

rock seems to consist largely of the weathered debris of igneous rocks, mainly acid. Clearly it is a geosynclinal sediment such as is common in the Lower Palaeozoic of Southern Scotland, N.W. England, Central Wales, and similar areas in Europe (*e.g.* the

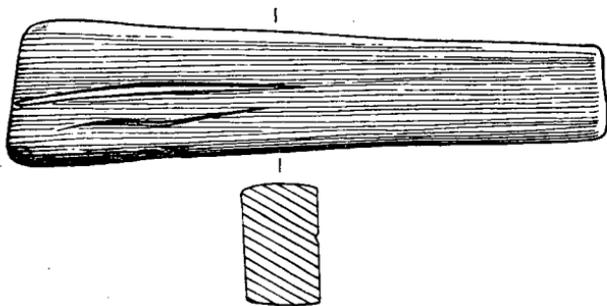


FIG. 57.—The hone. ($\frac{1}{2}$).

Ardennes province), but it has not been exactly matched and lacks distinctive characters. It somewhat resembles type 4 of Morey and Dunham's hones from Yorkshire (*Proc. Yks. Geol. Soc.*, 29, No. 8, 1953; p. 144), matched by them with rocks from various localities in the Southern Uplands of Scotland, and this would seem the most probable source. A hone closely resembling this was found recently at Backbury Hill, Dorset.

THE IMPORTED POTTERY

by G. C. Dunning, F.S.A.

The imported pottery was found in five pits, namely Pits 2, 3, 13, 14 and 16. The other pottery in the pits associated with these imports varied from pit to pit. Pits 2 and 16 contained Ipswich ware only, while in Pits 3, 13 and 14 Ipswich ware and Thetford ware occurred together in varying proportions. From these associations it is clear that the imported pottery arrived at Ipswich while Ipswich ware was still in use, but at the time of the introduction of Thetford ware. The imported pottery therefore provides crucial evidence for defining the terminal dates of these two major groups of pottery at Ipswich, and presumably also in East Anglia generally. Three classes of imported pottery are represented; rouletted Badorf ware, red-painted Badorf ware, and relief-band amphora. All the imported pottery is middle Rhenish in origin and appears to belong to the same period in the middle ninth century. It follows that two fixed points are now determined for the associated pottery. First, the lower terminal date of Ipswich ware must be

brought down to the middle of the ninth century. Secondly, the upper terminal date for the introduction of Thetford ware must now be extended back to the middle of the ninth century.

DESCRIPTION OF IMPORTED POTTERY (Fig. 58)

(a) *Rouletted and strip-decorated Badorf ware*

PIT 2

Sherd of Badorf ware. Buff ware with yellow-toned surface. Rouletting in two zones, each of two lines of notches (Fig. 58, 1).

PIT 3 (DITCH)

Sherd of Badorf ware. Buff ware with yellow-toned surface. Rouletting in three lines (Fig. 58, 2).

PIT 13

Layer 2. Sherd of Badorf ware. Pink ware, yellow outside surface. Applied ridged strip running vertically below the neck (Fig. 58, 4).

Layer 3. Five sherds of plain Badorf ware. Grey core, yellow surfaces.

PIT 14

Layer 1. Sherd of plain Badorf ware. Grey core, smooth yellow surfaces.

Layer 3. Sherd of Badorf ware. Yellow core, white surfaces. Rouletting in two zones, the lower of two lines of notches (Fig. 58, 3).

Layer 3. Sherd of plain Badorf ware. Grey core, smooth yellow surfaces. This sherd and that from layer 1 in the same pit are much thicker (5 to 9 mm.) than the rest (3 to 4 mm.), and probably belong to the same pot.

Layer 6. Sherd of plain Badorf ware. Yellow core and surfaces.

(b) *Red-painted Badorf ware*

PIT 13

Layer 2. Sherd of Badorf ware. Black core and inside surface. Outside light reddish-brown. Decorated with narrow lines of dark red (almost black) paint running vertically (Fig. 58, 5).

