

Imported Pottery in Dark-Age Western Britain

By CHARLES THOMAS

Lecturer in Prehistoric Archaeology, University of Edinburgh

THE recognition that wheel-made pottery from continental or Mediterranean sources occurs widely in western British sites of the dark-age period came first from Tintagel, Cornwall, exactly twenty-five years ago. In a report on the excavation of the monastery there,¹ Radford (following a suggestion by Wheeler) indicated the presence of exotic sherds whose counterparts appeared to lie in Gaul or further afield. In so doing, he initiated a field of research which has since grown to considerable size, has involved some twenty major sites, and may eventually lead to a firm chronology of the archaeology of the so-called 'Celtic west'.

It is therefore appropriate to take the opportunity of summarizing the quarter-century's work in this direction, and to offer here, in a Journal primarily devoted to material evidences, an analysis and a catalogue of the relevant wares. It must be stressed that the descriptions and distributions are far more reliable² than the attributions of the various types of pottery to distant sources—necessarily so, until much more work has been done—but it is most earnestly hoped that, to avoid future confusion, those concerned with the archaeology of the period will adopt the classification put forward here as a standard one.

This paper deals firstly with the actual pottery, classified, carefully described, and where possible assigned to a source; secondly, with the chronological framework; and lastly, with some of the outstanding problems still to be faced. An appendix gives, with full reference to published examples, the distribution of all the various classes of pottery, corrected to December, 1959.

In the report on the work at Garranes, co. Cork (Ó Ríordáin, 1942), four types of pottery were described and illustrated, and in a footnote (*ibid.*, p. 133) Radford outlined his preliminary classification of an overlapping series from Tintagel. On this dual basis, Radford was able, in his study of these wares for the E. T. Leeds memorial volume (Radford, 1956), to put forward four amended classes, A, B, C and D, and to furnish a distribution list. During the interval, however, I had been obliged to make further subdivisions of Radford's categories, and to add a fifth class, E (Thomas, 1954). In this paper, two more classes, F and G, are added. There can be little hope of discarding this sprawling classification until a great deal more is known of the contents.

¹ C. A. Raleigh Radford, 'Tintagel: the castle and Celtic monastery—interim report,' *Antiq. J.*, xv (1935), 515 and n. 4.

² I would emphasise here that, with negligible exceptions, I have both seen and handled all the material listed in the Appendix.

MEDITERRANEAN WHEEL-MADE WARES

The heading covers classes A and B. Class A comprises table-wares in the late Roman tradition, class B, amphorae and lagenae. Although their continental nature was recognized at an early stage, the suggestion of an eastern source for Aii, Bi and Bii is comparatively new (Thomas, 1957). In the last six months, field-work in France and Spain by Bernard Wailes has allowed comment upon these two classes with much more certainty.

CLASS A: SUBDIVISIONS A i AND A ii

A i bowls are wheel-made in a soft orange-red, pink, or brownish-red fabric, very finely levigated with almost no grit. The fractures are flaky and easily eroded. A matt wash, usually in a darker shade of red, covers both surfaces. Some bowls are of Drag. 38 form; on others, with a moulded upright rim, rouletting in single, double, or triple horizontal rows occurs. The bases have low foot-rings. Five of the Tintagel bowls of this class had shallow stamps on the internal base—three were expanded Latin crosses and two, part of some curvilinear design (? a chi-rho, or a dolphin's back and tail).

Illustrations: Tintagel—Radford (1956), fig. 13, p. 61.

Gwithian and Porthmeor—Thomas (1957), fig. 5, nos. 1 to 5, p. 17.

A ii bowls are wheel-made in a harder fabric of much the same colour range, though a buff shade occurs. Fractures are much sharper than in A i, and, in the same soil, Aii also resists decay better. Decoration is confined to single-row rouletting on the exterior of an upright moulded rim. The bases have foot-rings. The matt wash, perhaps a little more lustrous than in A i, is of body colour, and not darker, and is noticeably poorer on the external surfaces of the vessels. Differences in the colour of the wash on the rim, and that on the internal surface, have been noted.

Illustrations: Tintagel—Radford (1956), fig. 14, p. 62.

Garranes—Ó Ríordáin (1942), fig. 23, no. 249, p. 132.

Previous discussion of the sources (Radford (1956), p. 65 et seq.) allowed a north African or Egyptian origin for class A i, mainly on the grounds of the distinctive Christian symbols. Unfortunately the intermediately-placed Spanish and French examples cited (*op. cit.*) have transpired to be other kinds of pottery altogether,³ making the British instances even more outlying than had been thought. The attribution of class A ii to a southern Gaulish pottery-family (late colour-coated and stamped wares) led me to put forward an alternative theory (Thomas, 1957), namely that A i and A ii were more closely linked than had been supposed, and that both belonged, not to the southern Gaulish, but to the east Mediterranean 'Late-Roman' group. Individual points of resemblance—decoration, rim-form, fabric, wash or slip, and the stamps—were broken down, and comparison with actual sherds from the east Mediterranean has since made it clear that class A ii is indeed Late-Roman B or C, and that class A i is, in some unspecifiable way, connected with it.

