 32G, c. 162.460.

Reference: Felix, 1945: p. 188:6.

CAT.NO. 356. DAARLERVEEN, *GEMEENTE* HELLENDORP, OVERIJSSSEL.

L. 14.6; w. 5.85; th. 2.5 cm. Straight blunt butt; ^ flanges with slightly () sides; _ / septum; ^ flanges; U stopridge, with blowhole at base of septum. Blade part with faintly convex faces; slight side-flanges. Crescent-ground; cutting edge sharp. Patina: blackish. Museum: Zwolle, Inv.No. 114. (DB 244)

Map reference: Sheet 28B, c. 236/496.

Reference: Butler, 1963b: p. 211-IV.B.10.

CAT.NO. 357. WERVERSHOOF, *GEMEENTE* WERVERSHOOF, NOORD-HOLLAND.

L. 15.9; w. 5.5; th. 2.7 cm. Straight blunt butt; slightly sinuous ^ flanges, with () sides; U septum. U stopridge, sloping outwardly. Blade part with flat faces, faint flanges, 3-faced sides. Cutting edge somewhat expanded, sharpened but battered. Found Autumn 1982 on farmland S.E. of Wervershoof, while harvesting carrots. Probably transported in re-allocation. Sold by finder to unknown person. (DB 853)

Map reference: Sheet 20A, 140.2/526.5.

Reference: Van de Walle-van der Woude, 1983: pp. 225-6, 228 with drawing.

CAT.NO. 358. *GEMEENTE* NIJMEGEN, GELDERLAND.

L. 15.9; w. 6.3; th. 2.95 cm. Slightly convex blunt butt; ^ flanges with slightly () sides; U septum; U shelf stopridge, bullet-shaped in section. Blade part with _ / face, the marked flanges having been hammered down; sides 3-faceted. Crescent-ground; cutting edge sharp. Patina: black. Museum: Arnhem, Inv.No. BH 121. (DB 12)

Reference: Butler, 1963b: p. 211(35)-IV.B.9.

Dating: No close datings are known (cf. section 4, below).

AXP:FSW, but with variant outline:

CAT.NO. 359. SLEENERZAND, *GEMEENTE* SLEEN/ZWEE-LOO, DRENTHE (grave find).

L. 16; w. 5.8; th. 3.2 cm. The outline is atypical, displaying a

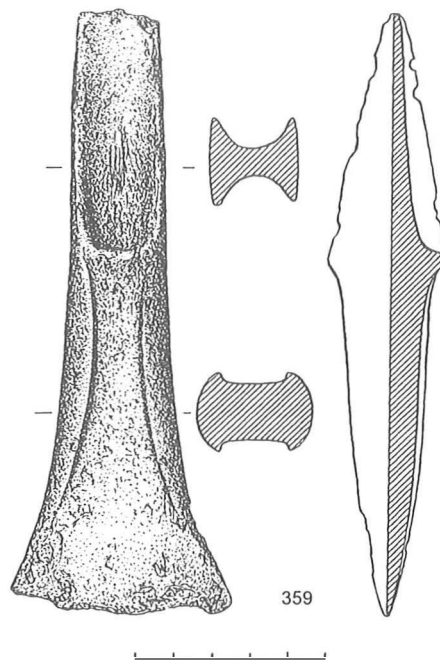


Fig. 80c. (Type AXP:FSW) 359: Sleenerzand, Dr.

continuously expanding curve. Irregular blunt butt; ^ flanges with nearly flat sides; deep U septum; U stopridge, > in section. Blade part with slightly concave faces, strongly rounded sides, projecting as sharply moulded low flanges above the flat face. Straight (?) cutting edge has recent damage. Surface corrosion-pitted, but otherwise well-preserved. Traces of wooden shaft adhere to both faces of septum. Found in primary grave of 2nd period of tumulus 'De Galgenberg'; excavated 1934, 1938 by Van Giffen, see Part I (Butler, 1990: Find No. 16, pp. 85-86, fig. 20, with previous references). Museum: Assen, Inv.No. 1934/V.30. (DB 1250)

Map reference: Sheet 17G, 248.30/537.25

References: Verslag, 1934: p. 21, Nos 64-67; Butler, 1963b: p. 212; Butler, 1992: pp. 85-86, Fig. 20:1.

Parallels and distribution, Type AXP:FSW: a almost all Netherlands examples are in the north of the country; with one exception in the northwest (Wervershoof) and one in the centre (Nijmegen). It is noteworthy that no single example of this type is at present known in the south of the Netherlands, or in Belgium.

For West Germany, Kibbert (1980) illustrates a very few seemingly similar examples in Westfalen; these, however, he divides among his *Var. Wardböhmen* (his p. 245, Nos 611, 612) and *Var. Paderborn* (p. 247, his Nos 636-637). His eponymous Wardböhmen example is not in fact from Kibbert's own area, but from the Lüneburger Heide, at Wardböhmen, Kr. Celle (*Schafstallberg* Tumulus 16, Grave II; Piesker, 1958: p. 34, No. 123, Taf. 60:5-9 – the side view of the palstave is there illustrated upside down; Laux, 1971: p. 183: grave with riveted dagger, pin of Laux's *Typ Westendorf*, hollowbased 'Sögel' flint arrowheads). Laux had previously classified the Wardböhmen palstave as a western European *schlichtes Absatzbeil, Var. B* (his p. 83); whereas for Piesker (1958) it was an *Absatzbeil*

vom nordwesteuropäischen Typus. Kibbert gives it, thus, a third type-name, his *Var. Wardböhlen*; the distribution of which in western Germany is at present unknown. So we reward it with a fourth type-name, as our AXP:FSW. The relationship is supported by Kibbert's citation of one of the Netherlands AXP:FS examples (our Cat.No. 359, from the Sleenerzand-Galgenberg grave) as a parallel for his *Var. Wardböhlen* palstaves.

Dating: The only associated find in the Netherlands is the atypical example from the grave Sleenerzand-Galgenberg (here Cat.No. 359). Kibbert (1980: pp. 252-253) suggests a dating for this find comparable with his *mittlere bis späte Hügelgräberzeit*. In terms of the Netherlands chronology, the timber-circle tumulus in which this palstave occurs dates it to Middle Bronze B. The Wardböhlen grave, with a reasonable parallel, was dated by Laux to his *Zeitgruppe I*, which Kibbert (p. 252) equates with *etwa der mittlere Hügelgräberzeit*.

3.4.3. Palstaves with midrib or midridge (AXP:M...)

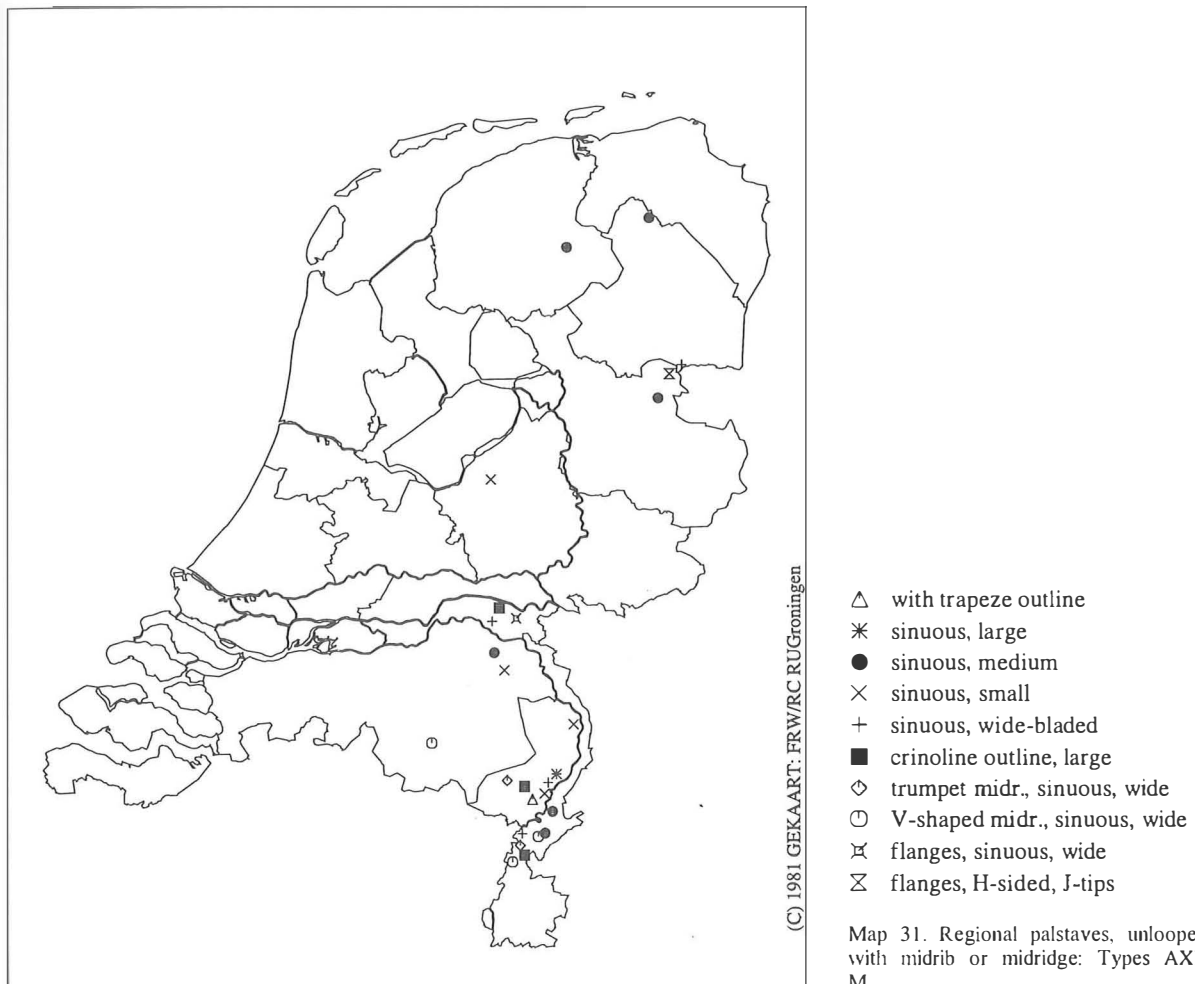
Total: 40 examples in the Netherlands (Cat.Nos 360-

399; Maps 31, 32). The occurrence of a midrib or midridge on palstaves is by no means a homogeneous phenomenon. A thick midrib or midridge, such as occurs (often in 'trumpet' form) on the Scandinavian 'work palstaves', Kibbert's *Typ Kappeln* is evidently a blade-strengthening feature. A narrow midrib is rather a decorative feature, all the more so if it takes a Y or trident form. These types of midrib became known both in the north and the south of the Netherlands on import palstaves.

Within our regional types, it is, however, striking that the midrib or midridge plays practically no rôle in the north, whereas in the southern part of the country various midrib types were taken over and utilized for at least part of the local production.

a) Palstaves with narrow midrib or midridge and sinuous outline (AXP:MIS...)

We group together under this heading a number variants, which, taken together, constitute a recognizable regional palstave group, characteristic of the south of the





● sinuous outline

Map 32. Regional palstaves, looped, with midrib or midridge: Type AXPL:MS.

Netherlands, spilling over into the adjacent Northwest German Rhineland.

a:1) *Palstaves with narrow midrib and double-sinuous (= crinoline) outline, large size (AXP:MISC>)* (fig. 81)

Four examples in the Netherlands (Cat. Nos 360-363): three south, one unprovenanced (Map 31). These have a very distinctive outline, with convexity not only of the hafting part but also of the blade part. The stopridge is straight, or nearly so, and slopes outwardly. Two of the four examples have a {} profile. Noteworthy also is the thin, short midrib descending from the stopridge.

CAT.NO. 360. WEURT?, *GEMEENTE BEUNINGEN, GELDERLAND*.

L. 17; w. 5.25; th. 3 cm. {} profile. Blunt butt with irregular V notch; convex ^ flanges with <> sides; shallow U septum; prominent shelf stopridge, sloping outwardly. Blade part with slightly convex trapeze outline, flat faces, <> sides. Short narrow midrib below stopridge on one face only. Two halves of mould were poorly registered. Cutting edge sharp. Patina: grey-green. Found at brick-yard at Weurt? Mu-

seum: Nijmegen, Inv.No. AC 28. Purchased 13 Jan. 1933 (paper label). (DB 1497)

Map reference: Sheet 40C, c. 184/431.5.

CAT.NO. 361. *GEMEENTE HEYTHUYSEN, LIMBURG*.

L. 17; w. 4.8; th. 2.95 cm. {} profile. Straight blunt butt; narrow ^ flanges with () sides; _/-shaped septum; thick, nearly straight shelf stopridge. Blade part with S outline, () faces and sides, short narrow midrib. Cutting edge sharp (recently improved!). Patina: dull mottled green; dark red stain on one side of septum; surface rough. Museum: R.M.O. Leiden, Inv.No. G.L.66 (old No. I.560). Ex coll. Guillon 194 (Roermond). (DB 288)

CAT.NO. 362. *SUSTEREN GEBROEK, GEMEENTE SUSTEREN, LIMBURG*.

L. 17.5; w. 4.9; th. 2.8 cm. Blunt butt with irregular U notch; slightly convex ^ flanges with <> sides; _/- septum; nearly straight shelf stopridge. Blade part with slightly convex-trapeze outline, [] section, short narrow midrib on face. A few small blow-holes near butt. Cutting edge sharp, slightly battered. Patina: mostly scrubbed off; where present brownish to greenish. Museum: Asselt, Inv.No. 243. Ex coll. Philips. (DB 64)

Map reference: Sheet 60A, c. 186/341.7

Documentation: *Inventaire* Coll. Philips, No. 243, with drawing.

References: Butler, 1973a: pp. 321-329, esp. p. 323, afb. 2:3;

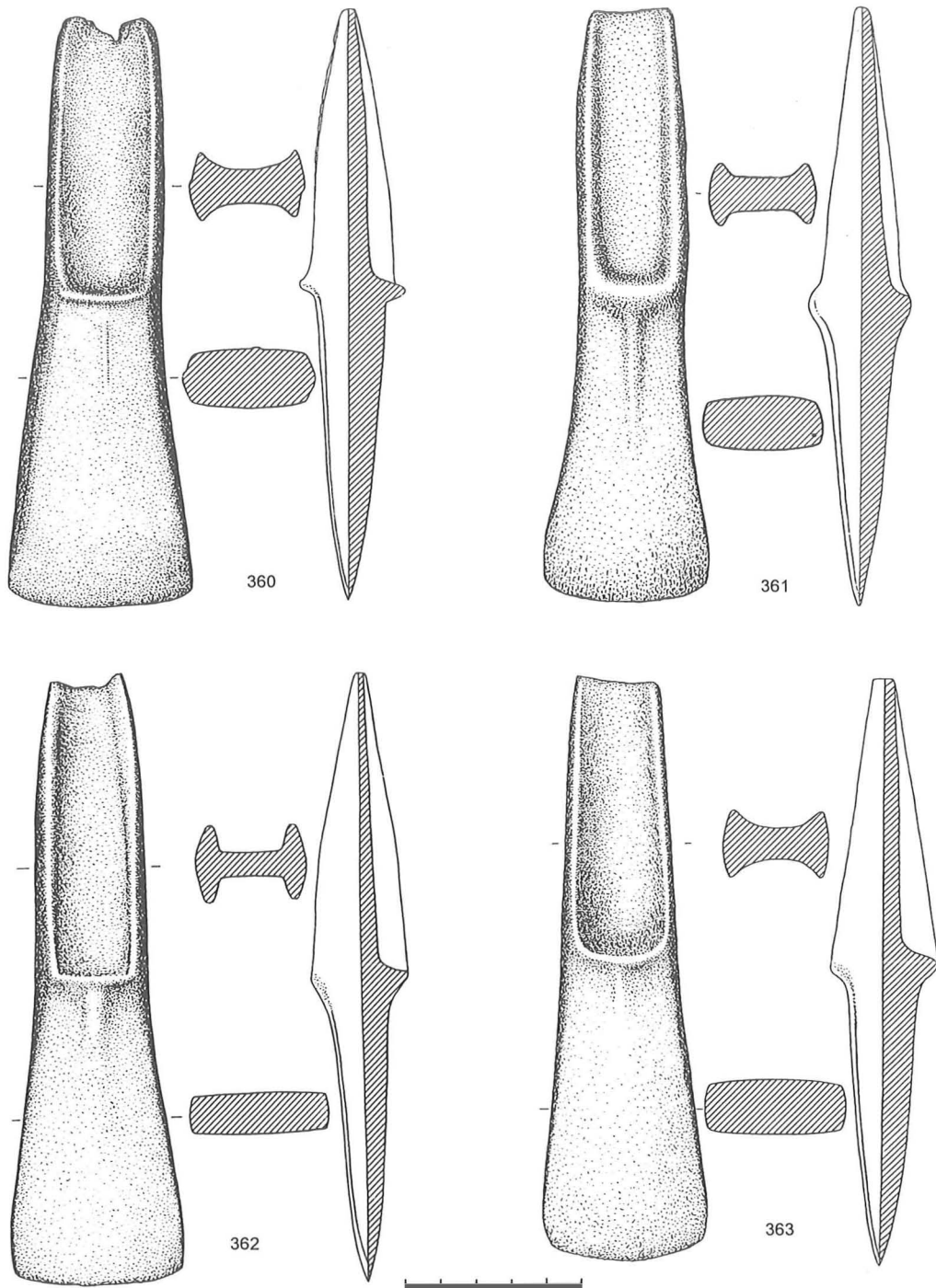


Fig. 81. (Type AXP:MISC>) 360: Weurt? Ge; 361: *gemeente* Heythuysen, Li; 362: Susteren Gebroek, Li; 363: provenance unknown.

Brongers & Woltering, 1978: p. 88, afb. 47.1; De Laet, 1982: p. 432; Wielockx, 1986: Cat.No. Hi.30.

CAT.NO. 363. PROVENANCE?

L. 16.7; w. 4.75; th. 3.1 cm. Slightly concave blunt butt; ^/flanges with slightly () sides; U septum; shelf stopridge, sloping outwards. Blade part with trapeze-shaped blade outline, becoming biconvex toward

the cutting edge, with slightly () faces and sides; very short thin rib on face below stopridge. Private possession. (DB 1752)

Parallels: The palstaves of Type AXP:MISC> are evidently related to the smaller varieties AXP:MS< and AXPL:MS. For AXP:MISC> there are no parallels in Kibbert.

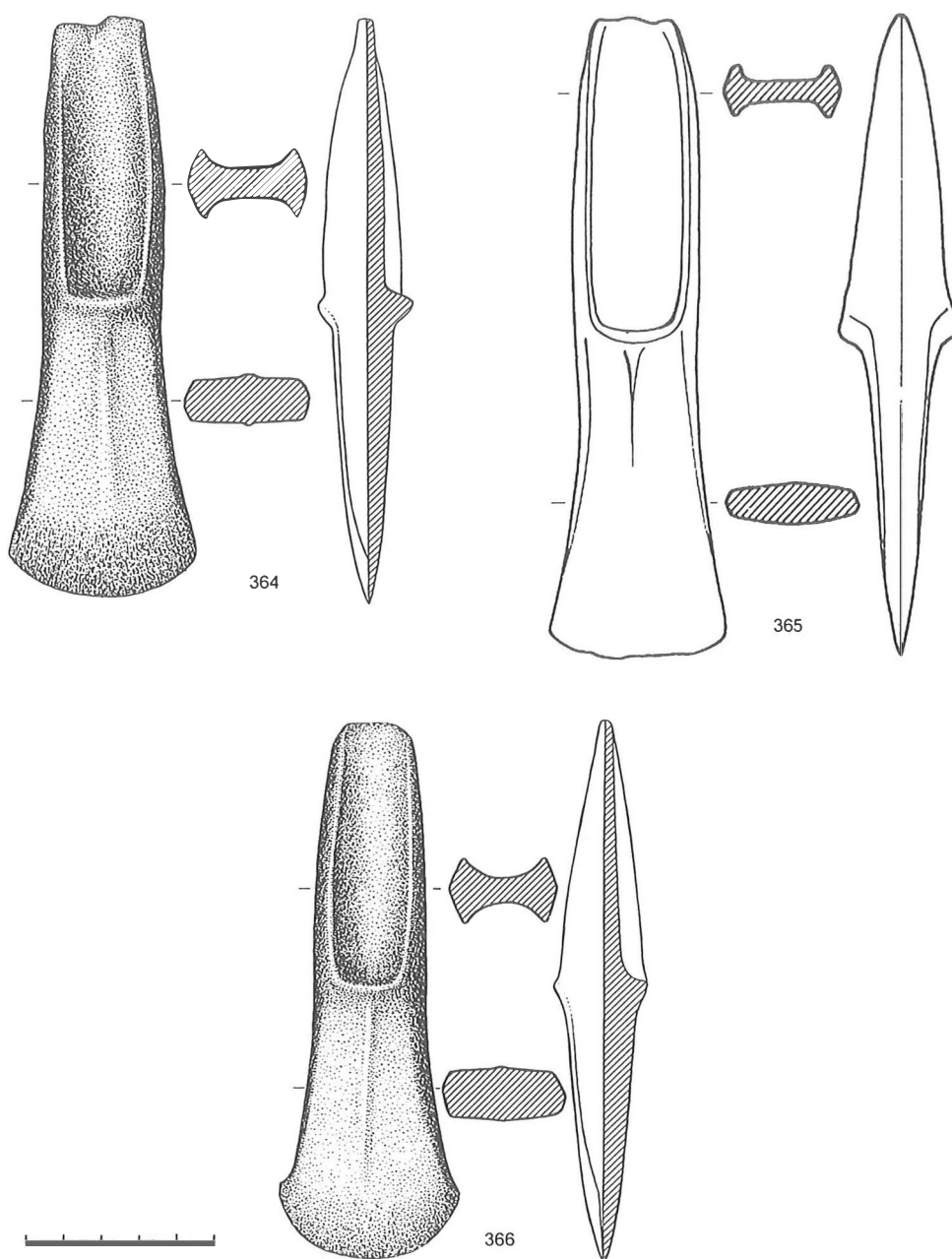


Fig. 82. (Type AXP:MIS>) 364: River Maas or Waal, Ge (dealer's provenance); 365: *gemeente Kessel*, Li (drawing R.O.B.); 366: 'Overijssel'.