PIT 14

Layer 1. Sherd of Badorf ware. Grey core, light brown inside surface with grey tones. Outside light reddish-brown. Decorated with lines of dark red paint running vertically. This sherd and that from Pit 13 are apparently from different pots (Fig. 58, 6).

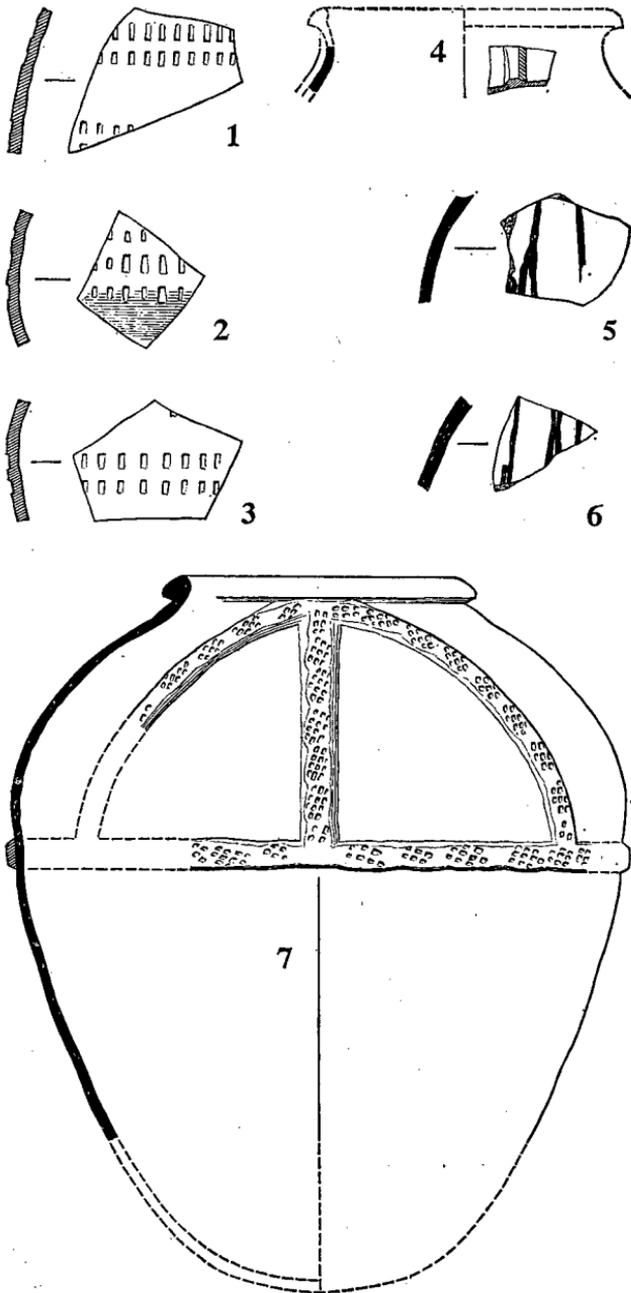


FIG. 58.—Imported Badorf ware. 1—3, 5, 6. ($\frac{1}{2}$); 4 and 7. ($\frac{1}{4}$).

(c) Relief-band Amphora

PIT 16

Layer 6. Large fragment of rim and upper part of relief-band amphora. A smaller separate piece of the lower part continues the profile towards the base (Fig. 58, 7).

The ware is gritty and fired very hard. In fracture the fabric has a 'sandwich' colour, light red in the core between grey layers on each side. The surface is yellow and lumpy in texture where the grits project.

The rim is rolled outwards and has a sharp outer edge. The decoration consists of applied strips in high relief, and covers the upper part of the vessel down to below the bulge. It is limited below by a horizontal strip, and between this and the rim is a series of curved strips forming arcs, each almost a half-circle. The arcs are divided down the middle by a vertical strip. The spacing allows for three such arcs round the pot.