Very good parallels come from such places as the Agora at Athens, Antioch,

³ Mr. Bernard Wailes has seen these, and has with great generosity permitted full mention of his own results in studying classes A, B and E on the continent in advance of his own publication.

the Great Palace of the emperors at Constantinople, and Tarsus.⁴ The position would be more satisfactory were it not for the very small number of sherds of either type of class A ware yet recovered in Britain, and the statistically inexplicable lack of basal sherds whose internal stamps could supply further evidence.⁵

Mr. Wailes has supplied the following brief summary of his examination of the south French material of this general type:

'Terre sigillée claire, divisible into types I and II on grounds of fabric, covers roughly the period from the late second to the fifth centuries. It resembles neither British A i nor A ii. Of the wares decorated with impressed stamps, there are the well-known Visigothic stamped wares, a grey version (céramique grise) and an equivalent in red ware: these have been named stamped ware Ia and Ib, but again there is no resemblance to either British A i or A ii. A further ware, far less common, but locally dated from the fourth to the sixth century, may be called stamped ware II. It resembles, in fabric, terre sigillée claire II; the slip or wash covers only the interior and the top of the rim, and the stamps are simpler and more sparingly applied than in either of the two kinds of Visigothic stamped wares. Stamped ware II can be regarded as fairly close to British A ii, but it must be emphasized that it is confined to a small number of sites in southern France, Catalonia, and possibly Sardinia and Majorca, and may itself be either an import from the eastern Mediterranean, or a "first generation" local copy of some such import.'

As this last sentence again brings us back to Late-Roman B and C, the implication is that class A ware in Britain was sea-borne all the way via the Straits of Gibraltar, and not taken overland from Marseilles to Bordeaux. Nothing of this type has been found either from Bordeaux or through the Narbonne gap. The implication has, as will be seen later, chronological value.

CLASS B: SUBDIVISIONS B i, B ii, B iii AND B iv

In this large group are to be found the various mass-produced containers for wines, oil, and perhaps even such luxuries as dried fruit and the mysterious *garum*. The few literary references, quite apart from the contexts in which sherds of these vessels have been recovered in Britain, make it clear that such were imported to fulfil the liturgical needs of the Celtic church, or to indulge the nostalgic tastes of local chieftains.

B i amphorae are large wheel-made pots, up to 2 ft. high, with fairly wide (3 to 4 in.) necks, finger-grooved handles, slightly swelling shoulders and blunt points—a devolved 'carrot' form. No complete example has yet been reconstructed, and it may be that a more globular type also existed. The fabric is medium-hard, with sharp fractures, and a range of both body and surface colours from a pronounced pink-red to buffs and even orange-red. Common to all shades of paste is the presence of irregular lumps of a white grit, up to 3 mm. long, which dissolve in acid soils and are probably a type of limestone. Decoration is confined to an area of uncertain extent from the base of the neck downwards, interrupted only by the lower springings of the two handles. This looks like close, sharp horizontal grooving produced with a comb,

⁴ The references are cited in Thomas (1957). Convenient summaries of the Late-Roman group exist in the Antioch report: F. O. Waagé, 'Hellenistic and Roman tableware of north Syria,' in *Antioch-on-the-Orontes*, iv, part 1: *Ceramic and Islamic Coins* (Princeton, 1948), pp. 1-61. Late-Roman B may be north African.

⁵ Mr. Radford has already suggested the probability that pieces of class A pottery were removed from monastic sites as souvenirs: this would apply *a fortiori* to pieces bearing Christian symbols.

and the name 'comb-surfaced' has been applied to this class, but it transpires that in some, probably in all, cases this was done by holding a sharp point up against the body whilst the pot still revolved, and by moving the point slowly upwards to form what is in essence a tight continuous spiral.⁶

Illustrations: Tintagel—Radford (1956), pl. vi B, p. 62.

Garranes—Ó Ríordáin (1942), figs. 19 and 20, p. 128.

This kind of vessel does not seem to occur in Gaul. Wailes confirms its absence in likely collections in south French museums, but has recently found instances in Barcelona.⁷ Eastwards, one might cite occurrences, published and unpublished, from Ventimiglia (Albintimilium), Palazzolo Acreide in eastern Sicily, Eleusis, Chios, Constantinople, and a group of sites on the Rumanian Black Sea coast.⁸ A specimen from Sicily,⁹ when compared with samples from four British sites, shows precisely the same heavy white grit and angle of stylus-grooving. A source within some wine-producing area further eastwards seems, however, to be indicated by the general distribution, and one thinks therefore of the Greek islands.

B ii amphorae are more globular than *B i*, and a nearly complete profile has been obtained at Gwithian, Cornwall. The bases are only slightly, if at all, pointed, the two handles are thick and stumpy, and the neck diameter (about 3 in.) smaller than *B i*. The paste, both surface and body, is a light red or reddish-buff, rarely with an orange tone, and exhibits a visible sprinkling of white sand in the fabric. In acid soils, dissolution of this sand can give the surfaces a minutely 'corky' appearance. The whole vessel is decorated with horizontal ribs about 4 mm. wide, rounded or flattened, which are produced on the wheel with a spatula. The ribs are close enough to form a sort of corrugation at neck and base, and gradually spread out to about 2 in. apart at the girth.