Dating: No close datings are known (cf. section 4, below).

a:2) *Palstaves, large, with narrow midrib and sinuous outline, wide blade (AXP:MIS>)* (fig. 82)

Three examples in the Netherlands (Cat. Nos 364-366): one south; two approximate provenance Gelderland and Overijssel (Map 31).

CAT.NO. 364. (RIVER) 'MAAS OR WAAL', GELDERLAND (dealer's provenance).

L. 16.65; w. 5.05; th. 2.6 cm. {} profile. Blunt, irregularly straight butt; ogival flanges with () sides; _/ septum; prominent, slightly rounded shelf stopridge, sloping outwardly. Blade part with flat faces, <> sides; long narrow midrib. Crescent-ground; cutting edge sharp, with tips not expanded. Patina: clean bronze colour. Museum: R.M.O. Leiden, Inv.No. e.1944/10.2. Purchased from A. Sprik (Zaltbommel). (DB 500)

CAT.NO. 365. *GEMEENTE KESSEL*, LIMBURG.

L. 16.7; w. 4.8; th. 3.3 cm. {} profile. Irregularly straight butt; ogival flanges with <> sides; gently curved stopridge. Blade part with convex faces, <> sides; cutting edge nearly straight, with non-expanded blade tips. Thin short midrib. Found during or soon after

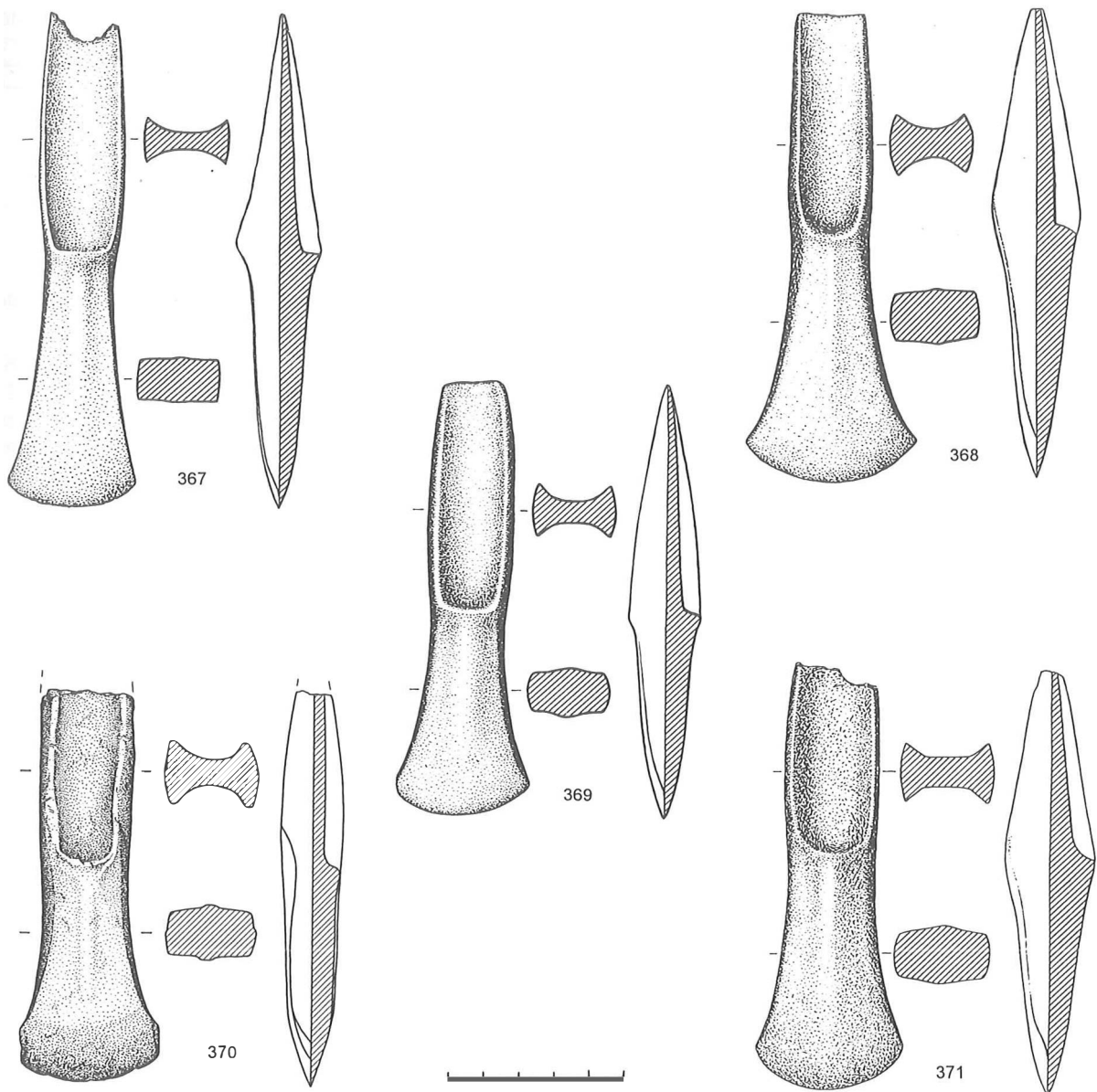


Fig. 83a. (Type AXP:MIS><) 367: Bakkeveen, Fr; 368: Hardenberg, Ov; 369: Montfort, Li; 370: gemeente Roermond, Li; 371: Gassel, N-B.

World War II in a wood: at same place, but not at same time as Cat.No. 318. Patina: dark green (partially removed). Drawing R.O.B. Private possession. (DB 2034)

Map reference: Sheet 58E, 200.5/368.8.

Reference: Bloemers, 1973: afb. 4:4 (right).

CAT.NO. 366. PROVINCE OF 'OVERIJSSSEL' (exact provenance unknown).

L. 14.45; w. 4.9; th. 2.5 cm. {} profile. Slightly rounded blunt butt; slightly ogival flanges with <> sides; U septum; slightly rounded ledge stopridge, sloping outwardly. Blade part with flattish faces, <> sides, long narrow midrib. Semi-circular, sharp cutting edge, one blade tip slightly J sharp. Museum: R.M.O. Leiden, Inv.No. d.1942/12.17. Purchased from C. Loeff of Voorhout; inherited from his father, notary W.H. Loeff of Haarlem. (DB 499)

Parallels: None are known on the German side of the border; at least none are illustrated by Kibbert. These palstaves are perhaps to be regarded as local derivatives of the *Typ Normand*.

Dating: No close datings are known (cf. section 4, below).

a:3) *Palstaves with narrow midrib and sinuous outline, medium blade width (AXP:MIS><) (figs 83a-83b)*

Six examples in the Netherlands (Cat.Nos 367-372): three south, two north; plus one possible fragment in the north (Map 31).

CAT.NO. 367. BAKKEVEEN, *GEMEENTE* OPSTERLAND, FRIESLAND.

L. 14.2; w. 3.65; th. 2.45 cm. Thin butt with large irregular U depression; slightly concave \wedge flanges with () sides; shallow U septum. Blade part with nearly [] section, narrow midrib. Cutting edge sharp. Patina: dark bronze with white flecks. Museum: Leeuwarden, Inv.No. 7A-1. (DB 196)

Map reference: Sheet 1 IF, c. 213.5/566.5.

References: Boeles, 1951: p. 482, fig. 13.2; Butler, 1963b: p. 211, IV B.1.

CAT.NO. 368. HARDENBERG, *GEMEENTE* HARDENBERG, OVERIJSEL.

L. 13.5; w. 4.95; th. 2.5 cm. Straight blunt butt; \wedge flanges with () sides; U septum; U ledge stopridge, outwardly sloping. Blade part with flattish faces, narrow midrib, () sides. Cutting edge sharp. Museum: R.M.O. Leiden, Inv.No. d.1907/6.1. Presented by C.C. Schotz of Hardenberg. (DB 376)

Map reference: Sheet 22D, c. 239.5/510.

CAT.NO. 369. MONTFORT, *GEMEENTE* AMBT MONTFORT, LIMBURG.

L. 11.3; w. 3.85; th. 2.1 cm. Straight sharp butt; slightly convex flanges with () sides; U septum; nearly straight ledge stopridge. Blade part with thick midrib, () sides. Cutting edge sharp. Private possession. (DB 1712)

Map reference: Sheet 60B, c. 193/348.

CAT.NO. 370. *GEMEENTE* ROERMOND, LIMBURG (exact provenance unknown).

L. (11.3); w. 4.1; th. 1.9 cm. Weight 275.2 gr. Butt end irregular (end broken off). Slightly leaf-shaped flanges with () sides; U septum, U ledge stopridge. Blade part with flat faces, () sides, narrow midrib. Cutting edge sharpened, crescent-ground, badly damaged; both cutting-edge tips damaged. Patina: dark bronze; yellowish sandy loam in pits. Dredge find, badly battered in rock-crusher. Private possession. (DB 2240)

CAT.NO. 371. GASSEL, *GEMEENTE* MILL EN ST. HUBERT, NOORD-BRABANT (Tongelaar estate).

L. 12.15; w. 4.3; th. 2.6 cm. Butt irregular (end broken off). \wedge flanges with () sides; \wedge septum; U ledge, outwardly sloping stopridge. Blade part with narrow midrib, () sides. Found around 1960 by W. van Lith. Museum: 's-Hertogenbosch, Inv.No. 9678, acquired from finder. (DB 277)

Map reference: Sheet 46A, 182.66/414.52.

Reference: Verwers, 1990: pp. 35-36, fig. 23.

CAT.NO. 372. EELDE, *GEMEENTE* EELDE (NOW *GEMEENTE* ZUIDLAREN), DRENTHE (Vosbergen estate).

L. (8.0); w. (3.6); th. (1.5) cm. Weight 113 gr. Blade fragment only.

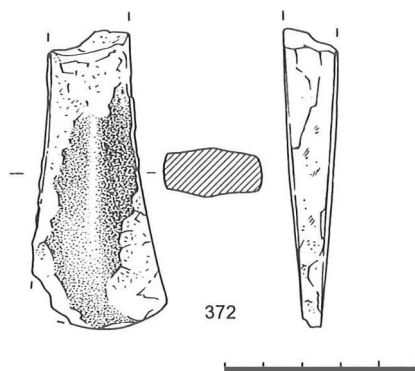


Fig. 83b. (Type AXP:MIS><) 372: Eelde, Dr.

Blade part with <> faces, slightly () sides; long thick midrib. Mild blade expansion, with narrow midrib. Patina: glossy black. Battered and heavily corroded. Breaks are patinated. Found 1984, in woods adjacent to a path, at a depth of 20 cm, in undisturbed ground, with metal-detector. Museum: Assen, Inv.No. 1987/IX.3. (DB 671)

Map reference: Sheet 12B, 234.825/573.625.

Parallels: No close parallels in Kibbert.

Dating: No close datings are known (cf. section 4, below).

a:4) *Palstaves with narrow midrib and sinuous outline, small version (AXP:MIS<) (fig. 84)*

Four examples in the Netherlands (Cat. Nos 373-376); one from Gelderland, three from the south (Map 31). The four palstaves of this group are, except for size, virtually identical to those of the 'large' variant. Three have a { } profile.

CAT.NO. 373. GASSEL, *GEMEENTE* MILL EN ST.HUBERT, NOORD-BRABANT (Tongelaar estate).

L. 10.8; w. 3.9; th. 2.8 cm. Weight 285.7 gr. Straight blunt butt; \wedge flanges with flattish sides; flattened-U septum; slightly rounded shelf stopridge. Blade part with sinuous outline, ridged blade. Cutting edge with S outline, sharp; has been heavily re-ground. Patina black, but roughly half has been removed by modern grinding, showing dark bronze. Surface somewhat pitted. Ochreous deposit at septum-stopridge junction. Found by harvesting potatoes. Private possession. (DB 2149)

Map reference: Sheet 46A, c. 182/414.

CAT.NO. 374. BETWEEN HELDEN AND NEER, *GEMEENTE* ROGGELEN NEER, LIMBURG.

L. 12.4; w. 4.1; th. 2.3 cm. { } profile. Slightly concave blunt butt; flanges with sinuous outline, () sides; \wedge septum; outwardly sloping, slightly projecting U stopridge. Blade part ridged; cutting edge with S outline. Cutting edge sharp. Casting seams prominent. Patina: 2/3 brown, 1/3 green. Found by a farmer on his land, between Helden and Neer, 10 km NW of Roermond. Private possession. (DB 1806)

Map reference: Sheet 58B, c. 197/366.

References: Butler, 1973a: pp. 321-329, afb. 3.2; Wielockx, 1986: Cat.No. Hi24.

CAT.NO. 375. DE KOLCK, *GEMEENTE* BROEKHUIZEN, LIMBURG.

L. 12.2; w. 4.5; th. 2.65 cm. { } profile. Irregularly straight, blunt butt; ogival flanges with flattish sides; shallow U septum, U shelf stopridge. Blade part with ridged face, shallow broad midrib. Two halves of mould were poorly matched. Cutting edge S-shaped, sharpened but partly broken off. Found near Huize de Kolck, under layers of sandy clay (0.75-1.00 m), bluish sandy clay (0.075/1.00-1.50 m), at the base of which the palstave; thereunder gravel. Private possession. (DB 1740)

Map reference: Sheet 52E, 208.18/389.50.

CAT.NO. 376. VIERHOUTEN, *GEMEENTE* ERMELO, GELDERLAND.

L. 11; w. 4.3; th. 2.95 cm. { } profile. Slightly rounded blunt butt; \wedge flanges, \wedge septum; slightly rounded stopridge, prominent shelf stopridge. Blade part with flat faces, rounded sides, with narrow midrib on faces. S-shaped cutting edge portion, cutting edge blunted; edges of flanges re-hammered. Patina: mottled green, mostly dark glossy. Museum: Zwolle, Inv.No. 116. Gift of P.C. Molhuijsen. (DB 245)

Map reference: Sheet 27C, c. 185/483.

Reference: Hijzeler, 1961: p. 85.

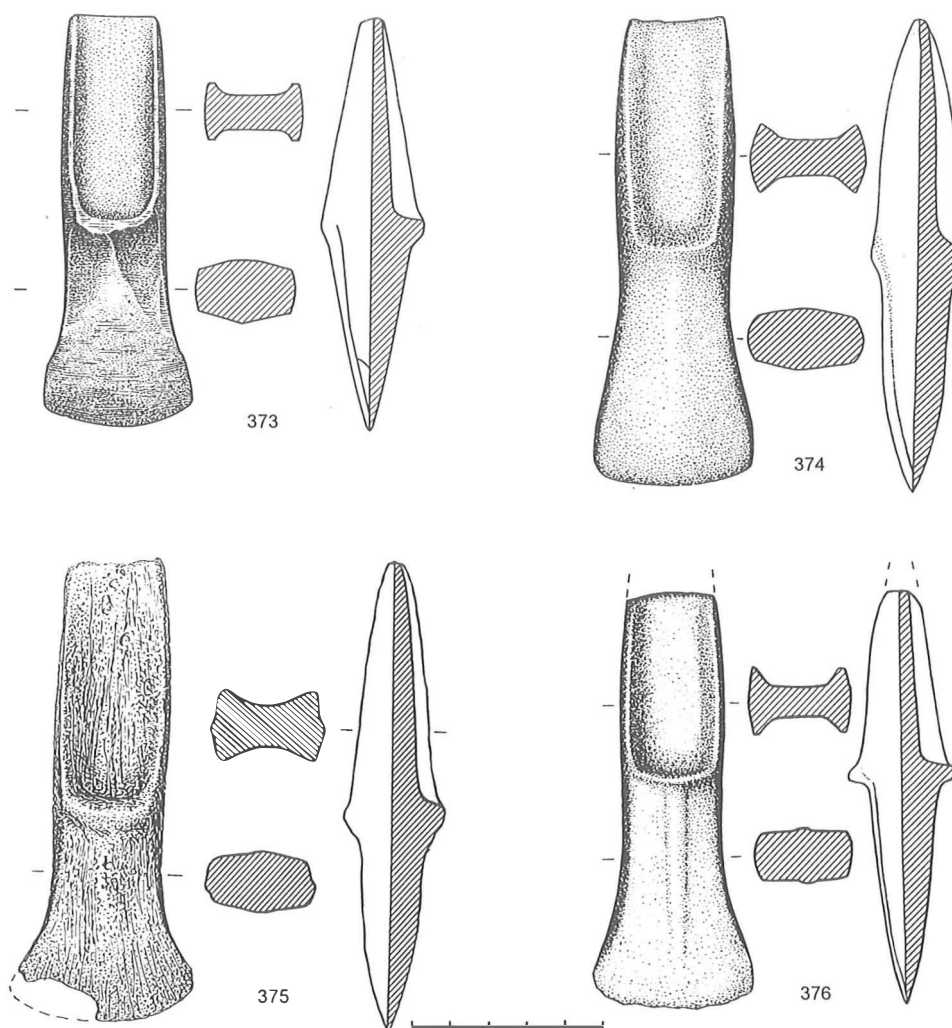


Fig. 84. (Type AXP:MIS<) 373: Gassel, N-B; 374: between Helden and Neer, Li; 375: De Kolck; Li; 376: Vierhouten, Ge.

Parallels: On the German side of the border are two good examples (Kibbert, 1980: No. 521, from Porz, Rheinisch-Bergischer Kr., which is along the Rhine, and No. 522, Gladbeck [?], along the Lippe). These are assigned by Kibbert (1980: pp. 214-229, esp. pp. 216 and 218), to his *Form Wankum*. Also, his No. 518, which he attributes to his *Zwischenform Kappeln-Wankum*, from Hinsbeck, Stadt Netletal, Kr. Krempen-Krefeld, NRW (which is close to the Netherlands Limburg border) is very like our Cat.No. 373.

These are evidently products of a local industry in the Rhine-Maas area, distributed on both sides of the modern Netherlands-German border. They are to be taken together with the larger versions, our Types AXP:MS..., and the otherwise very similar palstaves with loop (our Type AXPL:MS, Map 31).

Dating: Datable finds are lacking on both sides of the border. Kibbert (1980: pp. 217-218) attributes his *Form Wankum* to “*etwa der frühen Urnenfelderzeit*”, on the basis of somewhat remote parallels.

a:5) *Looped palstaves with narrow midrib or midridge and sinuous outline; small version (AXPL:MIS<) (figs 85a-85b)*

Eight examples in the Netherlands (Cat.Nos 377-384). Five of these form a tight little group in the Arnhem-Nijmegen area; with two strays, one in the north and one in the southwest (Map 31); plus one without provenance.

CAT.NO. 377. DREISCHOR, GEMEENTE BROUWERSHAVEN, ZEELAND.

L. 13.1; w. 4.65; th. 2.8 cm. {} profile. Butt straightish but irregular; ogival flanges with () sides; shallow U septum; U shelf stopridge. Low-placed D loop. Blade part S-outlined, () sides. Midrib on face. Cutting edge sharp. Patina black, small quantity light brown in hollows. Surface rough. Found 1966 (probably while ploughing). Museum: Zierikzee. (DB 740)

Map reference: Sheet 64H, c. 57/412.

CAT.NO. 378. EIMEREN, GEMEENTE ELST, GELDERLAND.