The strips are decorated with the repeated impression of a stamp. At some places the impressions are blurred or overlap one another, but evidently the stamp was elongated, about 0.85 in. long by 0.45 in. wide, and consisted of three rows each of four square or oblong notches.

The amphora has the following dimensions: rim diameter, $6\frac{1}{4}$ in.; bulge diameter, $12\frac{1}{4}$ in.; and the height is estimated at about 14 in. The base would come to a blunt point, as restored in the drawing.

DISCUSSION

The three classes of imported pottery found in the pits at Ipswich belong to well-known groups originating in the middle Rhineland. Thence the pottery was exported in some quantity over considerable distances by land and sea in north-west Europe.¹⁰

The fragments of Badorf ware are representative of the two well-defined classes of this pottery. The first is light in colour, whitish or yellow toned, and the sides of the pot are comparatively thin. The decoration is usually made by a roller-stamp, forming zones of square notches. Incised girth-grooves or wavy lines, and occasionally applied strips (as on the sherd from Pit 13) also occur. The types to which the Cox Lane sherds belonged were either spouted pitchers or more probably spouted amphorae (like Fig.

¹⁰ For a general account of the Rhenish trade in pottery see G. C. Dunning, 'Trade Relations between England and the Continent in the Late Anglo-Saxon Period', *Dark-Age Britain* (ed. D. B. Harden, 1956), 222 ff.

58, 7 but smaller);¹¹ the latter type is already represented in this country at Canterbury.¹²

The second class of Badorf ware is dark in colour, grey or brown in the core, with red-toned brown surface; the sides are about twice the thickness of the first class. The decoration is painted rather irregularly in vertical lines of dark red, which often fires to a dark brown colour. Sometimes the painting is combined with and runs across bands of roller-stamped notches.¹³ In fact the red painting forms a transition between Badorf ware and the Pingsdorf ware which succeeded it.

The relief-band amphora from Cox Lane belongs to the class of amphora with roll rim close against the side of the pot, which therefore has no neck and is without handles. Complete examples of such amphorae are published from Badorf itself,¹⁴ and from Raard, Friesland¹⁵ and Birka in Sweden.¹⁶ Several fragments of amphorae with roll rims and relief-band decoration are illustrated from Badorf.¹⁷ In size the Ipswich amphora is a rather small member of its class. It measures 12¼ in. in bulge diameter and about 14 in. in height. Complete amphorae often attain 20 in. in diameter and 24 in. in height, and have a correspondingly greater capacity.

The strip decoration on relief-band amphorae is usually in two or even three zones extending from the rim or neck down to well below the bulge. The deep upper zone has arcading, below which are narrower zones either of arcading or simple geometric patterns such as chevrons or triangles.¹⁸

The date of the imports at Ipswich depends partly on the fact that Badorf ware and relief-band amphora only are represented. The absence from any of the pits of red-painted Pingsdorf ware, which immediately replaced Badorf ware at the beginning of the tenth century, should be noted. Pingsdorf ware is well represented at London and other places in England,¹⁹ and its absence from the Cox Lane pits at Ipswich is therefore of some significance, and indicates that these pits were filled up and went out of use before

¹¹ For type specimens see *Dark-Age Britain*, p. 224, Fig. 49, 1-2. For examples of decoration see W. Lung, 'Töpferöfen der frühmittelalterlichen Badorfware', *Kölner Jahrbuch*, vol. I (1955), 55-65.

¹² *Medieval Archaeology*, vol. III (1959), 54, Fig. 26, 6-7.

¹³ The definitive account is by W. Lung, 'Zur Frage der Rotbemalten Badorfware', *Kölner Jahrbuch* vol. I (1955), 67-70.

¹⁴ *Kölner Jahrbuch*, vol. I (1955), 59, taf. 15, 1.

¹⁵ P. C. J. A. Boeles, *Friesland tot de elfde Eeuw*, (1951), 434, plate 50, 4.

¹⁶ Arbman, *Schweden und das Karolingische Reich*, (1937), 95, taf. 23.