Illustrations: Garranes—Ó Ríordáin (1942), figs. 21-22, pp. 130, 131.

Bantham—Fox (1955), fig. 2, p. 58, pl. xvii.

If the *B i* vessels were meant for wine, it is tempting to see the globular *B ii* amphorae as oil (i.e. olive oil) containers. Their interior surfaces often show some whitish deposit, not yet analysed, which is absent from *B i* sherds, and the form has been definitely associated with the carriage of this substance, as Grenier shows in his analysis of Gallo-Roman amphora types.¹⁰ The joint occurrence of class *B i* and *B ii* on so many sites in Britain might suggest a connexion between them, and they are also found associated at Barcelona, Ventimiglia, Byzantium, and the Black Sea coastal towns. Sherds of this ware from early Christian sites in western Turkey, and from the Great Palace at Byzantium, exactly match British instances

⁶ Thanks are due to Mr. John Boardman (Ashmolean Museum) who demonstrated this from examples found by him at Chios.

⁷ Recovered from two places in Barcelona during reconstruction work, and duly identified by Wailes in the equivalent of the City Surveyor's department.

⁸ References in Thomas (1956). For the Rumanian sites, see *Dacia*, II (1931), 135, fig. 55: *id.*, III-IV (1933), 411, 470, 557 and 586, figs. 36-39, 62, 70, 90, 93: *id.*, V-VI (1935), 419 et seq. I owe this recondite but fruitful source to Professor Stuart Piggott.

⁹ In the collection of the Dept. of Prehistoric Archaeology, University of Edinburgh, and obtained *in situ* by Prof. Piggott.

¹⁰ A. Grenier, *Manuel d'archéologie . . . (Déchelette)*, VI, pt. 2, *Archéologie gallo-romaine* (Paris, 1934), fig. 226 on p. 639, forms 20 and 23, refer; also p. 638, note 1, *passim*.

in respect of colour, fabric, and decoration.¹¹ A source in the same area as that of class B i is very probable.

B iii amphorae sherds are those which exhibit no decoration at all, and which cannot be regarded simply as undecorated parts of vessels of classes B i and B ii. It is possible to subdivide B iii even further on grounds of fabric,¹² but the very plainness of the material precludes much chance of finding a source. A coarse red variety, a thicker fabric with an external buff slip, and a thick pinkish-red type with distinct lamination, occur. All sherds are wheel-made and carelessly finished. In general, they are all much redder in tone than common Roman buff amphorae, but there are no stamped handles, nor is there any valid distributional association.

No illustrations are shown. The writer feels that a Mediterranean source is more likely for some of the material than a Gaulish one, but literary (mostly Irish) references could be adduced to suggest that the Bordeaux region formed the base for some type of amphora and the export of wine to Britain, even under Visigothic domination.

B iv vessels are true lagenae—fairly small, with little, stubby bases, globular bodies, a small, high, constricted bottle-neck with a thickened rim, and two little strap-handles coming from the rim to the beginning of the shoulder. The ware is very competent, with a clean fracture, and highly distinctive. It varies in body and surface colour (they normally agree) from a soft dull red to a rather striking dark reddish-brown, but always with a plentiful sprinkling throughout the fabric of tiny plates of golden mica. No examples have yet been illustrated, and I only identified this as a separate class a few years ago. A strange characteristic is that, though decoration is absent, a 'fluted' appearance may be noticed on larger sherds. This takes the shape of broad and very shallow horizontal concave bands, divided at intervals of just over an inch by scarcely perceptible rounded ridges.

Exact parallels, both in ware and in form, come from an early-fifth-century level at Byzantium.¹³ The group may well come from there. Sherds in good condition possess a striking and entirely non-British look.

In addition to the four groups within class B, there are a number of finds from Britain which look as if they should be included, but which cannot yet be more precisely defined. They are listed in the Appendix. Mention need be made only of two. The first is a group of sherds from Dinas Powis, from a large buff-surfaced amphora within the B iii class. The exterior of this vessel had borne groups of incised horizontal lines (not stylus-grooving) in a regular system (6—4—6—4—6—5—4, and so on). This can be matched in a general way by sherds of a large amphora from the Great Palace at Byzantium, similarly decorated (9—1—9—1—9—1—9, etc.), and a connexion is perfectly possible.¹⁴ In the second instance, sherds of B i or B ii fabric, or an allied paste, occasionally show a surface like corrugated paper: a kind of compromise between the decoration of

¹¹ These were seen through the courtesy of Mr. Michael Gough and Mr. R. B. K. Stevenson respectively, at Edinburgh.

¹² As was done, e.g. in Thomas (1954) and Thomas (1956): it showed little, except perhaps that the buff-slipped variety (B iii b) is the most-widely spread.