L. 13.1; w. 4.6; th. 3.15 cm. D loop, 2.6x0.6 cm. {} profile. Irregularly rounded blunt butt; ^ flanges, with slightly () sides;] [septum; nearly straight stopridge. Blade part with ridged face, () sides; prominent

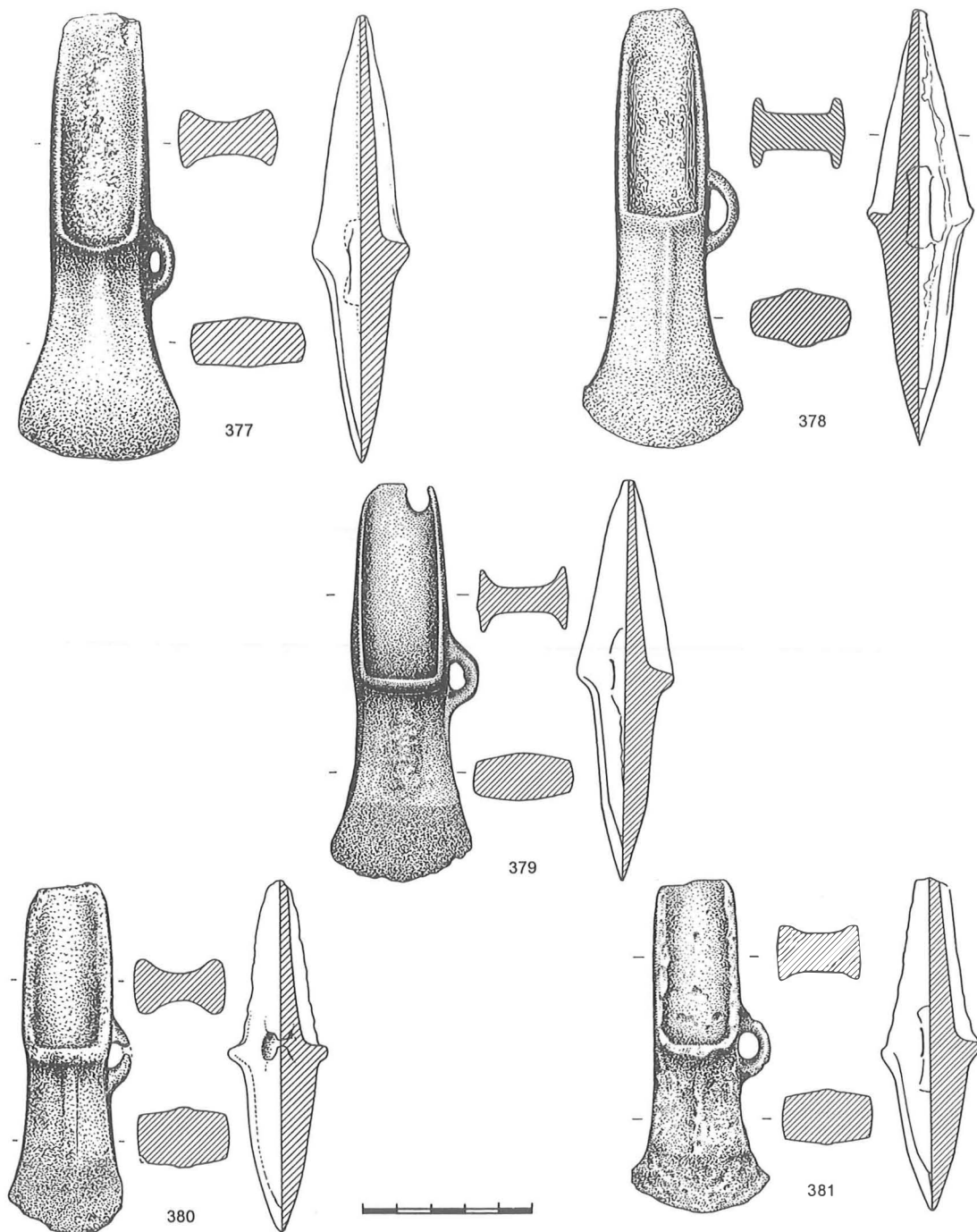


Fig. 85a. (Type AXPL.MIS<) 377: Dreischor, Zl; 378: Eimeren, Ge; 379: Volkel/Zeeland, N-B; 380: Gasselternijveen, Dr; 381: Escharen, N-B (see also fig. 85b).

midridge. Found c. 1955 in a field 'de Cradillen' while harrowing; the field had been levelled in 1952. Private possession. (DB 1746)

Map reference: Sheet 40C, c. 184/435.

References: Hulst, 1971: p. xvi, No. 6, fig. 2 and 3.

CAT.NO. 379. VOLKEL/ZEELAND, GEMEENTE UDEN/ LANTERD, NOORD-BRABANT.

L. 12; w. cutting edge 4.1 cm. Slightly rounded butt, with U-shaped

blowhole; parallel-sided \wedge flanges with flattish sides; \backslash / septum; fairly straight, strongly overhanging 'ledge' stopridge; D loop. Blade part with ridged faces (one side more prominently than the other); strong casting seams (on the non-looped side markedly non-axial). Heavily corroded. Patina: greyish green. Found along the road Venray-Zeeland. Private possession. The present owner purchased it around 1963 from the heirs of the finder, after seeing it on display in the *Gemeentehuis* at Boxmeer, together with a socketed axe. According

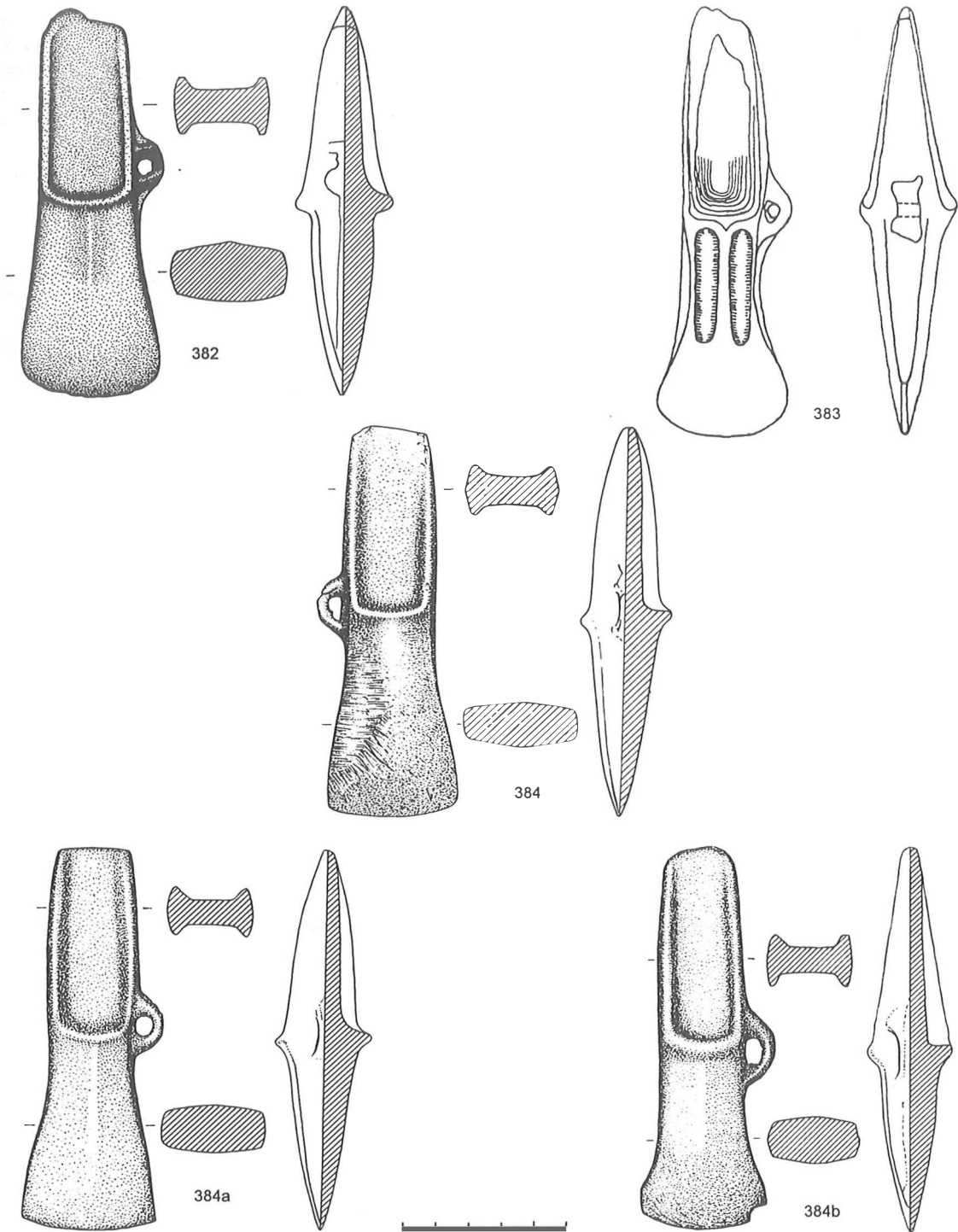


Fig. 85b. (Type AXPL:MIS<) 382: provenance unknown; 383: Haps, N-B (drawing AWN Nijmegen e.o.); 384: Hunerberg, Ge (see also fig. 85a).

to the owner it was found in a field along the Midden-Peelweg, alongside a landing strip of the air-field Volkel. (DB 730)
Map reference: Sheet 45H, c. 177/411.

CAT.NO. 380. GASSELTERNIJVEEN, GEMEENTE GASSELTE, DRENTE.
 L. 10.4; w. 3.4; th. 2.9 cm. {} profile. Nearly straight blunt butt; ogival

flanges with slightly () sides; U septum; [shelf stopridge. Blade part with narrow midrib. Cutting edge battered. Found at potato factory. Private possession. (DB 2089)

Map reference: Sheet 12H, 254.5/556.7.

CAT.NO. 381. ESCHAREN, GEMEENTE GRAVE, NOORD-BRABANT (De Schans).

L. 9.9; w. 4.0; th. 2.9 cm. Weight 244 gr. {} profile. Straight blunt butt; flanges with flat sides; shallow _/_ septum; [shelf stopridge. Blade part with narrow midrib on ridged faces, flattish sides. Cutting edge slightly expanded; sharp. Low-placed D loop (2.1x0.6 cm). Patina black; surface pock-marked, somewhat porous. Rather battered. Ochreous deposit in a few pits. Found in a field in de Schans "at an elevation of 9.40 m above NAP". Private possession. (DB 636)

Map reference: Sheet 45F, 178.3/416.

References: Koolen, 1983: afb. 36; Koolen, 1993: fig. 1.

CAT.NO. 382. PROVENANCE UNKNOWN.

L. 12; w. 4.3; th. 3.1 cm. D loop 2.0x1.2 cm. {} profile. Irregular (damaged) butt; flanges sinuous in outline, with slightly convex sides, [septum; slightly rounded, strongly pronounced shelf stopridge. Blade part with trapeze outline; one face is ridged, the other face is convex. Cutting edge sharp, with slightly rounded corners. Patina green, some loamy encrustation. Casting seam prominent on hafting part, vague on blade part. Museum: Nijmegen, Inv.No. xxx.d.27, ex coll. Kam; on loan to museum Kasteel Wijchen. (DB 2336)

CAT.NO. 383. HAPS, GEMEENTE CUYK, NOORD-BRABANT. L. 13.2; w. 4; th. 3 cm. D loop 2.6x0.8 cm. {} profile. Butt irregular (damaged). Blade part slender, with S-outline cutting-edge part. From a cultivated field, found in potato-sorting machine. Lost in fire. Private possession. Drawing kindly made available by the *Archeologisch Werkgemeenschap Nederland*, section Nijmegen and environs. (DB 633)

We have not seen this axe; measurements are from drawing.

Map reference: Sheet 46A, 188.36/413.30.

Reference: De Wit, 1983: p. 47, afb. 32.

CAT.NO. 384. HUNERBERG, GEMEENTE NIJMEGEN, GELDERLAND.

L. 12.1; w. 4.1; th. 2.8 cm. D loop 1.8x0.4 cm. Weight: 320 gr. {} profile. Straight, slightly sloping blunt butt; () sides; _/_ septum. Slightly curved shelf stopridge. Blade part with slightly ogival outline, slightly () sides, midridge. Cutting edge sharp. Glossy brown 'peat' patina. Museum: Nijmegen, Inv.No. (Inv.No. E.III.4e (old No. 8)). (DB 2190)

Metal analyses: (qualitative X-ray spectrography) Cu+Sn, substantial traces of Ag, As, Sb, Ni (British Museum, London).

Documentation: Letter P. Craddock (British Museum) to Butler, 3 July 1984.

Map reference: Sheet 40C, c. 189.7/427.7.

Modern copies of Cat.No. 384:

Cat.No. 384a:

L. 11.8; w. 4.1; th. 3 cm. Weight: 317 gr. Modern copy of Cat.No. 384 (made before 1830). Museum: Nijmegen, E.III.4a (4). Metal analysis: Cu+Zn, Pb, Sn. (DB 1553)

Documentation: Letter P. Craddock (British Museum) to Butler, 3 July 1984.

Cat.No. 384b:

L. 11.7; w. 4.0; th. 2.75 cm. Weight: 315 gr. Modern copy of Cat.No. 384 (made before 1830). Museum: Nijmegen, E.III.4b (5). Metal analysis: Cu+Zn, Pb, Sn. (DB 1554)

Documentation: Letter P. Craddock (British Museum) to Butler, 3 July 1984.

Comment on Cat.Nos 384, 384a, 384b: Three virtually identical looped palstaves from the Rijksmuseum Kam in Nijmegen were submitted to the present writer by drs. J.R.C. v. Zijl de Jong for comment. The three objects were so similar in size, form and details, that one could readily suppose that they had been cast in the same mould. On close examination, however, it appeared that certain features which could only be interpreted as modern damage – such as, for example, the file marks on the face – occurred identically on all three axes, but more sharply defined on Cat.No. 384 than on the other

two. On further detailed examination, it seemed likely that only one of the three axes (Cat.No. 384, Inv.No. E.III.4e [old No. 8]) was an original Bronze Age specimen, and that the other two examples were modern copies of it. Confirmation was sought via spectroanalysis. Samples from the three axes were submitted to Dr. Paul Craddock of the British Museum research laboratory; who after an x-ray spectrographic test reported that the two suspected modern copies had indeed a zinc content.

Parallels Type AXPL:MIS<: On the German side of the border, there is one example of this type (Kibbert, 1980: p. 216, No. 525) from Krefeld-Gellep, along the Rhine. Kibbert assigns the Krefeld palstave, along with the bronze palstave mould from the River Lippe at Werne in Westfalen (his No. 526), to a *Form Venlo* (so named after the find-spot of our palstave Cat.No. 231, originally illustrated Butler, 1973a: p. 326, Abb. 5:4). Neither the Venlo palstave nor the Werne mould seem, however, to belong to what we here designate the small variety, our Type AXPL:MISC<. The Venlo palstave itself we assign to *Typ Rosnoën*.

a:6) *Palstaves with narrow midrib and sinuous outline, wide blade (AXP:MISW)* (fig. 86)

Four examples in the Netherlands (Cat.Nos 385-388): one north, three south (Map 31).

CAT.NO. 385. COEVORDEN, GEMEENTE COEVORDEN, DRENTHE.

L. 15.8; w. 6.3; th. 2.7 cm. Weight 417.5 gr. Thin, irregular butt; ^ flanges, very slightly convex, with () sides; U septum; U stopridge, slightly overhanging and sloping outwardly. Blade part with slightly <> sides; faint midrib and slight side-flanges on widely splayed blade part. Crescent-ground, cutting edge sharp (somerecentre-sharpening). Casting seams prominent on upper part, becoming depressions on the blade part. No pouches. Patina: traces of black patina, but has been mechanically cleaned. Now mostly bright bronze to dark bronze in colour. Surface somewhat pitted. Found June or July 1994 by owner in ground transported for noise barrier; ground comes from Daler Allee where trees were uprooted. Private possession. (DB 874)

Map reference: Sheet 22E, c. 246/521.

CAT.NO. 386. GEMEENTE WIJCHEN, GELDERLAND.

L. 13.45; w. 4.9; th. 2.3 cm. Shallow-U blunt butt; ^ flanges with () sides; U septum; curved stopridge, slightly overhanging. Blade part with broad midrib, () sides. Fairly straight, sharp cutting edge. Collection: B.A.I. Groningen, Inv.No. 1938/IV.7a. Ex coll. H. Blijdenstein, harbourmaster at Nijmegen; private collection purchased via dealer J. Esser of Nijmegen (see also palstaves Cat.Nos 238 and 315). (DB 1094)

CAT.NO. 387. KESSEL, GEMEENTE KESSEL, LIMBURG.

L. 14.8; w. 5.2; th. 2.1 cm. Weight 375 gr. Straight blunt butt; ^ flanges with slightly () sides; _/_ septum, slightly U-shaped shelf stopridge. Blade part with flat faces except for narrow midrib; () sides; fan-shaped blade. Cutting edge sharp. Patina: mottled green. Part of butt restored. Museum: Brussels, Inv.No. B 589 (old No. 3575). Acq. June 1875, ex coll. Franssen. Metal analysis (Jacobsen, 1904: An. 37): Sn 8.25, Pb 0.172, Zn 0.495. (DB 1875)

Map reference: Sheet 58E, c. 201.5/367.

References: De Loë, 1931: p. 31(-2); Jacobsen, 1904: An. 37; Wielockx, 1986: Cat.no. Hi11.

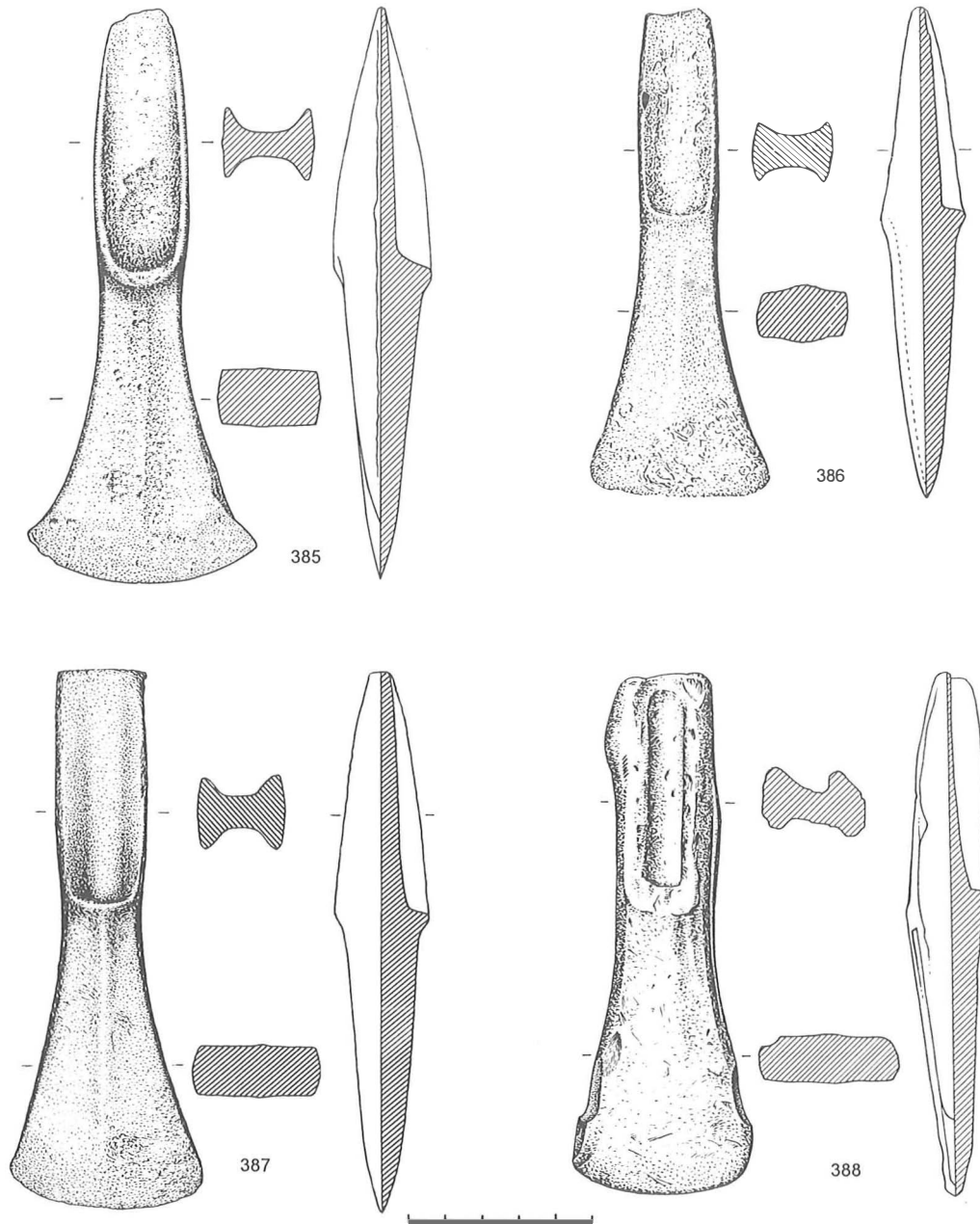


Fig. 86. (Type AXP:MISW) 385: Coevorden, Dr; 386: gemeente Wijchen, Ge; 387: Kessel, Li, 388: near Stevensweert, Li.

CAT.NO. 388. NEARSTEVENSWEERT (R. MAAS), GEMEENTE STEVENSWEERT, LIMBURG.

L. 14.25; w. (4.8); th. 2 cm. Heavily battered and distorted palstave; U septum, rounded stopridge. Blade with slight midrib. Patina: dark bronze. Dredge find. Museum: R.M.O. Leiden, Inv.No. I.1961/8.1. Purchased from owner via P. Manger (the Hague). (DB 2003)

Map reference: Sheet 60A, c. 186/349.

Reference: Jaarverslag, 1961: (176)6.

Parallels: None in Kibbert.

Dating: No close datings are known (cf. section 4, below).

b) *Palstaves with blade flanges and midrib and sinuous outline, wide blade (AXP:MIFSW) (fig. 87)*

Two examples in the Netherlands (Cat. Nos 389-390): one in Nijmegen area, one unprovenanced (Map 31).

CAT.NO. 389. PROVENANCE UNKNOWN.

L. 13.9; w. 5.3; th. 2.6 cm. Straight blunt butt; slightly convex ^ flanges with slightly () sides; shallow U stopridge. Widely expanded blade; narrow midrib; slight side-flanges. Crescent-ground. Blade tip slightly recurved. Cutting edge sharp. Was erroneously attributed to museum Asselt (as Inv.No. 83). Present collection unknown. (DB 47)

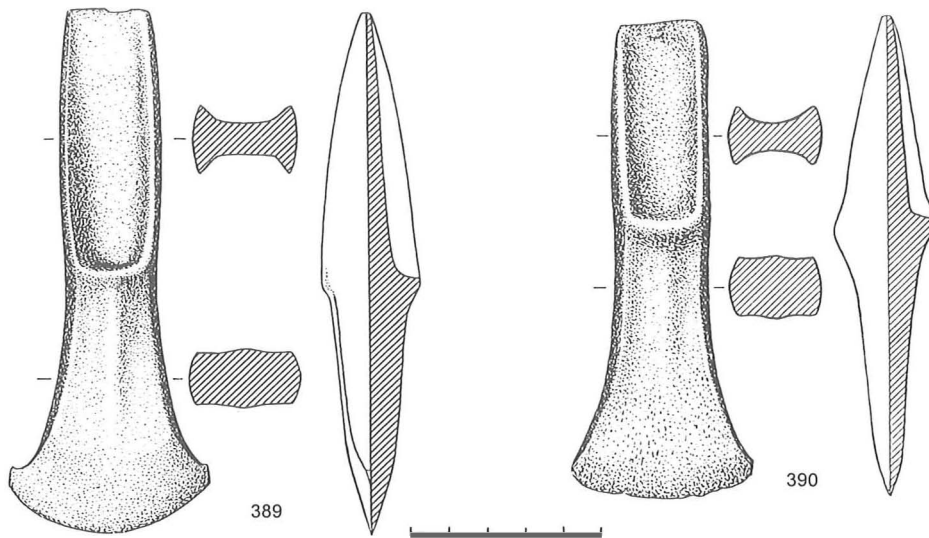


Fig. 87. (Type AXP:MFSW)
389: provenance unknown;
390: gemeente Nijmegen, Ge
(dealer's provenance).