¹⁷ *Kölner Jahrbuch*, vol. I (1955), 59, abb. 3.

¹⁸ F. Rademacher, 'Karolingische Keramik am Niederrhein', *Altes Kunsthandwerk*, vol. V (1927), 174, taf. 133.

¹⁹ *Medieval Archaeology*, vol. III (1959), 55-6, Figs. 28-30.

the arrival of this ware. This conclusion is not based solely on negative evidence, because recently part of a red-painted pitcher of Pingsdorf ware was found on a site in Queen Street in Ipswich (Fig. 59, 1). Another site in Ipswich produced a red-painted vessel, already published,²⁰ which is an import from the kilns in Dutch Limburg and dated about the twelfth century. Finally, from two sites in Ipswich come small round-based cooking-pots or

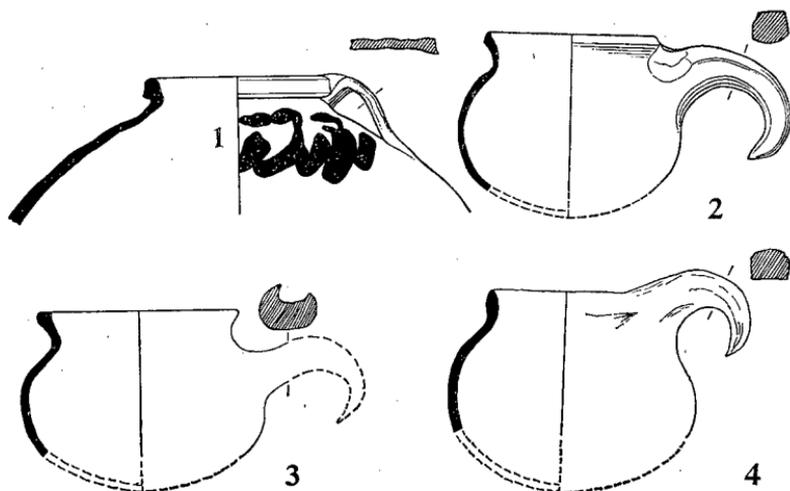


FIG. 59.—Imported Pingsdorf ware and handled ladles from Queen Street and the Buttermarket. (½).

ladles with curved handles, made of whitish or grey ware (Fig. 59, 2-4). Nos. 2 and 3 are from the same site in Queen Street as the Pingsdorf ware, though whether found in association is not known, and No. 4 is from the site of Corders in the Buttermarket. No. 3 is exceptional in that the outside below the bulge is sooty, showing its use over a fire for culinary purposes. No. 4 has an unusually small handle rising above rim-level. These pots are also imports from the lower Rhineland or the Low Countries.²¹ Although the type starts earlier in the Rhineland, some of the examples found in England are probably not earlier than the twelfth or even the thirteenth century. Abroad the latest in date belongs to the early thirteenth century; it was last used as the container of a hoard of pennies of Count Floris IV (1222-34).²² Ipswich has thus now produced a series of imported pots which are

²⁰ *Ibid.*, 56, Fig. 29, 5.

²¹ *Ibid.*, 56-60, Figs. 31-2 and 76, Fig. 40, Figs. 17-8.

²² *Berichten R.O.B.* (Amersfoort), vol. ix (1959), 302, afb. 24.

striking evidence of continuous and direct trading connections with the Rhineland from the ninth century onwards. In this respect the record at Ipswich is second only to that of London for the number and variety of the pottery imported from this region.

DATING

It remains to determine the date of the imported pottery found in the Cox Lane pits. As stated already, the imports belong exclusively to Badorf ware, of which twelve sherds of the light variety were found in four pits, and two sherds of the dark variety in two of these pits. In addition a relief-band amphora was found in another pit. The imports therefore occurred in no less than five of the fifteen pits on this site, a high proportion considering the small amounts of imported pottery known from some of the settlements of the period, such as Thetford, Norwich and York.