¹³ Seen in Edinburgh (*per* Mr. R. B. K. Stevenson) and there compared with B iv material from Tintagel and Tean, Scilly.

¹⁴ One such is illustrated, Alcock (1955), pl. viii, no. 8, and I am grateful to Mr. Alcock for subsequently showing me the remaining fragments at Cardiff.

B i and that of B ii. This, too, has a Mediterranean counterpart at Palazzolo Acreide, Sicily.¹⁵

WHEEL-MADE WARES OF SUB-ROMAN CHARACTER

The term 'sub-Roman' is here used in the precise sense in which I have recently defined it¹⁶: culturally, to indicate continuing Roman influence on material life in the areas contiguous to the former Roman civil zone (perhaps within it, too), and chronologically, the period approximately from A.D. 380 to 500. In this specific case Armorica (Brittany) may be included. Somewhere within these temporal and spatial limits, it is suggested, wheel-made and kiln-fired pottery was still being produced up to at least the middle of the fifth century. Without being too precise, such places as the vale of Severn, south Wales, the Cotswolds, south Devon, the Carlisle-Lancaster region, and north of York, are all possibilities.

CLASS C: NO SUB-DIVISIONS

This heading is taken to cover a small series of jugs or pitchers, described by their excavator as 'a coarse grey ware with a rough, red-brown surface, occasionally red-brown throughout. The only shape is a small broad pitcher with a concave neck, pinched-in spout and broad ribbon-handle decorated with deep stabs.' (Radford (1956), p. 60.)

The type is only found at one site, Tintagel: the instances mentioned by Radford (*op cit.*, p. 63) from Dunadd are all sherds of one single pitcher of class E iv. Mr. Radford has kindly informed me, in advance of the definitive Tintagel publication, that class C sherds are stratigraphically associated with sherds of A and B. He would see a connexion with a somewhat similar group of pitchers from southern France, 'thought to go back to the fifth century'.¹⁷

CLASS D: NO SUB-DIVISIONS, AS YET

Until recently this class was thought to be represented by a single type, a small low mortarium, best shown from Dinas Powis, where a complete profile was obtained.¹⁸ There is a rounded rim, and a spout weakly defined by an everted gap on the crest of the rim. Grit-studding occurs internally. The fabric is a soft, fine paste in a uniform dull grey with very little grit, the surfaces bearing traces of a wash in a very dark grey-black, almost a dull blue-black.

I am grateful to Mr. Alcock for the news (*in litt.*, June, 1959) that a further analysis of recent material from Dinas Powis shows other kinds of vessel represented in the same ware: these include cordoned bowls, bowls with bases like the mortararia, but lacking the grits and with internal rouletted or stamped ornament, and finally a pedestal base. 'All these are in perfectly characteristic D ware.'

¹⁵ The British instances (see Appendix) are from South Cadbury Castle, and Tintagel. The Tintagel sherd offers a very close match. The Sicilian sherd is at Edinburgh (note 9, *supra*).

¹⁶ Charles Thomas, 'The Celtic dark ages,' *Archaeol. News Letter*, vi, no. 6 (1958), fig 1, p. 132.

¹⁷ Mr. Wailes informs me that he was unable to find evidence to support this view in southern France: the supposed parallels are locally regarded as very much later in date. It is my personal belief, already communicated to Mr. Radford, that class C of Tintagel is a local medieval form: in this view I am joined by Mr. E. M. Jope.

¹⁸ Unpublished, but seen in Cardiff through the kindness of Mr. Alcock.

Whilst this dark-grey-washed ware can be found on vessels in both northern and southern Gaulish contexts, it does occasionally occur in quite late Roman collections in this country.¹⁹ Alcock refers to unstratified fragments from Caerleon in a grey ware close to class D, rather paler and harder but in one case with a dark blue-grey wash: he also emphasizes that the trick of grooving the under side of the base to produce a false 'foot-ring' is seen in material from Sudbrook, Monmouth, in the third or fourth century (*Archaeol. Cambrensis*, xciv (1939), fig. 7, no. 66). In these circumstances, and since the widest range of the class is seen at Dinas Powis, Alcock would justifiably favour a Bristol-Channel origin for Class D ware. A spread from here to Tintagel is easily explicable: to Dunadd in Argyll, and the Mote of Mark in Kirkcudbrightshire, less so.

CLASS G: NO SUB-DIVISIONS

The small bowls and dishes of class G exhibit a dull red, buff, or reddish-pink fabric far too gritty to be confused either with class A i or A ii. Surviving instances have all been slipped with a darker red wash of an impermanent type, that flakes off easily and is normally seen only in grooves and below the rims. The contexts of the finds would suffice to rule out a third- or fourth-century date, unless they represent unusually long ceramic survivals (of various late colour-coated or pseudo-Samian wares, for instance). In some cases, the forms themselves do not suggest Romano-British types.

As the Appendix demonstrates, occurrences of class G ware are widely scattered and need not be related, though some seem to be: they have a predominantly coastal distribution. In five of the ten sites involved, better-known imported wares are found, and two of the remaining five sites are otherwise known to be of sub- or post-Roman date.