CAT.NO. 390. GEMEENTE NIJMEGEN, GELDERLAND (dealer's provenance).

L. 12.7; w. (4.85); th. 2.7 cm. {} profile. Straight blunt butt; () sides; U septum; slightly U stopridge. Blade part with midrib and slight side-flanges, () sides. Museum: R.M.O. Leiden, Inv.No. N.S.752 (old No. I.553); purchased from J. Grandjean, Nijmegen. (DB 1627)

Comment: These AXP:MFSW palstaves are very similar to those of our AXP:MS series, differing only in having slight blade side-flanges.

b:1) *Palstave with blade flanges and broad midrib, parallel-sided blade with abrupt blade-tip expansion (AXP:MBFHJ)* (fig. 88)

Only one example in the Netherlands, in the north (Map 31).

CAT.NO. 391. ENGELAND, GEMEENTE GRAMSBERGEN, OVERIJSEL.

L. 13.5; w. 4.6; th. 2.6 cm. Irregular (damaged) sharp butt; slightly convex \wedge flanges with () sides; \backslash /septum. Slightly curved, inwardly sloping, slightly projecting stopridge. Blade part with broad midrib between slight flanges; parallel 3-faceted sides, with abruptly expanded J blade tips, crescent-ground. Cutting edge sharpened but battered. Found 1947 at Bruineveld. Museum: Gramsbergen, Inv.No. 13. (DB 1067)

Map reference: Sheet 22B, 238.0/513.9.

Comment: This palstave is evidently a variant of our northern palstave types.

Dating: No close datings are known (cf. section 4, below).

c) *Palstaves with narrow midrib or midridge and more or less trapeze-shaped (\wedge) outline, large size (AXP:MI \wedge)* (fig. 89)

Three examples in the Netherlands (Cat. Nos 392-394): one in the south, two unprovenanced (Map 31).

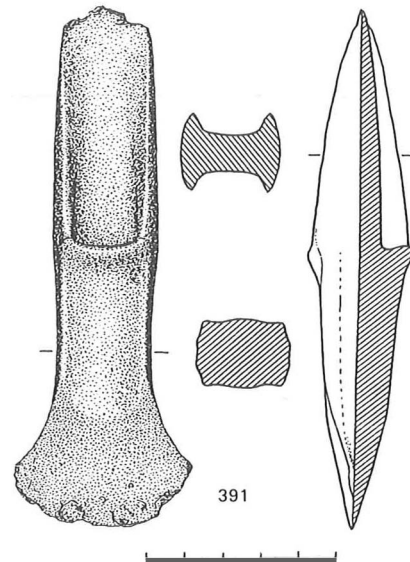


Fig. 88. (Type AXP:MBFHJ) 391: Engeland, Ov.

CAT.NO. 392. PROVENANCE UNKNOWN.

L. 14.1; w. 4.45; th. 2.6 cm. Butt battered; \wedge with flattish sides; \backslash /septum; U stopridge, sloping outwardly. Blade part with convex faces and sides; prominent narrow midrib. Museum: Legermuseum Delft, Inv.No. Daa-3. (DB 1119)

CAT.NO. 393. PROVENANCE UNKNOWN.

L. 17.1; w. 5.1; th. 2.85 cm. Straight blunt butt; \wedge flanges; U septum; somewhat V-shaped stopridge, sloping outwardly. Blade part longitudinally ridged on faces and sides. Patina: dark bronze to black. Loamy encrustation. Museum: Bonnefantenmuseum Maastricht, Inv.No. 203. (DB 209)

CAT.NO. 394. BUGGENUM, GEMEENTE HAELEN, LIMBURG (River Maas).

L. 15.9; w. 5.45; th. 2.1 cm. Butt irregularly rounded (abraded); \wedge flanges with slightly () sides; U septum, U stopridge. Blade part with

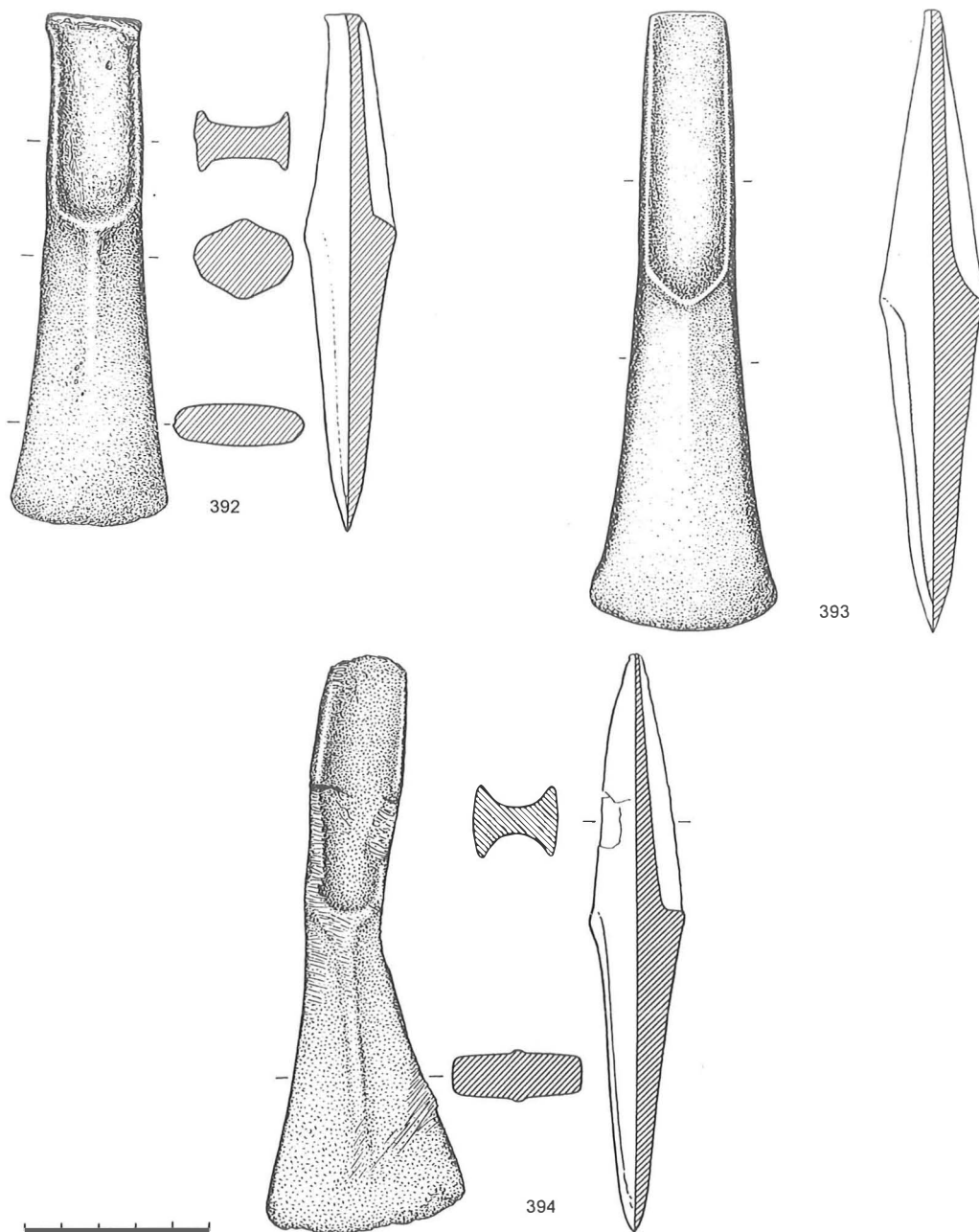


Fig. 89. (Type AXP:MI/Λ) 392: provenance unknown; 393: provenance unknown; 394: Buggenum, Li.

Λ outline; long narrow midrib. Dredge find. Patina bright green; bronze colour in places. Sharp bend in the middle (modern damage). Museum: Roermond, Inv.No. 1896; gift of J. Rumen (Haelen), along with Cat.No. 323. (DB 1125)

Map reference: Sheet 58D, c. 197.5/360/5.

References: Butler, 1973a: p. 322, afb. 1 (left), pp. 324-326; Wielockx, 1986: Cat. No. Hi2; De Laet, 1982: pp. 430-431.

Comment: Though two of these axes are without provenance, the three examples are undoubtedly from the south of the country, and represent a local variant.

A palstave nearly identical to Cat.No. 392 is illustrated by Kibbert (his No. 668), but it is also without exact provenance, though it is attributed to the 'Rhineland'. Kibbert assigns his specimen to his *Var.* Achternach, but the other *Var.* Achternach examples are without midrib!

Parallels: None in Kibbert.

Dating: No close datings are known (cf. section 4, below).

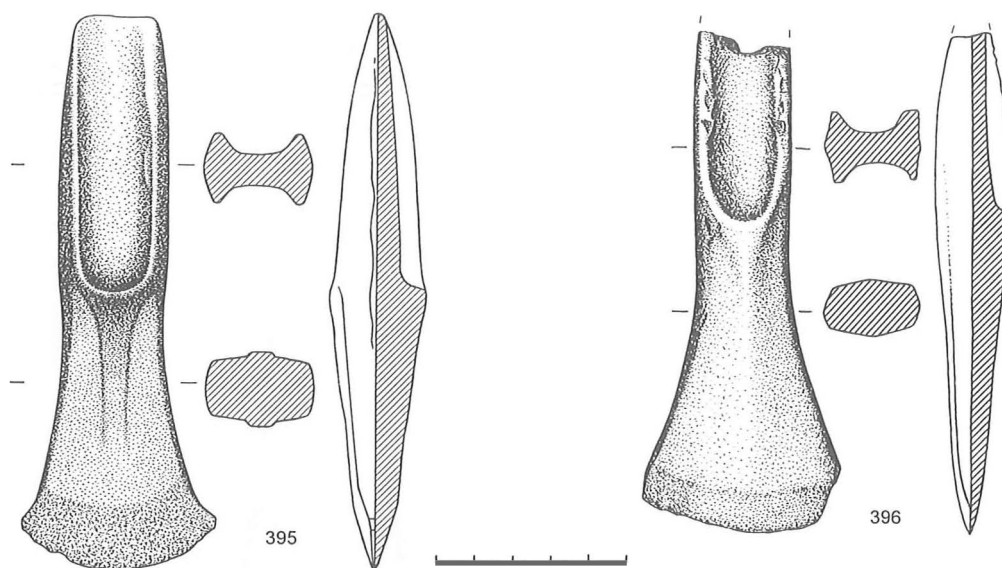


Fig. 90. (Type AXP:MTSW) 395: Leveroi, Li; 396: Susteren/Dieteren, Li.

d) *Palstaves with trumpet midrib and sinuous outline, wide blade (AXP:MTSW) (fig. 90)*

Two examples (Cat. Nos 395-396), both in the south (Map 31).

CAT.NO. 395. LEVEROIJ, GEMEENTE WEERT, LIMBURG.

L. 14.6; w. 5.1; th. 2.7 cm. Weight 422.2 gr. Straight blunt butt; slightly convex \wedge flanges; U septum; U stopridge. Prominent trumpet midrib with flattened faces. Crescent-ground. Cutting edge sharpened, has been blunted recently. Patina: part black, part dark green. Generally well-preserved. Found c. 1965 in an asparagus field. Acquired c. 1985 by the present owner from a fellow student; who in turn had it from an uncle. Private possession. (DB 2112)

Map reference: Sheet 58C, c. 188/362.

Remarks: To any book of records (Guinness or otherwise) we offer this example, as possibly the only Netherlands Bronze Age implement to have enjoyed (in June 1997) trans-oceanic travel by Concorde, when its owner re-visited the Netherlands and brought it along for study and inclusion in this catalogue.

CAT.NO. 396. BETWEEN SUSTEREN AND DIETEREN, GEMEENTE SUSTEREN, LIMBURG.

L. 13; w. 5.1; th. 1.95 cm. Part of butt broken off and missing; slightly convex \wedge flanges with $\lt \gt$ sides; U septum, with plastic trumpet-shaped midrib below it. Widely expanding blade, crescent-ground cutting edge (one tip broken off). "Acheté au travailleur lui-même dans la petite maison du Ringoven". Museum: Asselt, Inv.No. 87; ex coll. Philips. Missing in Oct. 1996. (DB 51)

Map reference: Sheet 60A, c. 187.5/342.

Documentation: *Inventaire Coll. Philips*, No. 87; with drawing.

References: Butler, 1973a: pp. 321-329, p. 325,afb. 4.1; Wielockx, 1986: Cat.no. Hi29.

e) *Palstaves with triangular raised ornament below stopridge and sinuous outline, wide blade (AXP:MVSU) (fig. 91)*

Three examples in the Netherlands (Cat. Nos 397-399), all three in the south (Map 31).

CAT.NO. 397. GRAETHEIDE, GEMEENTE BORN, LIMBURG.

L. 13.3; w. 4.9; th. 2.1 cm. Irregular thin butt; \wedge flanges with () sides; shallow \wedge septum; outwardly sloping U stopridge, with raised V ornament below it. Blade part with () faces and sides, strongly ogival outline. Private possession. (DB 1742)

Map reference: Sheet 60C, c. 184/334.

References: Butler, 1973a: p. 325, Abb. 4.2, pp. 321-329; De Laet, 1982: p. 432; Wielockx, 1986: Cat.No. Hi8.

CAT.NO. 398. OERLE, GEMEENTE VELDHOFEN, NOORD-BRABANT.

L. 15.3; w. 5.2; th. 2.85 cm. Straight blunt butt; \wedge flanges with slightly () sides; deep \wedge septum; outwardly sloping U stopridge, with raised V ornament below it. Blade part with slightly convex faces and sides. Blade sharp (but damaged); cutting edge markedly skew. Patina: glossy dark green; some pitting. Slight modern file damage. Found 1951 along the bicycle-path Oerle-Knegsel while planting fir trees; acquired by forester Kleyn, later by G. Beex. Private possession. (DB 1701)

Map reference: Sheet 51D, c. 153/380.

References: Beex, 1952; 1965: fig. 3; Van Doorselaar, Beex & Van Schie-Herweyer, 1969: p. 56.

CAT.NO. 399. LINNE, GEMEENTE AMBT MONTFORT, LIMBURG.

L. 14.5; w. 4.8; th. 2.7 cm. Irregularly broken (patinated) thick butt; \wedge flanges; U septum; U stopridge; V midrib. Blade part with flat faces, () sides, \wedge outline, with slightly everted blade tips. Cutting edge sharp; crescentic sharpening facet. Hammered-down casting seams. Patina: glossy green with blackish patches. Very well-preserved, but slight plough damage. Found at *kruisperceel* 27. Museum: St. Odiliënberg, Inv.No. 27. (DB 2299)

Map reference: Sheet 58B, (68E new), 196.56/351.280.

Parallels: with raised triangular ornament below stopridge: a palstave from Maaseik, on the Belgian side of the Maas (unpublished; Ashmolean Museum, Oxford, 1927/1984, ex coll. Evans) is very similar, but unlike the three specimens from the Netherlands it also has an arch-shaped raised ornament on the sides.

A fragment of a palstave from the Saint-Just-en-

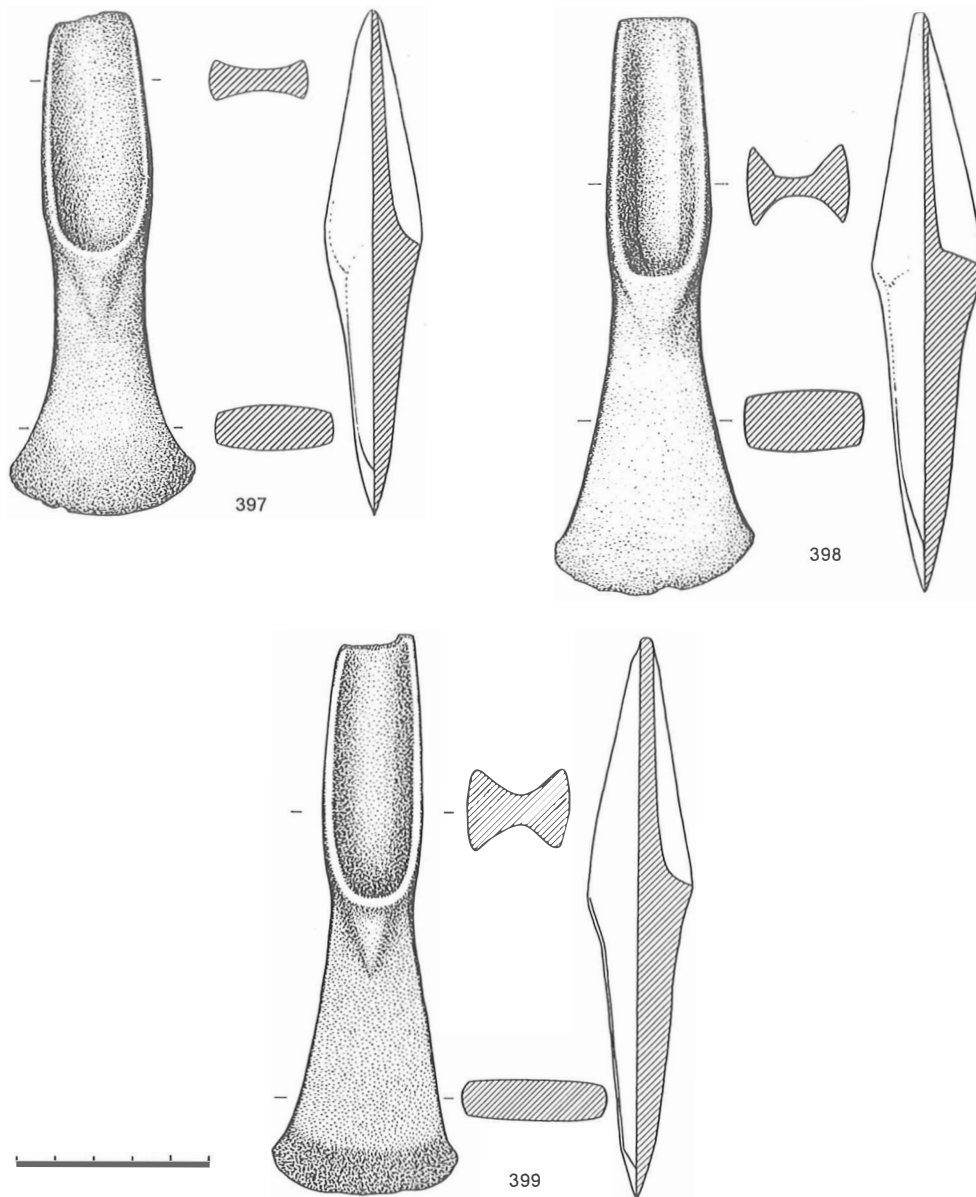


Fig. 91. (Type AXP:MVSW) 397: Graetheide, Li; 398: Oerle, N-B; 399: Linne, Li.

Chaussée (60 Oise, France) hoard has a similar raised triangular motif, but it is a looped palstave; whether wide or narrow-bladed is unknown.

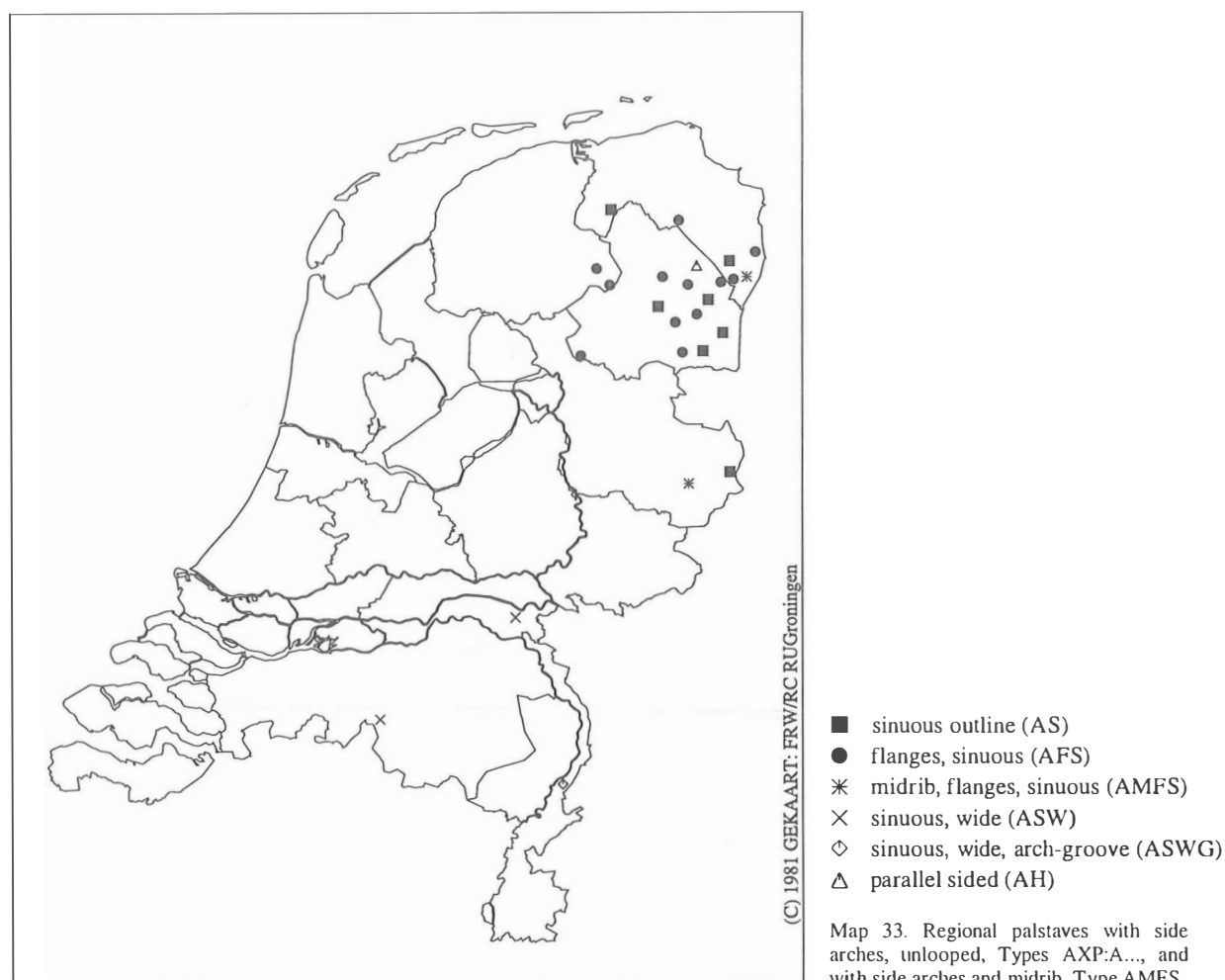
No parallels are illustrated by Kibbert (1980).