The presence of dark Badorf ware is significant, because this is regarded as a transitional form between this group and Pingsdorf ware, with which it shares the red-painted decoration. On the other hand, the absence of true Pingsdorf ware from the pits is also significant for the dating, since this pottery has now been found elsewhere in Ipswich and was widely imported into England. The problem thus boils down to finding the end-point of Badorf ware, or the beginning of Pingsdorf ware which followed so closely on it.

The best time-scale for the various groups of pottery made in the middle Rhineland, and their periods of exportation is still that provided by the stratified filling of the stream which passed through the town of Hedeby (Haithabu) in Schleswig.²³ In his definitive monograph on the pottery found at Hedeby, Hübener has confirmed the work of Jankuhn and others, and discussed the dates assigned to the various groups of Rhenish pottery found there and elsewhere.²⁴ At Hedeby the light variety of Badorf ware is present from the founding of the place about 800, and continued to be imported during the ninth century. The dark variety of Badorf ware appears about the middle of the ninth century, and is succeeded by Pingsdorf ware at the turn of the ninth and tenth centuries. Relief-band amphorae appear at Hedeby in the middle of the ninth century (though they are dated elsewhere to the first half of this century), and continued to be imported until the middle of the tenth century, thus overlapping the periods of the other groups.

Since the publication of Hübener's book, Braat has reviewed the evidence of the imported pottery found at sites on the Flanders-Flemish coast, and sought to define more closely the dating of

²³ Summarized, with references, in *Dark-Age Britain*, 223-6.

²⁴ W. Hübener, *Die Keramik von Haithabu* (Neumünster, 1959).

Badorf and Pingsdorf wares in Holland.²⁵ He supports the belief that the production of Badorf ware came to an end in the closing decades of the ninth century, and would place the arrival of Pingsdorf ware in Holland earlier than at Hedeby. The revised dating proposed in southern Holland may well have more application to the imports at Ipswich than does the time-scale worked out at Hedeby, in view of the position of Ipswich on the shortest sea route from the mouth of the Rhine, and the close trade relations with Holland and the Rhineland which become increasingly evident as fresh discoveries are made.

The date of the imported pottery in the Cox Lane pits may now be assessed. It belongs to the ninth century, and may be more closely defined as covering the first half and middle of the century (c. 800-850). The presence of light Badorf ware in quantity suggests that importation began during the first half of the century. The lower terminal date is given by the dark Badorf ware, and is supported by the absence of Pingsdorf ware from the site. The later pottery might be expected if the use of the pits had continued much into the second half of the century. The presence of relief-band amphora is consistent with the proposed dating, but does not qualify it.²⁶ The fact that Thetford ware occurred in both of the pits (Pits 13 and 14) which contained dark Badorf ware as well as the light variety is interpreted to mean that the change-over from Ipswich ware to Thetford ware happened about the middle of the ninth century.

THE COINS

by R. H. M. Dolley, M.R.I.A., F.S.A.

The two coins found in the course of the Ipswich excavations are both of sufficient importance to warrant discussion separately at some length.

(A) SILVER PENNY OF KING ÆTHELWEARD OF EAST ANGLIA

(Plate XXXVII, 1).

Obv. EDELPAROREX cross-crosslet.

Rev. +TVICAMONET long cross pattée with pellets in the angles.

Die-axis: 200°. *Wt.:* 18.8 grains. Uneven greenish patination.

²⁵ W. C. Braat, 'Die frühmittelalterliche Keramik von Burgh', *Oudheidkundige Mededeelingen*, vol. xli (1960), 95-106.

²⁶ Evidence has lately been published that the time-range of amphorae extended down to the later eleventh century (*Bonner Jahrbücher*, 162 (1962), 204), when arcading as on the Cox Lane example still occurs. Possibly the shape of the amphorae is an indication of date. The eleventh century one from Xanten is almost cylindrical with well rounded base, whereas that from Ipswich is more pointed or carrot-shaped at the base.