GREY WHEEL-MADE BOWLS (FORMERLY CLASS A III)

These are small low bowls, flat-based, without foot-rings, and with thickened everted rims. The fabric is competent and well-fired, but contains small to medium grits. The paste is a dull brownish-grey, and the surfaces have a dull grey wash on them.

This group was until recently (Thomas (1957), p. 18) called class A iii, and regarded as the product of an attempt to copy the red A i and A ii bowls, but the idea is not really tenable and must be dropped. The two sites involved are both on the Cornish coast, and the sub-Roman context is not disputable. An external source is historically more likely than a Cornish one.

The four groups—C, D, G and the grey bowls—taken together, then, may be either late-fourth or early-fifth century British products (in the case of D, this appears very probably so) or they may include vessels from some continental source where similar wares were being produced at this stage. Class G could perhaps be regarded in the latter light. The only decorated piece (apart from the

¹⁹ E.g. a late flanged bowl, wheel-made but slightly lop-sided, whose paste and wash strongly recall class D, in Lincoln Museum. It is from the Trollope collection, found 'in or near Lincoln' and the writer is grateful to the authorities for permitting him to examine and draw it. The ware is not apparently typical of Roman pottery in the Lincoln area.

class D rouletted bowls, which have earlier and purely local parallels) is the well-known sherd with part of a chi-rho and an *A* and *Ω* from Dinas Emrys, Caern.,²⁰ here placed in class G, but conceivably attributable to the red stamped ware from the Visigothic area. It is not, apparently, an A ware.

NORTHERN GAULISH OR FRANKISH WHEEL-MADE WARES

The largest group of sherds, representing some seventy to eighty vessels of at least five types, is the class called E. The ascription, first to France (Thomas, 1954), then to north-western France (Thomas, 1958), represented little more than guess-work. In December, 1958, I realized that I had been misled by the distributional pattern in Britain alone, and that class E is connected only with classes A and B insofar as it shared, to a certain extent, a common market with them. It is suggested here, in advance of a more detailed paper on the same topic by Bernard Wailes and myself, that class E vessels have more in common with the Rhineland than with southern or western regions.

CLASS E: SUB-DIVISIONS E i, E ii, E iii, E iv AND E v (PL. V, FIG. 43)

E ware vessels are produced on a fast wheel, and are strongly finger-corrugated on the inside. The ware is fired at a high temperature, approaching that of stoneware, and fractures cleanly if irregularly. The fabric is profusely gritted with small (1 to 2 mm.) pieces of quartz, with smaller fragments of a white substance—the two suggest use of a quartzite sand—and odd small lumps of a red or reddish-brown material, which suggests finely-crushed sherds of something like Argonne ware. Outer surfaces were occasionally smoothed whilst wet, giving a feel like a very fine sandpaper, but normally have a minutely granular or ‘pimpley’ appearance, as if the grits nearest the surfaces had²¹ partly thrust through. The colour range is wide. A dirty white is common for the interior, and may be due to reduction, but the exterior surfaces vary, from the same with grey and yellow tones to ochre and even dull red, or reddish-grey and a dark grey (the last variety often has dark grey internal surfaces). Considerable experience in handling the material is usually necessary for firm identification. On all shapes, a mildly concave under side and a raised whirl on the interior of the base are common. Marks of ‘string cut-off’—removal of the pot from the moving wheel with a taut string or wire—show in the form of a series of decreasing circles all tangential to the external basal edge at a common point.

E i jars are rounded cooking-pots from 6-8 in. high, with a swelling girth, a concave neck, and a rounded or ‘heart-shaped’ everted rim whose external diameter is less than the widest girth, and whose top sometimes shows traces of a vestigial lid-groove.

Illustrations: Garranes—Ó Ríordáin (1942), fig. 18, p. 126.

Lagore—Hencken (1950), fig. 58, p. 124; fig. 59, p. 125, no. 285 only, showing ‘string cut-off’ on base.

E ii beakers are small drinking-vessels with a pronounced carination, but otherwise are miniature versions of the jars. All instances found in Britain are 3 to 3½ ins. diameter and 2½ to 3 ins. in height.

²⁰ See H. N. Savory in *Trans. Caernarvon Hist. Soc.*, xvii (1956), 1-8, pl. 2. The sherd, seen through the courtesy of Dr. Savory, was recovered in a fragmentary state and had to be treated with a preservative: this, alas, makes it hard to be positive as to the precise nature of the fabric.

²¹ Mr. William Lake, master-potter of Truro, Cornwall, regards the granular surface of typical class E ware as the result of firing with dried turves or peat.