Dating: No close datings are known (cf. section 4, below).

3.4.4. *Palstaves with arch-shaped plastic ornament on the sides (AXP:A...) (Map 33)*

Introduction: The arch-shaped plastic side ornament (Kibbert: *Schildbogen*) presumably has its origin in the side treatment of flanged axes of the *geknickte Randbeile*

and related flanged axe types. It becomes stylized as a decorative motif on the side of palstaves in the North German-South Scandinavian area, beginning with the Ilsmoor type (cf. our Cat.No. 178), and subsequently becoming a common feature of types such as the northern 'work-palstave' series and Kibbert's types Kappeln A and Altenhagen-Rheydt. In northern Europe the arch ornament may be round-headed (cf. our Cat.Nos 179, 180, 181, or be transformed into a 'Gothic' pointed arch (Kibbert: *spitzwinkliger Schildbogen*). Pending the appearance of the PBF volume of Laux on the axes of Niedersachsen, an impression of the distribution of the non-northern palstaves with arches on the sides in



Northwest Germany may be obtained from the maps of Bergmann (1970: his Forms 9-12 and 15, on his Karten 41-44; with reserve as to their completeness and accuracy).

In western Europe the arch-shaped side ornament is rather uncommon, though it may occasionally be found on western European primary shield palstaves (cf. our Cat.No. 207). In the west it is more often replaced by a horizontal ridge or bar (cf. our Cat.Nos 194, 197, 203, 204, 206, 209, 210, 213, 215), or a flat-headed plastic ornament on the sides (cf. our Cat.No. 227).

a) *Palstave with arch-shaped ornament on parallel (H) sides (AXP:AH)* (fig. 92)

Only one example in the Netherlands, in the north (Map 33).

CAT.NO. 400. GEMEENTE GASSELTE (*aardappelfabriek*), DRENTHE.

L. 9.6; w. 2.7; th. 1.9 cm. Roughly straight blunt butt; slightly convex \wedge flanges, with rounded sides; shallow U ledge septum. Blade part with slightly convex faces and flattish sides, with faint side-arches.

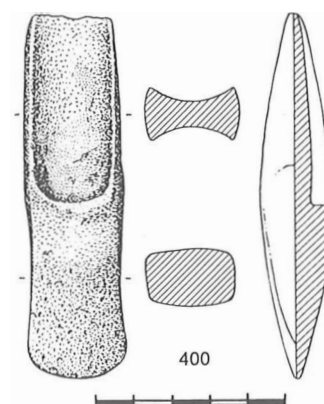


Fig. 92. (Type AXP:AH) 400: gemeente Gasselte, Dr.

Cutting edge sharp. Private possession. (DB 2088)
 Map reference: Sheet 12H, 254.5/556.7.

Dating: No close datings are known (cf. section 4, below).

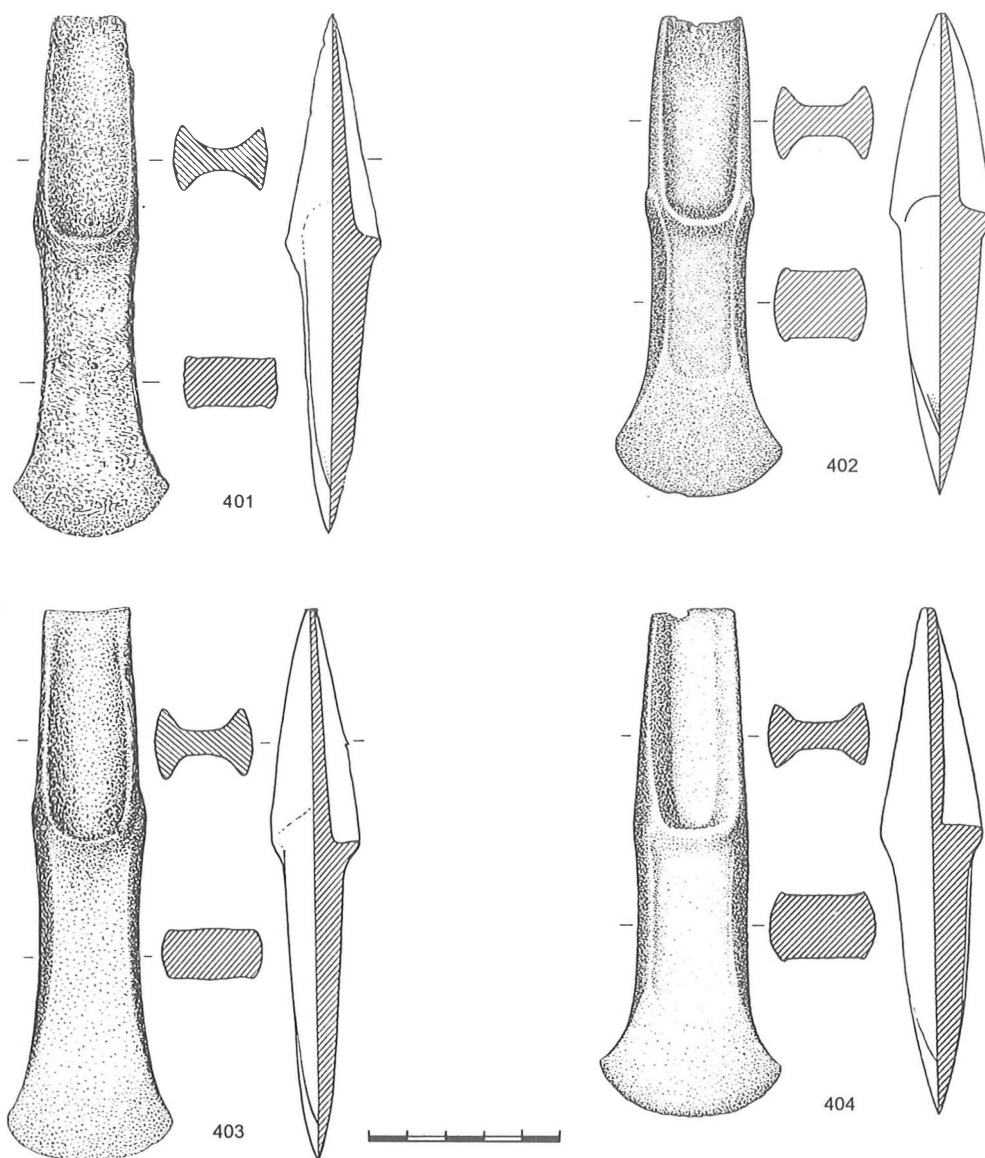


Fig. 93a. (Type AXP:AFS) 401: provenance unknown; 402: provenance unknown; 403: provenance unknown; 404: *gemeente Vlagtwedde, Gr* (see also figs 93b-d).

b) *Palstaves with arch-shaped ornament on the sides, blade flanges and sinuous outline (AXP:AFS) (figs 93a-93d)*

Seventeen examples in the Netherlands (Cat.Nos 401-417). As Map 33 shows, all provenanced examples are in three northern provinces: Friesland, Groningen and Drenthe. This type is thus the most numerous of the distinctively northern types in the Netherlands.

Within the series there is considerable variety in outline. A few, Cat.Nos 404, 413, 415, are rather parallel-sided, but with abruptly expanding blade tips (in this respect resembling the plain palstaves of the AXP:PHJ series, also a North Netherlands specialty). The largest

number (Cat.Nos 401, 403, 410, 411, 412, 414, 416, 417) have parallel sides on the hafting part, but biconcave sides on the blade part. Still others (Cat.Nos 402, 405, 407, 408, 409) have a sinuous outline. One specimen (Cat.No. 406) is noteworthy for its unusually narrow butt and widely expanded blade.

Four axes of this type have lightly faceted sides. A few have a rather faint, nearly imperceptible midrib.

Almost all of this type have generously expanded blade tips. The blade width varies from 4.2 to 6.25 cm. The stopridge is almost always rounded, but in a few cases nearly straight.

CAT.NO. 401. PROVENANCE UNKNOWN.

L. 13.8; w. 4.1; th. 2.55 cm. Straight sharp butt; \wedge flanges with () sides, faint arches; U septum; U shelf stopridge. Blade part with [] section, with faint flanges. Collection: Oudheidkamer Vriezenveen, no Inv.No. (DB 611)

CAT.NO. 402. PROVENANCE UNKNOWN.

L. 12.7; w. 4.3; th. 2.7 cm. Weight 339.3 gr. Slightly irregular U butt; slightly convex \wedge flanges with () sides; U septum; U shelf stopridge. Blade part with parallel sides but expanding toward cutting edge. Plastic side-arches; side-flanges; () sides, flat faces. Straight ground, with unusually long sharpening facet. Pouched. Cutting edge sharp. Patina: mostly brown, with greeny patches. Collection: I.P.P., Amsterdam; no inventory number. (DB 2262)

Note: This specimen served as an 'examination axe', with which in his time Prof. W. Glasbergen confronted students at the I.P.P. during oral examinations.

CAT.NO. 403. PROVENANCE UNKNOWN.

L. 14.5; w. 4.4; th. 2.4 cm. Straight butt; \wedge flanges with () sides; U septum; U shelf stopridge, sloping inwardly; \wedge side-arches. Blade part with faintly convex faces, slightly () sides, slight cutting edge expansion. Cutting edge sharp. Unknown collection. (DB 1074)

CAT.NO. 404. GEMEENTE VLAGTWEDDE, GRONINGEN.

L. 13.5; w. 4.8; th. 2.65 cm. Straight blunt butt; \wedge flanges with () sides; \wedge septum; nearly straight shelf stopridge. Blade part with flat faces, faintly faceted () sides, with slight side-flanges, side-arches. Sharp J cutting edge, straight ground, with slight pouches. Cutting edge sharp but battered. Patina: black to dark bronze, with light green corrosion patches. Private possession (acquired via S.J. Kruisselbrink, then chief foreman of the Nederlandsche Heidemaatschappij, and Roosa, Velp). (DB 1799)

Documentation: Letter S.H. Achterop to J.D. van der Waals, 25 June 1960 (in B.A.I. Groningen). (fig. 93b)

CAT.NO. 405. EXLOO, GEMEENTE ODOORN, DRENTHE.

L. 16.3; w. 5.7; th. 2.9 cm. Sinuous outline; \wedge flanges; U septum; rounded overhanging stopridge. Flat blade with side-flanges, becoming arch-shaped ornament on sides; sides faceted. Wide blade; cutting edge sharp. Patina: mostly dark green, but patches of black, light green and bronze colour. Found 1946 by A. Menes (Emmen), during reclamation of parcel at northeast edge of Odoornersand, at a depth of 20 to 30 cm. Private possession. (DB 1715). Plaster cast of this palstave (DB 1980) in Museum Assen, Inv.No. 1963/XI.1.

Map reference: Sheet 17F, 253.9/543.9.

Reference: Butler, 1963b: p. 212, No. 8.

CAT.NO. 406. EXLOO (NEAR), GEMEENTE ODOORN, DRENTHE.

L. 16.2; w. 6.25; th. 2.6 cm. Straight sharp butt; \wedge flanges with slightly rounded sides; \wedge septum; U shelf stopridge, sloping inwardly. Blade part Blade part with fan-shaped body, () sides with faceted edges; wide blade with sharp cutting edge. Patina: blackish (partly removed). Surface corrosion-pitted. Large blowhole at stopridge on one side. Found in the moor. Museum: Assen, Inv.No. 1928/VII.1; presented 18 July 1928 by family Ten Rodegate Marissen (Exloo). (DB 143)

Map reference: Sheet 17F, c. 256/545

References: Verslag, 1928: p. 13, No. 18; Butler, 1963b: p. 212, IV.C.9.

CAT.NO. 407. WEPER, GEMEENTE OOSTSTELLINGWERF, FRIESLAND. WEPERPOLDER.

L. 15.4; w. 5.0; th. 2.7 cm. Nearly straight, slightly irregular blunt butt; \wedge flanges with () sides; \wedge septum; U ledge stopridge, slightly overhanging, with blowhole at base of septum on one side. Blade part

with flat face, slight side-flanges, 3-faceted sides with plastic arch. Crescent-ground. Cutting edge sharp but battered, with slightly everted tips. Patina: mottled black/dark bronze/greenish (has been partially 'cleaned' mechanically). Surface somewhat pitted. Deep horizontal scratch and large pits on one face. Museum: Leeuwarden, Inv.No. 1973/VIII.2. The axe was previously in the study collection of the B.A.I., Groningen, there with the Inv.No. 1920/X.1; purchased from Pieter Hof (Harderwijk). (DB 1073)

Map reference: Sheet 11H, c. 217/558.

CAT.NO. 408. ROSWINKELERVEEN, GEMEENTE EMMEN, DRENTHE.

L. 14.5; w. 5.2; th. 2.55 cm. Weight 365 gr. Butt irregular (damaged); \wedge flanges with () sides; nearly \wedge septum. Blade part with flat faces, () sides; slight flanges becoming arch-shaped ornament on sides. Straight ground; J-tip expansion of sharp cutting edge; pouched. Broken in centre; cracks and blowholes in upper part. Patina: brown to blackish. Found while digging peat at a depth of c. 1.5 m. Museum: Assen, Inv.No. 1912/V.3. Presented 1 May 1912 by H. Joling (Nieuw-Weerdinge). (DB 114)

Map reference: Sheet 18A, c. 264/539.

References: Verslag, 1912: p. 13, No. 10; Butler, 1963b: p. 212-IV.C.6.

CAT.NO. 409. DONKERBROEK, GEMEENTE OOSTSTELLINGWERF, FRIESLAND. BREEBERG.

L. 16.25; w. 5.8; th. 2.9 cm. Nearly straight blunt butt; \wedge flanges with () sides; U septum; shallow-U, slightly overhanging ledge stopridge, outwardly sloping. Blade part with slightly () faces, () sides. Faint side-arches, which become faint side-flanges. Fan-shaped blade, crescent-ground; cutting edge sharp. Patina: black (partly removed). Found before 1904. Museum: Leeuwarden, Inv.No. 1-2. (DB 192)

Map reference: Sheet 11H, 213.4/562.4.

References: Boeles, 1951: p. 482, Pl. VI:6; Butler, 1963b: p. 211, IV.C.1.

CAT.NO. 410. 'EAST GRONINGEN' (exact provenance unknown; presumably from the reclamation of the Dollard, possibly from Westerwolde).

L. 14.7; w. 5.2; th. 2.7 cm. Straight blunt butt; \wedge flanges with flat sides; \wedge septum; straight ledge stopridge, slightly projecting, sloping inwardly. Blade part with faintly convex faces, slightly () sides. Prominent side-arches, becoming slight flanges for the blade. The blade is biconcave in outline, with J tips. The blade has anciently been re-sharpened by hammering and grinding; the former has produced 'pouches' on the sides, the latter a clearly defined sharpening facet on the blade. Preservation fairly good, but a number of large corrosion pits on faces and sides. Modern damage: cutting edge and butt have been filed. Large (7mm) bore-holes on each side; on the one side filled in with an iron mass, on the other side the hole contains the broken-off tip of an iron drill bit. Patina: black. Private possession. (DB 1756)

CAT.NO. 411. (Attributed to) KIEL-WINDEWEER (near), GEMEENTE HOOGZAND-SAPPEMEER, GRONINGEN (dealer's provenance).

L. 14.8; w. 5.3, th. 2.7 cm. Irregularly straight blunt butt; slightly convex \wedge flanges; slightly rounded stopridge. Blade part with slightly biconcave outline, side-arches. Cutting edge sharp, with J tips, straight ground. Patina black, with some green pitting. Present location unknown. Formerly in possession of unknown farmer at Kielwindeveer, later of someone in Zuidlaren; who sold it again via an antique dealer. (DB 1926)

Documentation: Drawing here published is from good photos (Museum Assen, No. I17701-4).

Map reference: Sheet 12E, c. 248/570.

Reference: Archeologisch Nieuws, 1972(12): p. 143.

CAT.NO. 412. CANAL BUINEN/SCHOONOORD, GEMEENTE BORGER, DRENTHE.

L. 15.7; w. 5.2; th. 2.5 cm. Weight 430 gr. Straight blunt butt; \wedge flanges

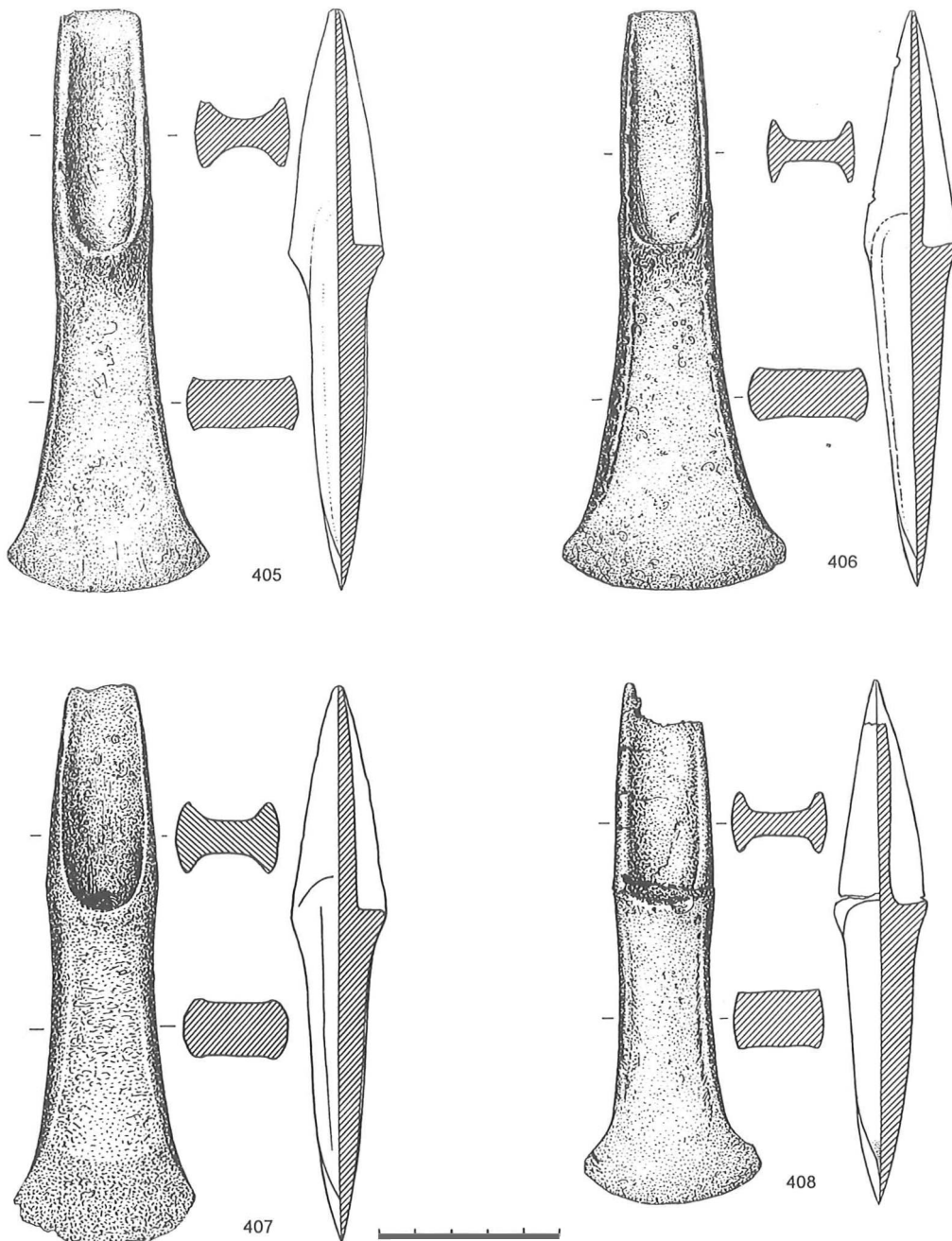


Fig. 93b. (Type AXP:AFS) 405: Exloo, Dr; 406: near Exloo, Dr; 407: Weperpolder, Fr; 408: Roswinkelveen, Dr (see also figs 93a,c-d).

with nearly flat sides; flattened-U septum; straight shelf stopridge. Blade part with flat faces, () sides, distinct flanges, meeting as a side-arches. Deep blowhole at stopridge on one side. Crescent-ground. Cutting edge sharpened but battered; otherwise well-preserved. Patina: brown, with patches of bright green. Found during canal works. Museum: Assen, Inv.No. 1927/I.1. Presented by the architects Wieringa of Coevorden and the Mayor of Sleen, A. Jongbloed, via the *amanuensis* H. Lijn. (DB 138)

Map reference: Sheet 17E.