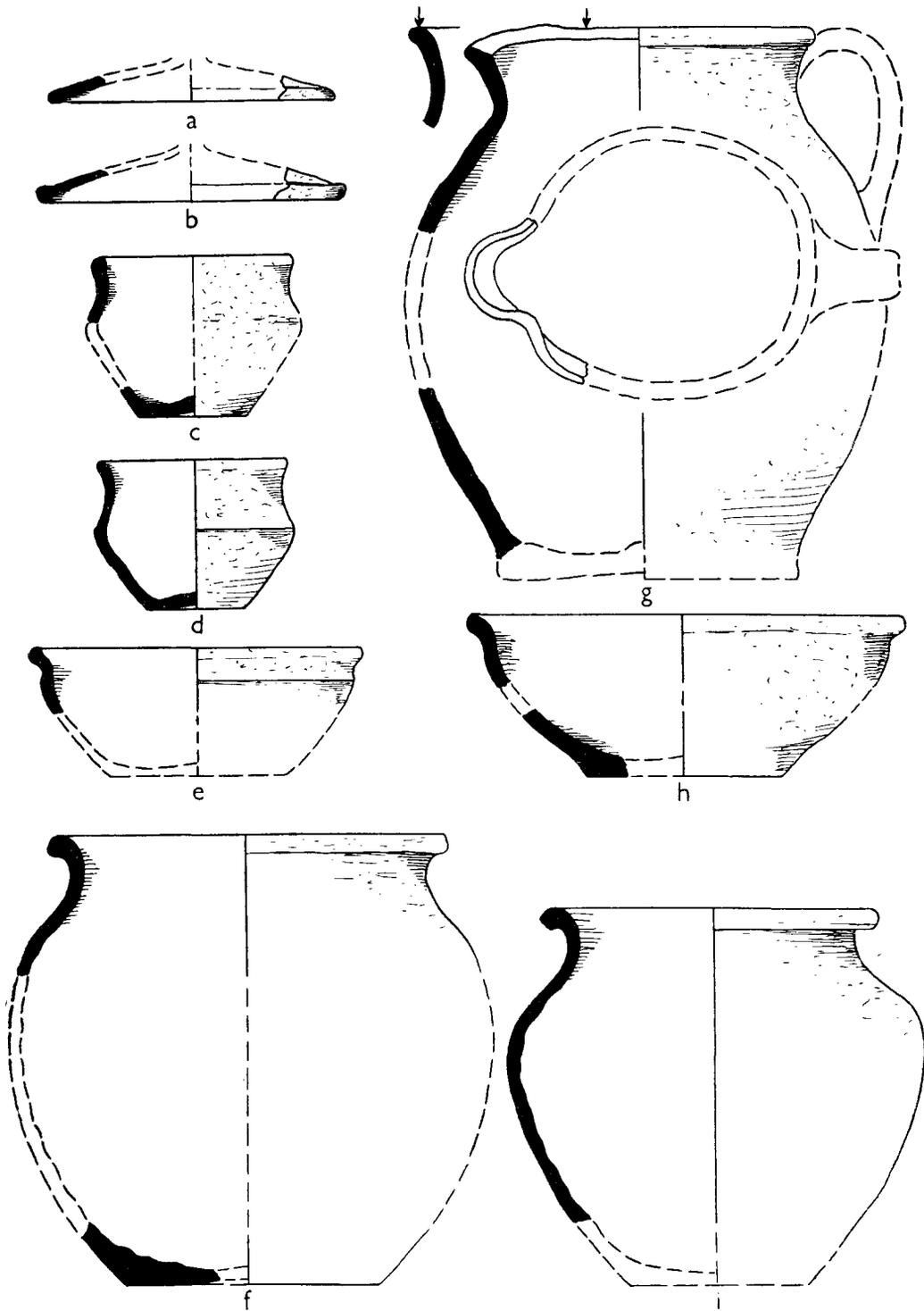


FIG. 43

FORMS OF CLASS E WARE FROM VARIOUS UNSPECIFIED SITES (pp. 96 ff.)
 E i. jar: (f) and (i); E ii. ('Buston') beaker: (c) and (d); E iii. bowl: (e) and (h); E iv. jug: (g); E v.
 pot-lids: (a) and (b)

Illustrations: Buston and Ballyfounder—Waterman (1958), fig. 5, p. 47.
Lagore—Hencken (1950), fig. 59, p. 125, no. 1559.

E iii bowls are also carinated, and of much the same height as the beakers, but are a good deal wider. The rim is generally thin, but can be very slightly everted or thickened. The general form is of course a late Roman one, and can be seen in this country in such things as the well-known Crambeck bowls.

Illustrations: Lagore—Hencken (1950), fig. 59, p. 125, no. 270.

E iv pitchers have lips, not spouts, and broad, thin strap-handles, whose sections, like flattened W's, show two longitudinal finger-grooves. Though not entirely 'trefoil-mouthed', as Waterman (1958, p. 52, note 7) describes the Dunadd example, there is some pinching around the sides of the spout. The height seems to be about 9-10 in.

Illustrations: Dunadd—(very inadequately) *Proc. Soc. Antiq. Scot.* xxxix (1904-5), fig. 41, p. 315. The paste here is very red and rather unusual, but grits and surfaces conform to normal class E type, and the presence of fragments of both lips and handles in more normal E ware from Dunadd and other sites is well testified. The sherd is very much burnt.