References: *Verslag*, 1927: p. 13, No. 22; Butler, 1963b: p. 211, IV.C.4 and p. 202, fig. 13.

CAT.NO. 413. AMEN, *GEMEENTE ROLDE*, DRENTHE. DE BOESKOLLEN.

L. 16.1; w. 6; th. 2.6 cm. Irregular straight blunt butt; ^ flanges with () sides; \ / septum; U shelf stopridge. Blade part with faintly convex faces, side-flanges, () sides faintly faceted, with side-arches. Cutting edge very sharp, with J tips, slight pouches. Blowholes at base of septum. Preservation very fine. Patina: black, with slight traces of red on septum. Found June 1963 by R. Timmer (Buinen) in the west bank of the Amerdiepje, 30 cm below the surface, during canalization ("tijdens kanalisatie in west-talud van het Amerdiepje, 0,30 m onder het maaiveld"). Private possession. (DB 698) Plaster cast of same

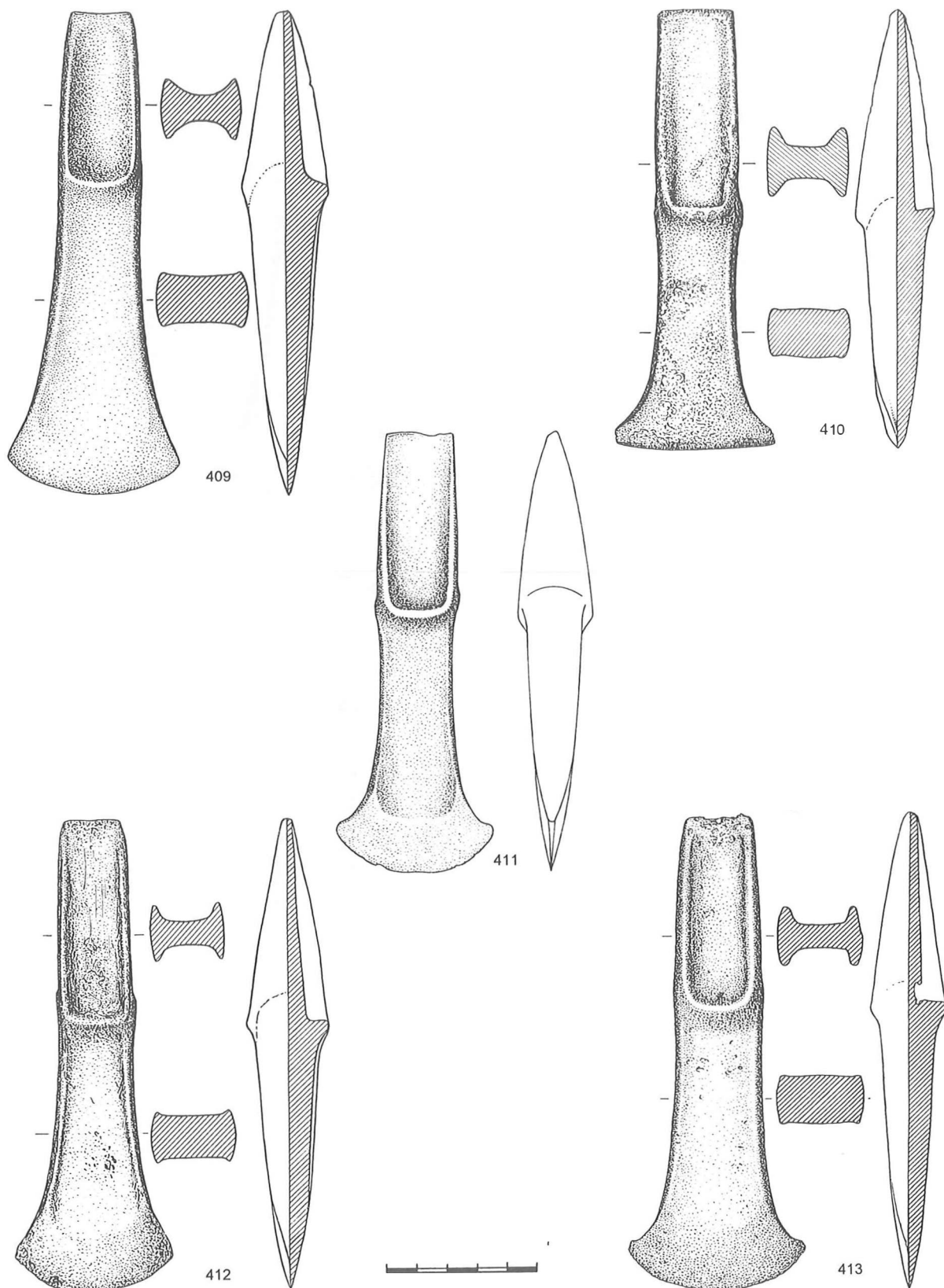


Fig. 93c. Type AXP:AFS 409: Donkerbroek, Fr; 410: 'East Groningen'; 411: Kiel-Windeweer, Gr (dealer's provenance); 412: canal Buinen/Schoonoord, Dr; 413: Amen, Dr (see also figs 93a-b,d).

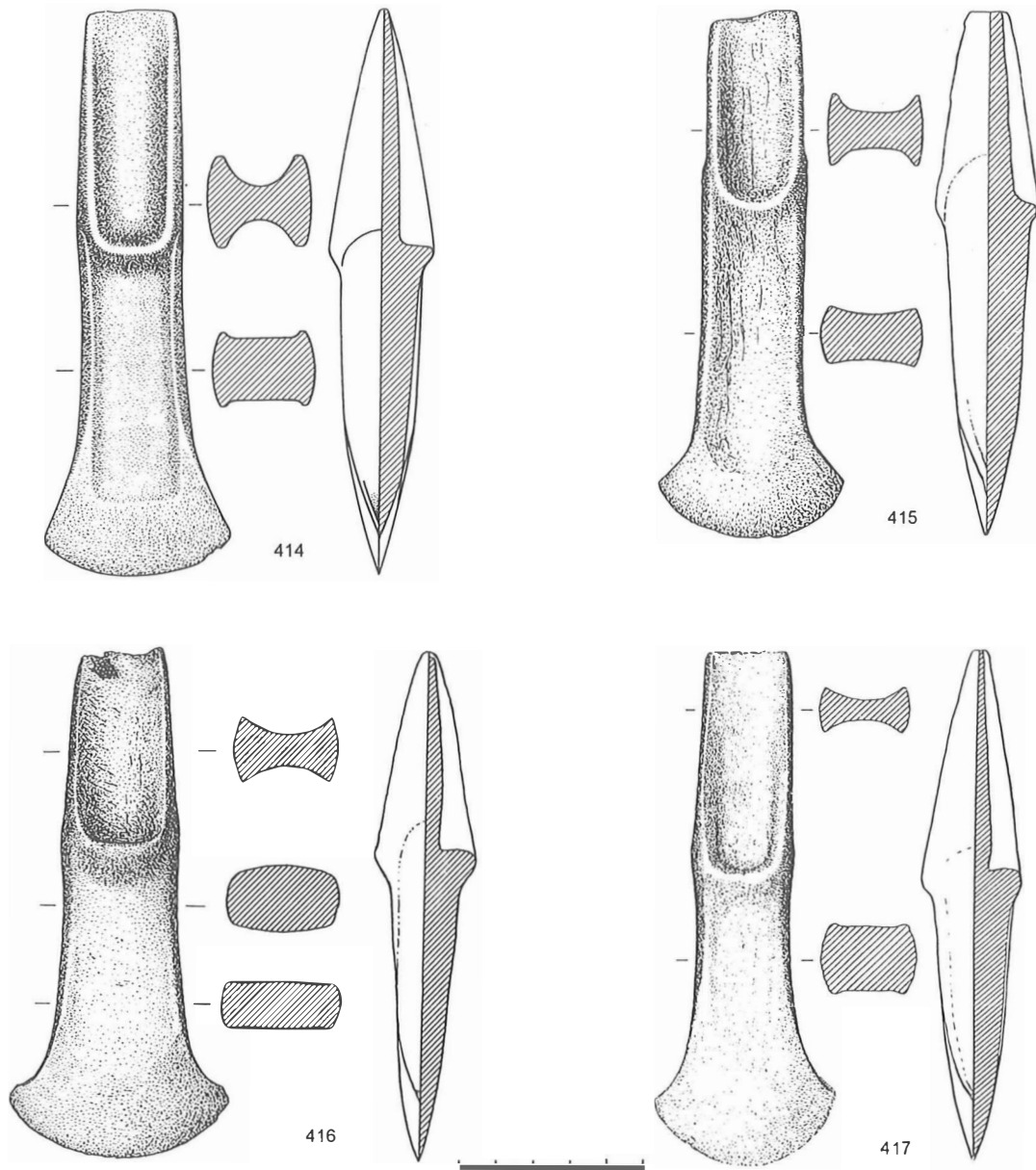


Fig. 93d. 414: Wachtum, Dr; 415: Wedde, Gr; 416: Wezup, Dr; 417: Reestdal (gemeente Meppel), Dr (see also figs 93a-c).

palstave (DB 1824) in Museum Assen, Inv.No. 1963/X.3, presented by K. den Hartog (Assen).

Map reference: Sheet 12D, 237.79/550.93.

CAT.NO. 414. WACHTUM, *GEMEENTE DALEN*, DRENTHE. L. 15.6; w. 5.1; th. 2.9 cm. Straight butt; \wedge flanges with () sides; deep U septum; prominent, overhanging stopridge. Blade part with flat faces, () sides, with prominent flanges, meeting as a plastic arch on the rounded sides. Straight ground, pouched; cutting edge sharp. Very well-preserved, but occasional corrosion pits. Pointillé on flange edges. Faint traces of casting seams. Found 1981 by R. van Wijk while picking potatoes. Museum: Assen, Inv.No. 1995/X.1. (DB 669)

Map reference: 17G, 245.63/525.80.

CAT.NO. 415. WEDDE, *GEMEENTE STADSKANAAL*, GRONINGEN (near Hoornderveen).

L. 14.5; w. 5.15; th. 2.8 cm. Butt irregular (part anciently broken off); \wedge flanges with () sides; U septum; U stopridge. Blade part with U faces, () sides; side-arches, becoming side-flanges. Parallel sides but J cutting-edge tips. Cutting edge sharpened but recently blunted. Surface rough. Patina: blackish, on one face light green. Found under a peat layer. Museum: Groningen, Inv.No. 1906/I.4. (DB 171)

Map reference: Sheet 13A, c. 266/566.

References: Verslag, 1906: p. 19, No. 5; Butler, 1963b: p. 211, IV.C.3.

CAT.NO. 416. WEZUP, *GEMEENTE ZWEELOO*, DRENTHE.

L. 13.8; w. 5.9 cm. Irregularly straight blunt butt; \wedge flanges with

rounded sides; U septum; flattened-U shelf stopridge. Blade part with flattish faces, () sides, slight flanges; J blade tips, crescent-ground; cutting edge sharp. Blowhole at stopridge on each side. Patina: dark bronze. Found 1940/41, by J. Perkaan, while ploughing. Private possession. (DB 1687)

Map reference: Sheet 17G, 244.43/536.08.

Documentation: Letter S. Achterop to Butler, 16 Sept. 1961.

CAT.NO. 417. REESTDAL, *GEMEENTE MEPPPEL, DRENTHE*. L. 14.1; w. 4.9; th. 2.7 cm. Weight 416 gr. Straight blunt butt; A flanges with () sides; U septum, U stopridge (slightly sloping inwards, slightly overhanging). Blade part with flat faces, faintly faceted () sides; slight side-flanges; slight side-arches. Strongly re-ground and blade re-hammered (pouches on sides); cutting edges sharp, with J tips. Patina: dark bronze to black. Found by J.J. Riesen during work on the Reggersbrugje (bridge), c. 2 km SE of Meppel. Museum: Assen, Inv.No. 1966/IX.1; presented by son of finder. (DB 1981)

Map reference: Sheet 21F, 210.95/522.45.

References: *Museumbulletin* 1962: pp. 198(205), 210(12); *Jaarverslag*, 1966 (in: *Nieuwe Drentse Volksalmanak* 1968) p. 294.

Parallels Type AXP:AFS: Kibbert (1980: pp. 242-243) has in his area only two examples of our type AXP:ASF, which he classifies within his major grouping of 'Northwest German plain palstaves', under the heading *Var. Altenhagen* within his *Form Altenhagen-Rheydt*. These are his No. 584 (Borgholzhausen, Kr. Gütersloh), and No. 585 (Holthausen, Stadt Waltrop, Kr. Recklinghausen).

As we might expect, parallels are more numerous in Niedersachsen, though for a full list we must await the coming publication of Laux. Many will no doubt be found among Bergmann's *Form 9* (his Taf. 5:10, Liste 95, Karte 41) and *Form 11* (his Taf. 5:12, Liste 97, Karte 42: semi-circles), but as most of the examples are unillustrated, a critical check is at present impossible. We may notice a number of examples in the Emsland and Oldenburg and extending eastward to the Lüneburger Heide for which illustrations are available:

Altenhagen, Kr. Celle (Grauer *Berg, Grab 1, Best. II*): Piesker, 1958: Taf. I:1, 60:8;

Hermannsburg, Kr. Celle: Laux, 1971: No. 40C, Taf. 75:7;

Suderberg, Kr. Uelzen: Laux, 1971: No. 579, Taf. 75:6;

Fiirstenau, Kr. Bersenbrück: Sudholz, 1964: No. 94, Taf. 35:3;

Diite, Kr. Tecklenburg: Sudholz, 1964: No. 383, Taf. 31:2;

Leschede, Kr. Lingen: Sudholz, 1964: No. 103, Taf. 32:2;

Meppen, Kr. Meppen: Sudholz, 1964: No. 109, Taf. 32:4.

Even from this short and certainly incomplete list it is evident that palstaves of our AXP:AFS type occur in the north of the Netherlands and the adjacent Northwest German area (Niedersachsen from the Emsland to the Lüneburger Heide); contrasting strikingly with their rarity in the south of the Netherlands and in Nordrhein-Westfalen.

Dating: A palstave in the hoard from Hohenfelde,

Kr. Steinburg, in Schleswig-Holstein near the Elbe mouth, contains a palstave (Aner & Kersten, 1993: Kat.Nr. 9386, Taf. 10c) which is at least very closely related to those of our Type AXP:ASW. It accompanied eight northern 'work palstaves' types and a spearhead of the type Smørumøvre of G. Jacob-Friesen (1967: I, p. 333, Cat.Nr. 778) and is dated to Northern Period II.

c) *Palstaves with arch-shaped ornament on sides, midrib, blade flanges and sinuous outline (AXP:AMFS)* (fig. 94)

Two examples (Cat.Nos 418-419), both in the north.

CAT.NO. 418. DRIENE, *GEMEENTE HENGELLO, OVERIJSSSEL*. L. 15.8; w. 5.2; th. 2.65 cm. Slightly rounded, blunt butt; A flanges; U septum, convex sides; U-shaped, sloping stopridges. Blade part with nearly parallel sides and slightly J blade tips. Arch ornament on sides; moderately broad midrib. Patina: originally dark brown, mostly scraped off. Well-preserved. Museum: Enschede, Inv.No. 498; found May 1954 by one Aldenkamp. (DB 1048)

Map reference: Sheet 28H, 253.80/475.82.

CAT.NO. 419. WEENDE, *GEMEENTE VLAGTWEDDE, GRONINGEN*. WEENDERVELD.

L. 17.4; w. 7.0; th. 2.4 cm. Shallow U blunt butt; A flanges with () sides; U shelf stopridge, sloping inwards. Blade part with () faces and sides, narrow midrib, flanges becoming side-arches. Cutting edge widely expanded, straight ground, sharp. Somewhat asymmetrical in side view. A larger than normal specimen, with exceptionally wide cutting edge. Patina: dull bronze colour, with dark grey stains. Traces of wood were originally present. Museum: Groningen, Inv.No. 1956/I.1 (formerly B.A.I., there Inv.No. 1933/V.1). (DB 182)

Map reference: Sheet 13D, 271.58/557.50.

Documentation: Groenendijk, *dossier Vlagtwedde* No. 24.

Reference: Butler, 1963b: p. 211, IV.C.2.

The Weende example, though obviously closely related to our North Netherlands varieties, is somewhat exceptional due to its large size, unusually widely everted blade (7 cm, the widest of the regional palstaves in the Netherlands; only some of the imported Voorhout palstaves are wider), and its graceful form.

Dating: No close datings are known (cf. section 4, below).

d) *Palstaves with arch-shaped ornament on sides and sinuous outline (AXP:AS)* (figs 95a-95b)

Seven examples in the Netherlands (Cat.Nos 420-426): six in the north, one unprovenanced but presumably north (Map 33). These differ from Type AXP:AFS in that they lack flanges on the blade part.

The outline of these axes is variable, from J to sinuous. All have generously everted blade tips; the smallest specimen has a blade width of 4.2 cm, the others vary from 4.9 to 5.5 cm. The side arches are not very pronounced; one (Cat.No. 424, Losser) even has a 'negative side-arch', i.e. a shallow hammered-in arch-shaped groove. (This feature also occurs on our Cat.No. 429, a trapeze-bladed palstave from Beesel, Limburg, and on a few examples in West Germany: Kibbert,

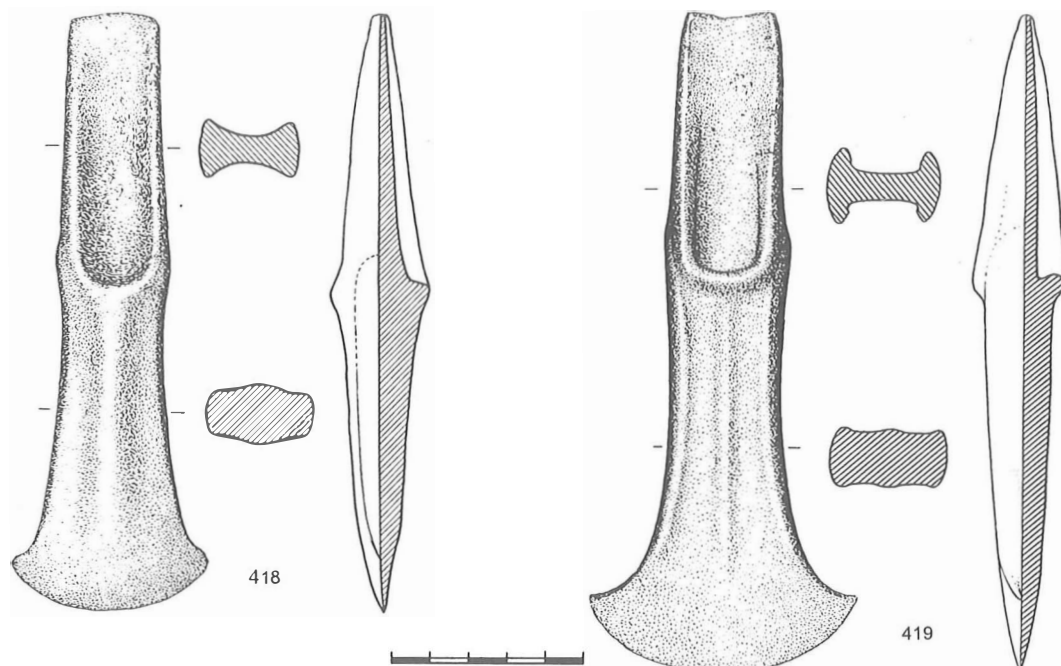


Fig. 94. (Type AXP:AMFS) 418: Driene, Ov; 419: Weenderveld, Gr.

1980: p. 247, his Nos 630 and 631, both Westphalian, and listed by him as related to his *Var. Anzin.*)

CAT.NO. 420. *GEMEENTE EMMEN, DRENTHE.*

L. 13.9; w. 5; th. 2.8 cm. Irregularly straight blunt butt; slightly concave \wedge flanges, with nearly flat sides; U septum; U shelf, inwardly sloping. Blade part with slightly convex faces and sides, concave outline, J cutting edge tips. Arch-shaped ornament on sides. Cutting edge sharp. Museum: R.M.O. Leiden, Inv.No. c. 1923/12.2, purchased from H. Gewald. (DB 399)

References: Butler, 1963b: p. 212, IV.C.5; Holwerda, 1925: p. 69, Afb. 25, No. 3.

CAT.NO. 421. PROVENANCE UNKNOWN ('found in a packing box').

L. 15.7; w. 5.5; th. (stopridge) 2.8 cm. Weight 406 gr. Straight blunt butt; \wedge flanges, with $\langle \rangle$ sides, \wedge septum; shelf stopridge, straightish on one face, slightly rounded on the other. Blade part with flat faces. Sides with arch ornament and very prominent, but hammered-down casting-seams in the form of a broad ridge; outline $\langle \rangle$. Long and wide straight-ground sharpening facet. Cutting edge sharp (slight modern re-sharpening and battering). Patina: black to dark bronze. Preservation excellent. Private possession. (DB 640)

CAT.NO. 422. WESTERBORK, *GEMEENTE WESTERBORK, DRENTHE.*

L. 10.9; w. 4.2; th. 1.99 cm. Weight: 177.6 gr. Very irregular butt; \wedge flanges with slightly rounded sides; \wedge septum; slightly rounded ledge stopridge. Blade part with very slightly convex sides and faces, $\langle \rangle$ outline. On each face a circular pit under the stopridge; arch-shaped bulges on sides. Cutting edge sharp. Patina: very dark bronze; rather corroded, pitted surface. Cutting edge sharp. Private possession. (DB 2263)

Map reference: Sheet 17B, c. 239.9/538.4.