E v pot-lids have so far been found at only one site, Dalkey Island, co. Dublin. They are flattened conical lids with a thickened rounded rim, and, from the size, it is clear that they are intended as lids for class E i jars. None has been illustrated.

It will be seen, from the composite picture of class E profiles shown here (FIG. 43), that the whole group has a distinct, late-Roman, appearance. It must obviously descend from some strong ceramic tradition well-established during the accepted Roman period, and is thus likely to be in the region of some fairly sizable Roman civil settlement. It will also be noticed that, in a subtle way, all the forms are typologically devolved; none of them, individually, matches known Roman forms closely enough to be identified with them. The best illustration of such devolution at this period is given by L. Hussong in his valuable study of the Trier potteries from the fifth to ninth centuries A.D. Class E ware significantly resembles the series from Trier (Hussong (1936), *Beilage* 1-2) for the seventh to ninth centuries, though the context of many of the British vessels should be placed rather earlier, and indeed there are points of resemblance to certain of Hussong's forms for the late fifth and sixth centuries.

Is this comparison valid in a more special sense? Four of the five class E shapes can be seen in the Trier diagrams—the pot-lid, E v, excepted—and the coincidence strongly suggests a relationship. Trier itself must be ruled out as the source of class E, but the other clues point to a source in north-eastern France, west of the Rhine but perhaps just inside the area usually known as the Rhineland. Vessels which are indeed class E ware have now been located in Brittany and the Channel Isles by Wailes, north of the Loire and thus within the Frankish region, and I myself have noted others from a site near Montreuil, from the Marne area, and (more recently) what seems to be an E i jar from the Dutch province of North Brabant. The ware does not seem to be known at all in France south of the Loire. Petrographic analysis of the Lagore sherds, though at a stage when they

were confused with the later Rhenish wares (Hencken (1950), p. 125) did not succeed in localizing a source in the Rhine valley; but it is interesting to see that, as long ago as 1947, Bersu realized that all the Irish occurrences of class E, in spite of superficial differences, must have a common, probably continental source,²² and that Waterman has more recently hinted (Waterman (1958), p. 25, note 7) that both the Buston E ii beaker and the Dunadd E iv pitcher may be Frankish.

ALLIED MATERIAL

There are a few sherds which must be regarded as allied to, though not included within, this class. These (detailed in the Appendix) are from south-western Scotland, and include the rim of a tubular-spouted jug from Buston Crannog, sherds of some eleven other vessels from the same place, and a rim and neck of a jar of class E i type from Lochlee Crannog, also in Ayrshire. This last is in the same rather dark fabric as the Buston Crannog spouted vessel, and bears on the shoulder two or three sharp horizontal corrugations. Similar corrugations occur, rarely, on normal class E i jars—for instance, at Dunadd and Dalkey Island—and at Trier this is a late-fifth- or sixth-century feature.

POSSIBLE PREDECESSORS

It might well be thought that, if class E ware hails from some area west of the Rhine, its Roman predecessors would on occasions have found their way across to southern England. This may well be so, and I give in the Appendix a few such instances: the Kingston Buci sherds in Lewes Museum, in particular, seem exactly the same fabric and shape as E i jars. I have not, however, been able to make anything like an intensive search through the massive series of coarse wares from likely southern English sites.²³

LATER RHENISH WARES

The connexion with the later and better-known Rhenish wares discussed in Dunning's recent and comprehensive paper²⁴ is uncertain. Apart from a single small sherd from an Irish site, which is alleged to be of Pingsdorf ware, Dunning's types do not occur in the western British zone. They are, however, largely eighth-century and later (the major exceptions, at Whitby, may owe their presence there to special missionary contacts). If, as seems probable, class E ware goes no later than the seventh century, we must regard it as the forerunner of the later wares, and recognize a complete shift of interest on the part of the traders by the end of the eighth century. A variety of reasons—the spread of Christianity in Saxon England, the break-up of autocracies in the Celtic province, and the start of the Viking raids, to name a few—might be adduced to account for this shift.

²² *Proc. R. Irish Acad.*, LI (Sect. C, no. 3, 1947), 73, note 107.

²³ Nor do I intend to do so. Too many varieties of Roman coarse ware, confusingly like forms of class E, exist, and it would be a hopelessly prolonged and unrewarding task.

²⁴ G. C. Dunning, 'Trade relations between England and the continent,' in *Dark-age Britain: studies presented to E. T. Leeds* (ed. D. B. Harden, 1956), p. 218.

WHEEL-MADE WARES OF UNCERTAIN ORIGIN

Only one small group falls under this heading.

CLASS F sherds are found at Dunadd in Argyll, Dalkey Island near the entrance to Dublin bay, and Huckhoe in Northumberland. They belong to thin-walled but fairly large vessels, wheel-made and well fired. The fabric is roughly laminated, giving a flaky and uneven fracture. The colour throughout is a shade which defies accurate description—a mixture of pearl-grey and pink. Flecks of tiny red grit, not unlike those seen in class E ware, can be observed in the body. One of the Dalkey Island sherds shows a very faint horizontal broad fluting, as in the B iv lagenae, but there is a single rim, from Huckhoe, which is more reminiscent of the class E i jar type.