CAT.NO. 423. ONSTWEDDE (near), *GEMEENTE STADS-KANAAL, GRONINGEN.*

L. 15.5; w. 5.45; th. 2.9 cm. Straight blunt butt; \wedge flanges with $\langle \rangle$ sides;

U septum; slightly curved shelf stopridge, strongly sloping outwards. Blade part with slightly convex faces and sides; faint arch-shaped ornament on sides. J cutting edge, recently re-sharpened. Very well-preserved. Patina: black; partly clean bronze colour. Found in a parcel of heath ground near Onstwedde. Museum: Groningen, Inv.No. 1906/1.3; purchased. (DB 168)

Map reference: Sheet 13C, c. 266/561.

Reference: Verslag, 1906: p. 19, No. 4.

CAT.NO. 424. LOSSER, *GEMEENTE LOSSER, OVERIJSEL.*

L. 15.7; w. 4.9; th. 2.6 cm. $\langle \rangle$ outline. Straight blunt butt; slightly concave \wedge flanges, with $\langle \rangle$ sides; shallow \wedge septum; flattened-U shelf stopridge. Blade part with slightly convex faces and sides, in outline parallel-sided but with flaring blade tips. Cutting edge sharp, but partly broken away; side-arch, outlined by an arch-shaped groove above it. Patina: black to dark bronze. Museum: Zwolle, Inv.No. 118. Gift of T. Morsink of Losser. (DB 247)

Map reference: Sheet 29C, c. 266/476.

Reference: Butler, 1963b: p. 212-IV.C.10.

CAT.NO. 425. ZEVENHUIZEN, *GEMEENTE LEEK, GRONINGEN.*

L. 14.6; w. 4.35; th. 2.3 cm. Butt straightish (not original); \wedge flanges; slightly rounded shelf stopridge, sloping inwards slightly. Blade part with flat faces, $\langle \rangle$ sides, with arches; in outline concave sides, with slight cutting-edge expansion. Cutting edge sharp. Patina: black. Found 1877, in a dredge pit, 5 m under the sand surface of the raised bog which was there 5 m thick ('in een baggerput 5 m onder het zandoppervlak van het ter plaatse 5m. dikke hoogveen'). Museum: Groningen, Inv.No. 1877/1.1. Presented by K. Hofkamp, director of the Burger Dag- en Avondschool at Groningen. (DB 162)

Map reference: Sheet 11F, c. 219/571.5.

References: Verslag, 1877: p. 4, sub b; Glasbergen, 1957: p. 169.

CAT.NO. 426. ODOORNER ZIJTAK, *GEMEENTE ODOORN, DRENTHE.*

L. 11.9; w. 4.5; th. 2.35 cm. Weight 270 gr. Rounded sharp butt; \wedge flanges with flat sides; shallow U septum; straightish stopridge ledge

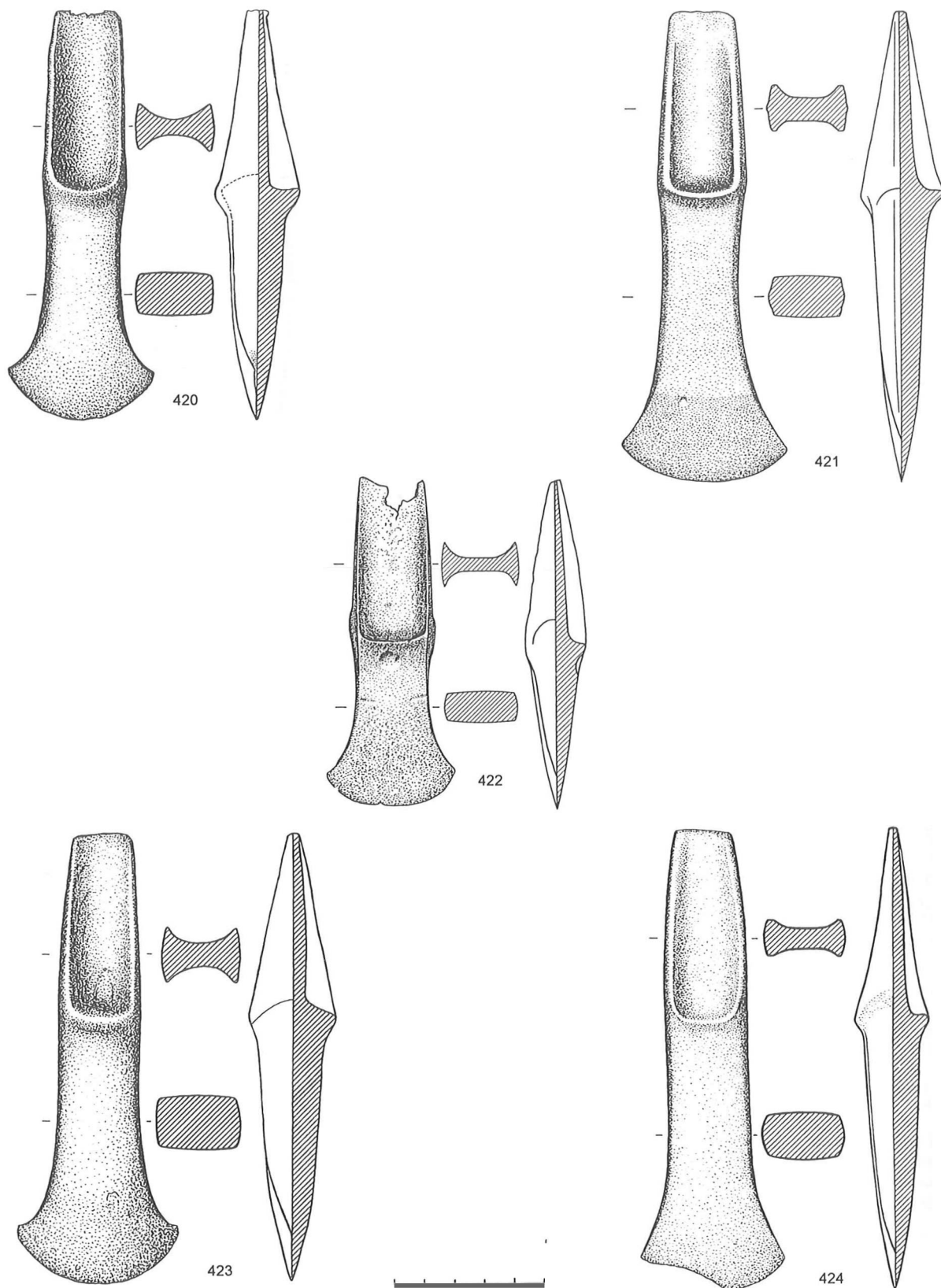


Fig. 95a. (Type AXP:AS) 420: *gemeente* Emmen, Dr; 421: provenance unknown; 422: Westerbork, Dr; 423: near Onstwedde, Gr; 424: Losser, Ov (see also fig. 95b).

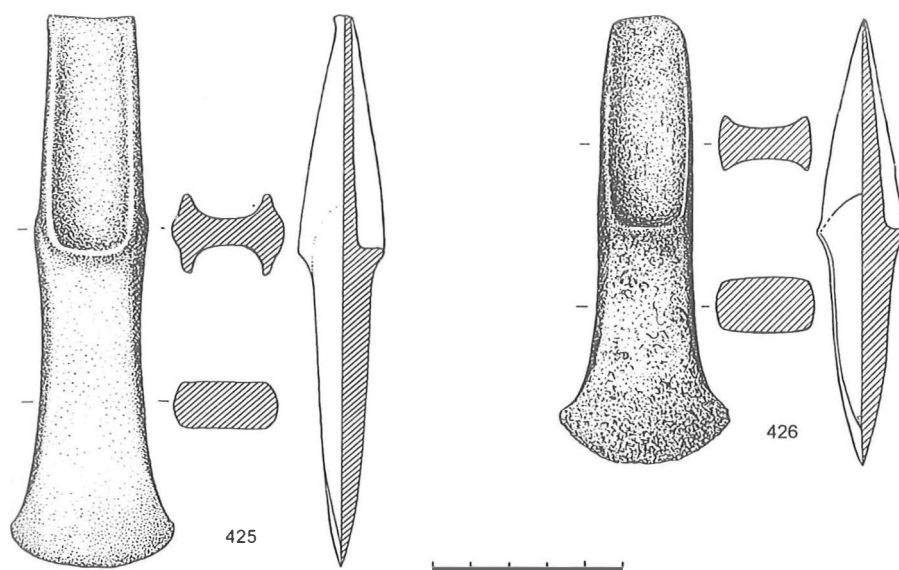


Fig. 95b. (Type AXP:AS) 425: Zevenhuizen, Gr; 426: Odoornert Zijtak, Dr (see also fig. 95a).

stopridge. Blade part of [] section, with slightly convex faces and sides; side-arches. Cutting edge with J tips, slightly pouched, sharpened but battered. Patina: black. Surface pitted. Found 1899 in the bog south of the Odoornert Zijtak, at a depth of c. 1 m. Museum: Assen, Inv.No. 1899/IV.48. (DB 98)

Map reference: Sheet 17F, c. 253/538.

References: Verslag, 1899: p. 133, No. 1605; Butler, 1963b: p. 211, IV.A.9.

Distribution Type AXP:AS: In the Netherlands, in the north (Map 33).

Parallels: Palstaves similar to AXP:AS make up the bulk of Kibbert's *Form Altenhagen-Rheydt, Var. Rheydt* (his pp. 242-244, Nos 586-597), and also of his *Form Meppen-Borken, Var. Borken* (his pp. 244-245, Nos 598-610). Both these varieties are common in the Westphalian area (Kibbert, 1980: Taf. 65C). Kibbert's distinction between these two variants is that the palstaves those of his *Var. Rheydt* have rounded stopridges, and those of *Var. Borken* straight stopridges. Almost all the North Netherlands examples of our Type AXP:AS have a rounded stopridge, so that in terms of Kibbert's definition our examples could be equated with *Var. Rheydt*. But Kibbert's drawings suggest that in fact half of the *Var. Borken* specimens also have a stopridge that is rather rounded, so that the distinction does not have any real force.

In Niedersachsen, examples are known on the Lüneburger Heide (Suderburg, Kr. Uelzen: Laux, 1971: Cat.No. 579, Taf. 75:6; note therein the confused attribution of cross-sections); Fallingbostel, Kr. Follingbostel, Laux, 1971: Cat.No. 71, Taf. 75:4).

One example is attributed either to Albersloh, Kr. Münster, or between Wachtendonk and Wankum, Kr. Geldern (Kibbert, 1980: p. 244, No. 599). Kibbert also cites as parallels for his *Var. Rheydt* a few examples from the Göttingen area (Sattenhausen, Kr. Göttingen, and 'bei Göttingen').

In general, it appears that our seven AXP:AS palstaves could be of Westphalian derivation.

Dating: No close datings are known (cf. section 4, below).

d:1) Type AXP:ASW (wide-bladed variant) (fig. 96)

Two examples in the Netherlands (Cat.Nos 427-428): one Gelderland, one south (Map 33).

CAT.NO. 427. ESBEEK, GEMEENTE HILVARENBEEK, NOORD-BRABANT. MOLENHEIDE.

L. 12; w. 5.6; th. 2.7 cm. Butt end irregular (broken off); slightly convex ^ flanges, with flattish sides; U septum; U shelf stopridge, sloping slightly outwardly. Blade part with flattish sides and faces; arch-shaped ornament on sides. Cutting edge crescent-ground, with wide J tips; pouched; cutting edge sharp. Patina: black. Very well-preserved. Museum: Tilburg, Inv.No. A.1236 (old No. 325). Ex coll. J. Lauwers (Esbeek). (DB 2049)

Map reference: Sheet 50H, c. 132/186.

CAT.NO. 428. BERG EN DAL, GEMEENTE GROESBEEK/UBBERGEN, GELDERLAND.

L. 13.7; th. 5.5; th. 3.1 cm. Convex-triangular flanges (apparently secondarily shortened), flat-faced V septum; straight shelf stopridge rounded at corners. Broad blade with flat faces. Arch-shaped ornament on sides. Edge battered. Patina: brown (partly scraped off on one side). Museum: Nijmegen, Inv.No. AC 21 (old No. E III.11c). (DB 1490)

Map reference: Sheet 40D, c. 191/426.

Parallels: A number of good parallels for Type AXP:ASW occur among some (not all) of Kibbert's *Var. Rheydt* (his Nos 586-997; pp. 243-244, map Taf. 65C) in Nordrhein-Westfalen. Kibbert cites as parallels for these: Suderberg, Kr. Uelzen (Laux, 1971: No. 579, Taf. 75:6; and Sattenhausen, Kr. Göttingen (Maier, Kr. Göttingen. No. 668, Taf. 38:6).

Dating: No close datings are known (cf. section 4, below).

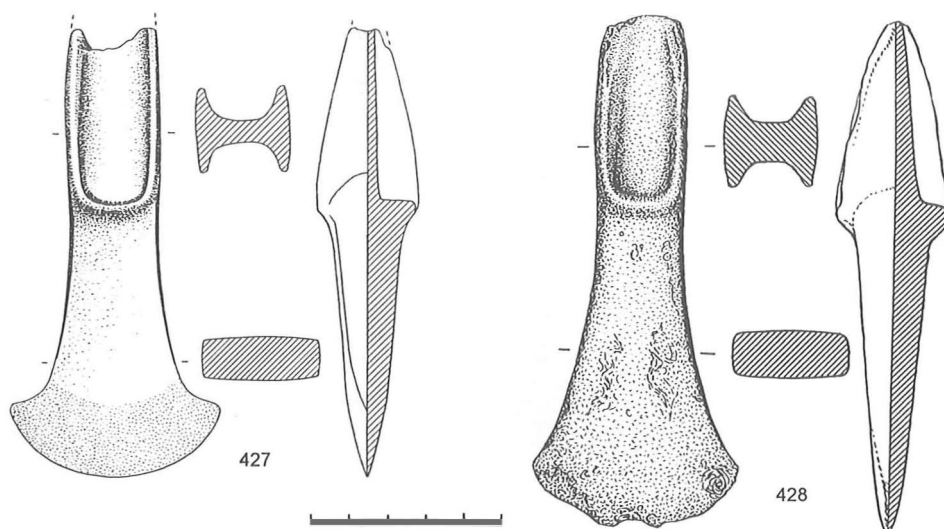


Fig. 96. (Type AXP:ASW)
427: Esbeek, N-B; 428: Bergen Dal, Ge.

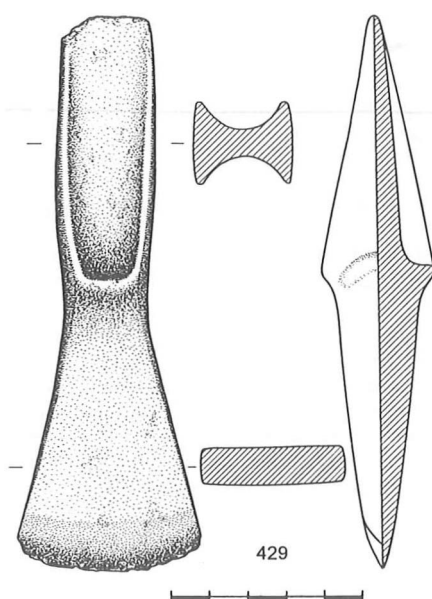


Fig. 97. (Type AXP:AGSW) 429: Beesel, Li.

d:2) *Palstave with arch-shaped groove on sides and sinuous outline, wide blade (AXP:AGSW) (fig. 97)*

One example in the Netherlands (in the south; Map 33).

CAT.NO. 429. BEESEL, *GEMEENTE BEESEL*, LIMBURG.
L. 14.7; w. 4.9; th. 3.0 cm. Weight 397.3 gr. Straight sharp butt (slightly battered); Δ flanges with slightly convex sides; U septum; U stopridge. Blade part trapeze-shaped, with flat sides and faces. Cutting edge crescent-ground, sharpened, but slightly battered. No pouches. No casting seams. On sides, at stopridge level, an arch-shaped groove. Patina partly black, partly green. Brown loamy encrustation. Well-preserved, except for some prominent recent scratches and batterings. Found in a field with metal-detector (prolific

multi-period find-spot). Private possession. Marking: 38/146 (black ink on side). (DB 2285)

Map reference: Sheet 58E, 202.5/364.8.

Note: The 'negative arch-shaped ornament' (arch-shaped groove instead of the usual bulging side-arch) occurs also on Cat.No. 424, from Losser, Overijssel, under Type AXP:AS; cf. also Kibbert, 1980: Nos 630 and 631 in Westfalen.

Cat.Nos 427 and 429 are the only side-arched palstaves known in the south of the Netherlands, apart from the western European primary shield palstave (here Cat.No. 207) from Vlodrop, Limburg.

3.4.5. *Fragmentary palstaves difficult to classify (not mapped) (AXP:) (fig. 98)*

a) *Narrow plain palstave fragment*

CAT.NO. 430. PUTBROEK, *GEMEENTE ECHT*, LIMBURG.
L. (8); th. 2.6 cm. Narrow hafting part. Butt irregular; U septum with flattish sides; U ledge stopridge. Preserved upper portion of blade part is narrow, with \cap flanges and sides; slight narrow midrib on one face only. Museum: R.M.O. Leiden, Inv.No. I.1936/3.31. Purchased from J. Geradts, Mayor of Posterholt. (DB 374)

Documentation: Correspondence R.M.O., Leiden.

Map reference: Sheet 60B, c. 198/347.

b) *Narrow plain palstave fragment, with narrow midrib on one face*

CAT.NO. 431. 'NORTH LIMBURG OR MIDDLE LIMBURG' (exact provenance unknown).

L. (8.9); th. 2.2 cm. Weight: 195.8 gr. $\{$ profile. Butt slightly rounded, blunt; very low flanges; \cap septum, convex sides; slightly rounded ledge stopridge, sloping outwardly. Blade part with straight parallel sides (insofar preserved), convex faces and sides. Slight trace of narrow midrib present on one face only. Anciently broken; part of the patina on the break survives, although part is worn off. Somewhat rolled. Patina originally brown (preserved especially on the septum),

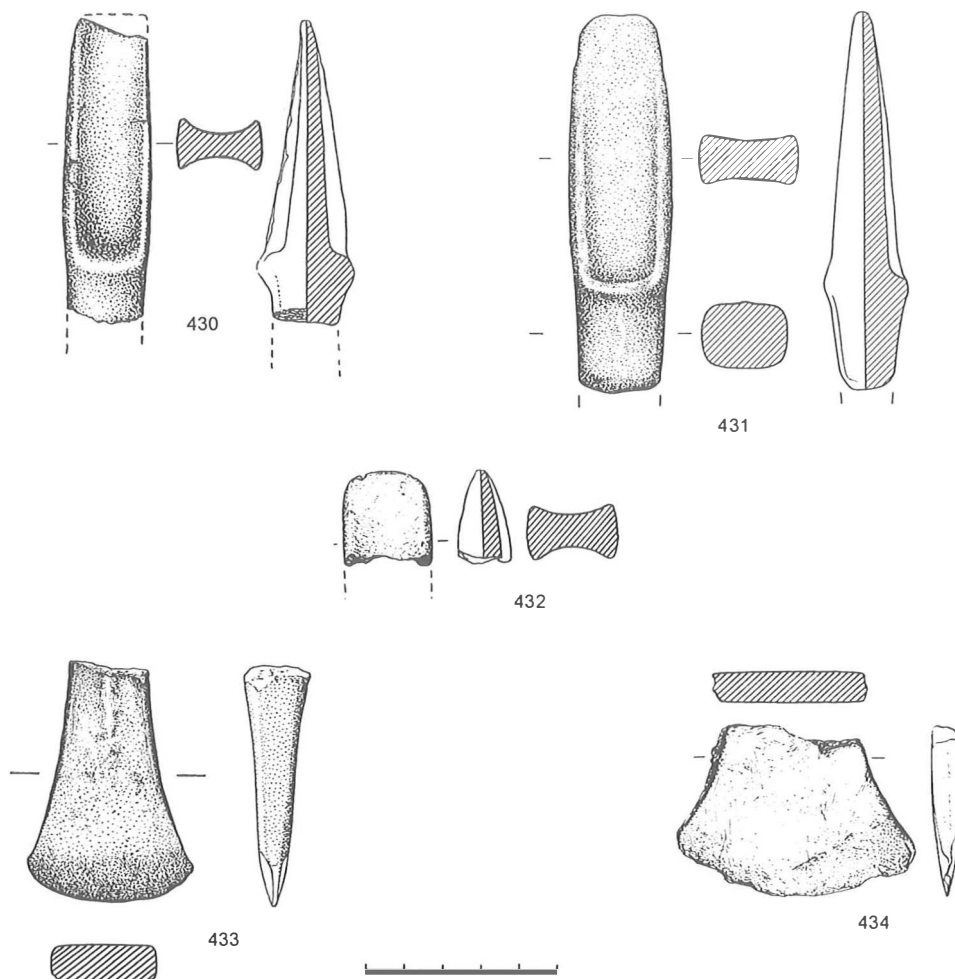


Fig. 98. (Fragments) 430: Putbroek, Li; 431: North or Middle Limburg; 432: Roswinkelerveen, Dr; 433: provenance unknown; 434: provenance unknown.

but mostly light dull green, with bronze colour at abraded places along the break and on the edges of flanges and the stopridge. Found Autumn 1985 by H. Hoeymakers (Tienray) among potatoes, the exact origin of which was not traceable. Collection: Oudheidkamer Horst. (DB 835)

Reference: Schatorjé, 1986: p. 127, afb. 19.

c) Butt fragment

CAT.NO. 432. ROSWINKELERVEEN, GEMEENTE EMMEN, DRENTHE. NIEUWE SCHUTTING (from bog hoard). L. (2.2) cm. Small fragment of the butt of a palstave; slightly rounded blunt butt; U septum. Part of hoard, further information see Part I. Museum: Assen, Inv.No. 1924/X.12. (DB 1212)

Map reference: Sheet 18A, 262.8/538.8

References: Verslag, 1924: p. 16, Nos35-41; Butler, 1992: pp.63-64, Fig. 9:5.

d) Palstave fragment with narrow midrib, moderately wide blade

CAT.NO. 433. PROVENANCE UNKNOWN. L. (6.4); w. 4.3; th. 2.1 cm. Blade part only. [] section, expanding blade. Narrow midrib. Cutting edge sharp. Collection: unknown. (DB 608)

e) Palstave fragment with wide blade

CAT.NO. 434. PROVENANCE UNKNOWN.

L.(4.4); w. 6.3 cm. Portion of blade part only. Wide blade; cutting edge sharp. Collection unknown. (DB 323)

3.4.6. Palstaves: locus unknown, sketch available, inadequate information (not mapped)

CAT.NO. 435. 't ZAND, GEMEENTE ZELHEM, GELDERLAND L. c. 20 cm. Palstave, known only from a brief note, with crude thumbnail sketch, in the diary of Captain H. J. Bellen (Ede) under 27 January 1926. The palstave had been dug up by a brother of the then



Fig. 99. 435: 't Zand, Ge (sketch H.J. Bellen).

owner, who died in 1926. Present locus unknown. (DB 1942)
Documentation: Diary Captain H.J. Bellen, under 27 Jan. 1924.
Map reference: Sheet 41A, c. 222/449.8.

CAT.NO. 436. MONTFORT, *GEMEENTE* AMBT MONFORT, LIMBURG.
 L. 15.5; w. 5.5 cm. Palstave found near the bridge across the Vlootbeek. Patina filed off. Purchased 22 July 1901 by Major E.H.J. Vander Noordaa and mentioned in his diary, with a thumbnail sketch. This palstave did not pass with Noordaa's collection to the R.M.O. Leiden; present locus unknown. (DB 2256)
Map reference: Sheet 60B, c. 193/348.

3.4.7. *Palstaves: locus unknown, no drawing available, inadequate information (not mapped)*

CAT.NO. 437. *GEMEENTE* HAAKSBERGEN/*GEMEENTE* EIBERGEN, OVERIJSSSEL/GELDERLAND.
 Palstave mentioned by G.J. Ter Kuile. Formerly in Museum Enschede, but lost before 1969. (DB 2347)
Reference: Ter Kuile, 1909: p. 21.

CAT.NO. 438. PROVENANCE UNKNOWN.
 Palstave, formerly in museum Denekamp. (DB 1334)

CAT.NO. 439. EDE, *GEMEENTE* EDE, GELDERLAND. RIET-KAMPEN.
 Palstave, c. 15 cm. long, private possession, present locus unknown. Information from W. Metz (I.P.P., Amsterdam). (DB 750)
Map reference: Sheet 39F, 172/448.

CAT.NO. 440. VIERLINGSBEEK, *GEMEENTE* VIERLINGSBEEK, NOORD-BRABANT.
 A looped palstave is listed by Beex (1970) as having been purchased in 1890 by the R.M.O., Leiden. According to verbal information from L. Verhart, curator of the R.M.O., the Museum has only a winged axe from Vierlingsbeek purchased between 1890 and 1900. (DB 925)
Map reference: Sheet 46D, c. 198/400.
Reference: Beex, 1970.

4. ON THE CHRONOLOGY OF PALSTAVES IN THE NETHERLANDS

Palstaves make their first appearance in the Netherlands as rather scarce imports in the Sögel-Wohlde phase (on current views more or less in the 15th century BC). In the course of this phase imported examples come from various directions. From North Germany or Denmark we have at least the one Type Ilsmoor/Neukloster palstave, our Cat.No. 178, in southern Drenthe. From the South German area, there is at least the palstave-chisel, our Cat.No. 243, in North Brabant. From Britain and western France, came imports in somewhat greater numbers: we have at least the transitional stopridge axe-palstaves, Cat.Nos 191-192, and the Early Shield Palstaves of Acton Park and other variants, Cat.Nos 193-212. In this phase, the cast-flanged axes of Oldendorf and other types presented in Part II:1 (Butler, 1995/1996) were apparently far more important, and are likely to have been locally manufactured in western Germany and the eastern part of the Netherlands. There is no evidence to suggest we had in this phase our own regional palstave production.

The next-following chronological phase – Period II in the North European chronology, the Taunton phase in Britain, *Bronze moyen 2* in western France (centering in the 14th century BC according to the dendrodates of the Danish treetrunk coffin graves) – was the period in which in various regions in western and northern Europe fairly standardized palstave types were evolved, and were produced on a considerable scale. Some of those products were imported into the Netherlands. From northern Europe came almost all the palstaves of our Group I (Map 22), from the West most of those of our Group II (Maps 23, 24).

It would be in this period that the regional palstave types of our Group IV appeared in Northwest Germany, the Netherlands and Belgium. Direct dating evidence is, however, extremely scarce. Highly unusual is a find like that of the Sleen-Galgenberg in Drenthe, with a local (if somewhat atypical) palstave (our Type AXP:FSW) in the primary grave of a timber circle monument of the local Middle Bronze B.

The North Netherlands-Northwest German palstaves, which have typological features reflecting influences from both these major directions, almost never occur in datable grave finds or hoards, so that it is not possible to offer a useful discussion of their detailed chronology. Broadly, there is no reason to doubt that our regional types emerged more or less contemporaneously with the North European and western European types referred to in the preceding paragraph. Palstaves with a 'brace' profile, i.e. with reduced flanges and somewhat projecting stopridge, as fig. 41:7 – in our catalogue abbreviated with the symbol {} – have, typologically speaking, a status intermediate between earlier palstaves (leaf-flanged or with triangular flange outline), and palstaves belonging to the British-Northwest French 'late' type. The transition cannot be directly dated in the Netherlands, owing to the absence of datable finds. In the West German area of Kibbert (1980), however, brace-outlined palstaves become common within many of his types dated by him to the *mittlere* and *jiingere Hügelgräber* periods (he does not distinguish between these two phases in his palstave datings). Further comment on this point will perhaps become possible when we have full accessibility to the Northwest German material. Occasional associated finds in Germany make some contribution to the comparative chronology of our regional palstave development. We may mention here:

Hohenfelde, Kr. Steinburg (Aner & Kersten, 1993: p. 31, Kat.Nr. 9386, Taf. 10-11). This Northern Period II hoard, found 1951, near the Elbe mouth in Schleswig-Holstein, contains nine palstaves and a fragmentary decorated spearhead of Jacob-Friesen's Type Smørumøvne. One of its palstaves (Taf. 10c) is at the least very closely related to our Type AXP:AFS (above, Cat.Nos 401-417). The other palstaves in the hoard are normal northern types with blade flanges and thin or trumpet midrib.

Wardböhmen, Kr. Celle: *Schafstallberg*, Grave 16,

Burial II (Piesker, 1958: Taf. 60:5-9; Laux, 1971: p. 183). In this grave on the Lüneburger Heide, a palstave comparable with our Type AXP:FS (possibly FSW) was accompanied by a *Hügelgräber* midrib dagger and a pin of Laux Type *Westendorf* (see above, under Type AXP:FS). Laux dated the grave to his *Zeitgruppe I*.

Darmstadt-Arheilgen, Tumulus group Bayerseich (Hessen) Hgl. 124, Gr. I ('Hauptbestattung', 'mehrere Männergräber' (Kibbert, 1980: p. 180, No. 436, pp. 229-231, Taf. 69J). Here a palstave of Kibbert's *Typ Baierseich, Var. Dörnigheim*, a local palstave type (Kibbert's No. 552), has a ribbed 'belt' at stopridge level, reflecting influence from North European Period II palstaves (cf. our Cat.Nos 186 and 240). This, and another palstave in the same assemblage, have trapeze-shaped blade part (No. 552, also with a 'crinoline' finish to the cutting edge), suggesting a parallel relationship with our AXP:PA palstaves; in probable association with *jiingere Hügelgräber* objects.

Köln-Nippes, Nordrhein-Westfalen, grave find. Palstave similar to the first-mentioned Darmstadt specimen; probably found together with rapier resembling Schauer's *Typ Weizen*, pin probably of Kubach's *Typ Haitz* (Kibbert, 1980: p. 228, No. 551, Taf. 71A).

These finds not only illustrate the contemporaneity of Northern Period II palstaves with the South German *jiingere Hügelgräber* horizon, but also suggest the beginning of at least some of our Northern and Southern regional types in the same period. An even more difficult question, however, is that of the length of the period of manufacture and use of the various palstave types. In the North European area, palstaves practically disappear from the find record after Period II; but in Britain palstaves continue on until the end of the Bronze Age, and distinct 'Late' palstave types emerge. In Middle western Germany, Kibbert recognizes the beginning of most of his palstave types within the *mittlere* and *jiingere Hügelgräber* phases, corresponding chronologically to the Northern Period II; but sees a number of plain unlooped types as at least in part parallel with the *friihe* and *ältere Urnenfelder* and Northern Period III.

There are, however, difficult questions to be raised: to what extent are the dating ranges of this second group actually justified by the very small number of associated finds in which they occur, and to what extent is that dating applicable to the finds in the Netherlands? A thorough-going re-examination of this material is evidently required.

In the Netherlands there are exceedingly few dated Late Bronze Age palstave associations:

Vilt, gemeente Berg-en-Terblijt, Limburg: we have already given our reasons (above, under Cat.No. 322) for doubt as to the validity of the association of the palstave with the other objects attributed to this hoard. Only if genuinely associated would it date the palstave (an atypical example of our Type AXP:PH) to the '*Stufe Oberbeck*' of Kibbert (1980, 1984); a phase which he

intercalates to represent an early part of Ha B, parallel with an early part of Northern Period V. But the association may not be genuine (different patina), or the palstave could long predate the deposition of the hoard.

Bargeroosterveld, Drenthe, hoard of 1900: one complete looped palstave, plus the middle fragment of a second (and, as far as it goes, very similar) example (Cat.Nos 233-234). The palstaves were found with a pair of Northwest German *Nierenringe*, a small Urnfield knife, and other objects. The North European Period IV dating depends on the *Nierenringe*. The dating is supported by the North German find, as a hoard or unrecognized grave, of a rather similar looped palstave (though with a more trapeze-shaped blade) with a double-T-handled Urnfield knife at Barrien-Bülten, Kr. Grafschaft Hoya in Niedersachsen (Prüssing, 1982: p. 87, No. 186, Taf. 27A). The rather rare double-T-handled knives, a specialized version of the Central European Urnfield knives, had been claimed by Sprockhoff (1941) as a characteristic form of his *Ems-Weser Kreis*. Later a spectacularly large example was found in the Netherlands (Butler, 1973b) and more recently there have been several new stray finds in the West German area: Xanten, from the Rhine; Petershagen, from the Weser; Löhne-Meninghöfen, Kr. Herford (Koschik, 1993; *Neujahrsgrüß/Jahresbericht Museum Münster* 1994: pp. 32-33, *Bild B*). Their dating depends, apart from typological considerations (the blade form of these knives is that of Central European HaA2 and B1 varieties), chiefly on the Danish Vejby grave (Thrane, 1972: p. 167, Abb. 1) which contains a Northern Period IV tweezers.

Both the Bargeroosterveld and Barrien-Bülten palstaves were accepted by Schmidt & Burgess (1981: pp. 130-131) as probable West European exports, and assessed by them as falling more or less on the borderline between British 'transitional' and 'late' types. Their dating would be somewhere around the transition between the Penard and Wilburton phases. A large fragment seemingly from a palstave similar to the Bargeroosterveld examples is present in the hoard II (found 1919) from Boutigny-sur-Essone, in the Paris area (Mohen, 1977: pp. 117-118, 128-129, No. 311-350; esp. p. 128, No. 3120). The hoard contains HaA2 articles as well as West European types; Mohen dates the find to Bronze final II, and equates it chronologically with Wilburton and St. Brieuc-des-Iffs.

There are, however, no full-fledged British-West French 'late' palstaves (in Britain current in the Wilburton and Ewart Park phases) in the Netherlands. It would therefore seem that palstaves play an extremely limited part in our exchange networks in the Late Bronze Age.

5. SUMMARY AND SOME CONCLUSIONS

Our Map 21 shows in a generalized way the area in

which Middle Bronze Age axes (high-flanged axes, stopridge axes and palstaves) were used in the Netherlands, by indicating the *gemeenten* (as of 1986) in which at least one axe of these types has been found. This distribution corresponds in general with the area inhabited in and around the Middle Bronze Age. Much of the western part of the country was subject to marine inundation or was peat-covered at that time; though recent excavation has shown that at least parts of the western coastal dune belt, and of the fossil sandy creek ridges in the West Frisian (North Holland) area around Hoogkarspel were occupied. The northern coastal marine-clay area were not settled until the beginning of the Iron Age. In the East, a few areas – especially eastern Gelderland (the Achterhoek) and southern Limburg) are, however, unaccountably find-poor, possibly merely through lack of interest on the part of collectors and researchers.

We have here attempted to distinguish between palstaves of import types – divided into those of North European, Central European and western European origin – and types of regional manufacture.

The import types. It is, of course, difficult to be certain whether import-type palstaves are actual imports, since they could be local imitations (which would, of course, have been copies of imported examples). But in the Netherlands the number of import-type palstaves is so limited, and the types represented are so heterogeneous, with so few examples of each type occurring, that it seems very likely that the greater number of those found here were actually imported.

Classified as belonging to import types are 66 palstaves. Among these, 13 are of North European types, 50 of western European types, and only three of Central European types.

The North European-North German palstaves are, as Map 22 shows, found predominantly in Drenthe, with a few notable exceptions: the belted palstaves from Velsbroek, Epe and Texel.

The Drenthe finds parallel other North European influences, such as the import of amber necklaces (Butler, 1990: pp. 48-59) which concentrate especially in southern Drenthe. The grave finds (Velsbroek, Texel) in the coastal dune-area of belted North European palstaves occur in areas which (as the recent excavations have shown) were by no means poor in Bronze Age settlement, despite their paucity of finds of metal-work. We have suggested that these burials may represent an intrusive group, bringing along prestige weapons from the Elbe Mouth area.

The import of palstaves from northern Europe may well have begun during North European Period IB. At least the IJsmoor/Neukloster palstave from Emmercompascuum (Cat.No. 178) belongs formally to that phase, in which the high-flanged axes of Type Oldendorf (Butler, 1995/1996: Cat.Nos 79-136, Map 14) were however the predominant axe type in the eastern regions

of the Netherlands as well as in Jutland and North Germany. All the other northern palstaves found in the Netherlands are of types which in Denmark and North Germany would be assigned to the Northern Period II. In this period, on the indirect evidence of our Epe hoard (Butler, 1990: pp. 91-92, fig. 23), which contains no northern palstave, but a British-type one which must be contemporary with the Northern Period II, the flanged stopridge axes of the apparently locally made Type Vlagtweede were current (and apparently more numerous) in the IJssel area, Twente and Drenthe (Butler, 1996: p. 230, Map 17).

Palstaves of varied western European types occur in modest numbers (fifty examples, from 34 finds) in various parts of the Netherlands – West, South, Centre – but only two finds (the shield palstave from Norg, Cat.No. 216, and the two ‘late’ palstaves from the Barger-ooisterveld hoard of 1900, Cat.Nos 233-234) are known from the area east and north of the River IJssel (Map 24).

A special case is that of the Voorhout hoard (Cat.No. 193 ff), in the western dune area of South Holland (Map 23). Its North Welsh ‘Acton Park’ shield palstaves do not otherwise occur in the Netherlands. It is therefore not entirely clear that we could have here a local secondary production centre, such as seems to have existed at Pyrzyce near the Baltic in Poland and Habsheim along the Rhine in Alsace (where palstaves imitative of the Acton Park type were apparently locally cast, alongside local axe types) or, perhaps more probably, that the Voorhout find is simply a hoard of imported objects.

A possibly parallel case may be the Northeast Polder or Flevoland find (Cat.Nos 222-224), but its evidence has been muddled by heavy corrosion of the objects coupled with poor documentation of the find.

Chronologically, the import palstaves from western Europe extend from the British-Northwest French Acton Park-Tréboul phase (the Voorhout hoard), through the Taunton/*Bronze median* II and the Penard/Rosnoën phases, but hardly or not at all in the Wilburton-*Bronze final* IIIa phase. Import objects from the German *Hügelgräberkultur* area are even scarcer; only the *Niedermockstadt-Reckerode* palstaves from Doorwerth and Vught (Cat.Nos 239 and 240) are certain examples, the two unprovenanced Bohemian palstaves (Cat.Nos 241-242) being very probably modern import. The *Var. Reckerode* palstaves are dated by Kibbert to the *mittlere* or *jüngere Hügelgräberzeit*. The Doorwerth and Vught examples take their place alongside the finds of *Hügelgräber* pins, bracelets, sickles and occasional other objects which will be discussed subsequently in this series.

The regional types. Nearly three-fourths (71%) of the 260 palstaves found in the Netherlands are assignable to ‘regional’ types. These are palstaves which, on the basis of the distribution of their types (as far as at present

known), may be presumed to have been made in the Netherlands, or in adjacent areas of West Germany or Belgium.

Direct evidence for bronze-casting in the Netherlands has not been found. Only one casting mould for palstaves has been found in the Netherlands: the fragment of a bronze half-mould dredged from the River Maas at Buggenum, Limburg (above, Cat.No. 323). Since palstaves closely comparable to that which could be cast in the Buggenum mould are lacking, it may be that this mould fragment was imported simply as a piece of scrap metal intended for recycling, and it may never have actually been used for casting in this area (the palstave also from the Maas at Buggenum, above, Cat.No. 394, has a similarly shaped blade, but it possesses a midrib, which products from the Buggenum mould would not have had). In western Germany, a palstave which could have been cast in the bronze palstave mould from Werne (cf. above, under Cat.No. 324) would also be quite atypical for the Netherlands and western Germany; the mould itself may be of British origin (cf. Kibbert, 1980: p. 218), and there is no real evidence that the mould was actually employed in the region in which it was found.

On the other hand, the heavy predominance numerically – around 4/5 of the total – of palstaves of types with a limited, regional distribution constitute plausible evidence for the production of these types within the region in which they occur. Moulds of bronze or of clay could have been employed for their production. That hardly any bronze moulds have been found could be explained by the supposition that such moulds, being normally in the possession only of bronze-casting workshops, would normally be melted down when no longer usable; remains of clay moulds would mostly have escaped recognition.

Noteworthy is the absence among the regionally produced palstaves – northerners, southerners, and those common to both areas – of palstaves with a distinctively prestige-object character. A single possible exception is the (somewhat) extravagantly sized and proportioned Cat.No. 419, from Weende in Groningen province; but even this is a modest specimen compared, say, to some of the more flamboyant Scandinavian display palstaves. All the rest in the Netherlands seem to be ordinary workaday objects.

Slightly over half of the regional palstaves (96 out of 185 = 52%) are plain palstaves; 16 of these are looped and 80 unlooped. Midrib/midridge regional palstaves number 40 (22% of the 185); only eight of these are looped, and 32 unlooped. Palstaves with side arches number 30 (16% of the 185), none of which have loops. Palstaves with flanged blade part number 19 (10% of the 185), none of them looped.

Our typological analysis, and the resultant mapping of the distribution of the various palstave types, indicate that there are significant differences in distribution within the country. The major differences are between a northern

and a southern region. The northern region occupies primarily the territory of the provinces of Drenthe and Overijssel, with as fringes the prehistorically inhabited parts Groningen, Friesland and Flevoland. Across the border, its relations are with at least the German Emsland and Oldenburg. The southern region encompasses Netherlands Limburg and the eastern half of North Brabant, and also the riverine area around Arnhem and Nijmegen, now part of Gelderland. Across the borders its relations are with the German North Rhine area and Westfalen, and the Belgian Maas area.

There are palstave types that are common to both these regions. Chief among these are the plain palstaves with sinuous outline and medium or wide blade expansion (Types AXP:PS and AXP:PSW). These two types together represent 22% of the 185 regional palstaves in the Netherlands.

In our northern region, the palstave population is in large measure dominated by a series of types, heterogeneous in many respects, but having in common either the presence of a raised arch-shaped ornament on the sides (our AXP:A... series); or the presence of side flanges on the blade part (our AXP:F... series). Some northern palstaves (Type AXP:AFS) have both those features. The AXP:A... series includes Types AXP:AS, AFS, AMFS, ASW, ASWG, and AH, with a total of 30 specimens (more than half of these are AXP:AFS). The AXP:F... series includes AXP:FSW, FSJ, and FSN, with together 14 examples. These types are either totally or almost totally unrepresented in the South. Other types which are predominantly represented in the Northern region are AXP:PHJ, with eight of its nine examples in the North, and AXP:PS<, with five of its seven examples in the North.

In our northern region, we attribute 85 palstaves out of the total of 99 found (thus 86%) to the 'regional' types. Winged axes are not known to occur in the North. In the Late Bronze Age palstaves seem to have been almost entirely replaced by socketed axes; palstaves have not been found in any of the relatively numerous northern-region Late Bronze Age hoards, with the single exception of Bargoosterveld 1900 (Cat.Nos 233-234). In the southern region, the varied sorts of palstaves possessing a midrib or midridge (AXP:M...) are the most common, with c. 30 examples. Also prominent in the South are plain palstaves with a trapeze-shaped outline of the whole axe or of the blade part (AXP:/ and AXPL:/); of the 17 examples of these, 16 are in the South and only one in the North.

Among the 65 palstaves found in the two southern provinces, 54 (thus 83%) are attributable to southern regional types. In the Late Bronze Age the palstave stock in the South was supplemented by a limited importation of winged axes from the East French-West German area. In the last phase of the Late Bronze Age in our southern region the palstaves were seemingly almost entirely replaced by socketed axes (Butler, 1973a; 1987).

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