At the moment it is difficult to suggest even the most general source for this little group. One point of great interest is, of course, the Northumberland site of Huckhoe, a native fort which seems to have a sub-Roman occupation. With the dubious exception of the single A i sherd from Catterick, Yorks., this is the first instance of these wares straying across into eastern England, and in Northumberland it presumably antedates the period of the first Saxon settlers.

DISTRIBUTION AND CHRONOLOGY

DISTRIBUTION

The four outline maps (FIGS. 44, *a-b*; 45, *a-b*) show, within the British isles, the distributions of class A, class B, classes D and G but not C and the grey bowls), and class E. Whilst it is a safe guess that further examples will be recovered from Cornwall, south Wales, Ulster and the Dalriadic region of western Scotland, the present patterns are not likely to be changed radically. Two striking facts emerge. Firstly, the range of both A and B is primarily southern, and the trade nexus which contains them also links three areas (Cork and Waterford, Pembroke and the south Welsh coastal plain, and the north coast of Cornwall) which are, historically, connected in the sub-Roman period by the migrations and influences of certain Irish tribes (Thomas (1958), p. 68). Secondly, it shows well that the range of class E takes in a great deal more of western Britain, involving not only Dalriadic Scotland, and the Ulster homeland of the settlers there, but also the Scotland of the northern British kingdoms as well. It will be seen, too, that with few exceptions the sites are all coastal. An analysis of their nature, excluded here, shows a rough balance between contexts of a religious and of a secular kind.

The distinction between the distributions of the supposedly east Mediterranean wares of classes A and B on the one hand, and the supposedly Frankish class E on the other, cannot entirely be explained on grounds of local habit or taste. We may not suppose off-hand that people living north of a line from Dublin to Anglesey in sub- and post-Roman times did not drink wine: there is some evidence, albeit rather obscure, that they did when they could get it. It is conceivable that wine was imported in cask, or at any rate in small wooden containers, to some northern Irish and western Scottish centres, and this would explain the absence of class B wares in the north.²⁵ The absence is significant. Dunadd was not

²⁵ See, e.g., *Adamn. Vit. Columbae*, lib. 1, cap. 50, near the end.

by modern standards, dug well, nor was the Mote of Mark, but both sites were fairly thoroughly turned over and produced a mass of class E and D sherds. The lack of class A and class B material in the north may well be a reflection of the distances to which traders were prepared to sail—those from the Mediterranean regarding the Irish Sea as their limit, for example.

What has emerged clearly from some years of study is that the distribution maps conceal a chronological distinction, and that, by and large, the northern sites are to be regarded as later than the southern ones.

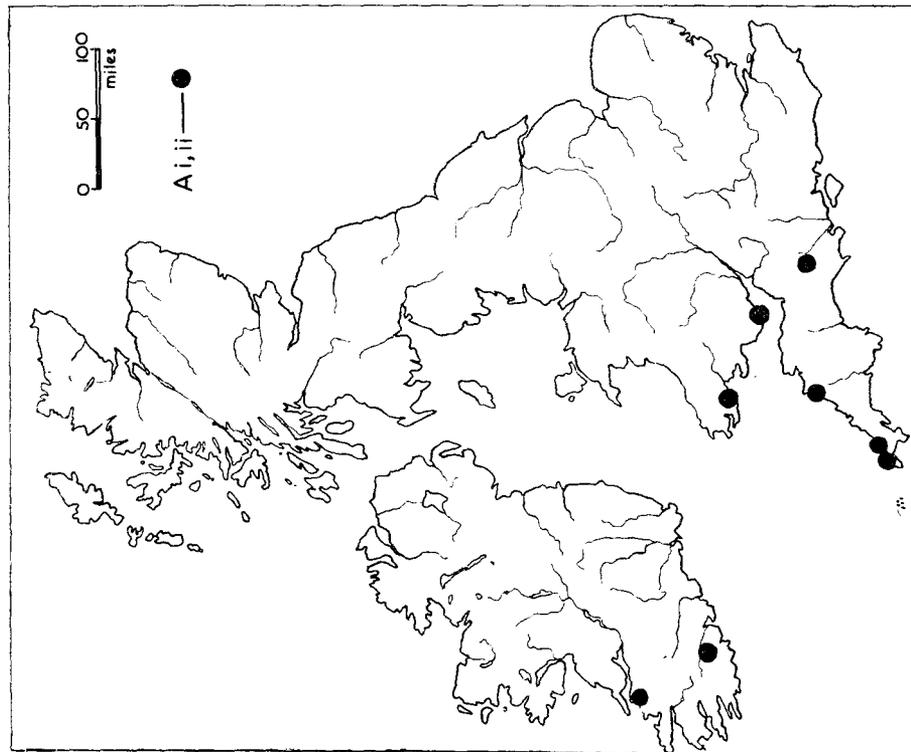
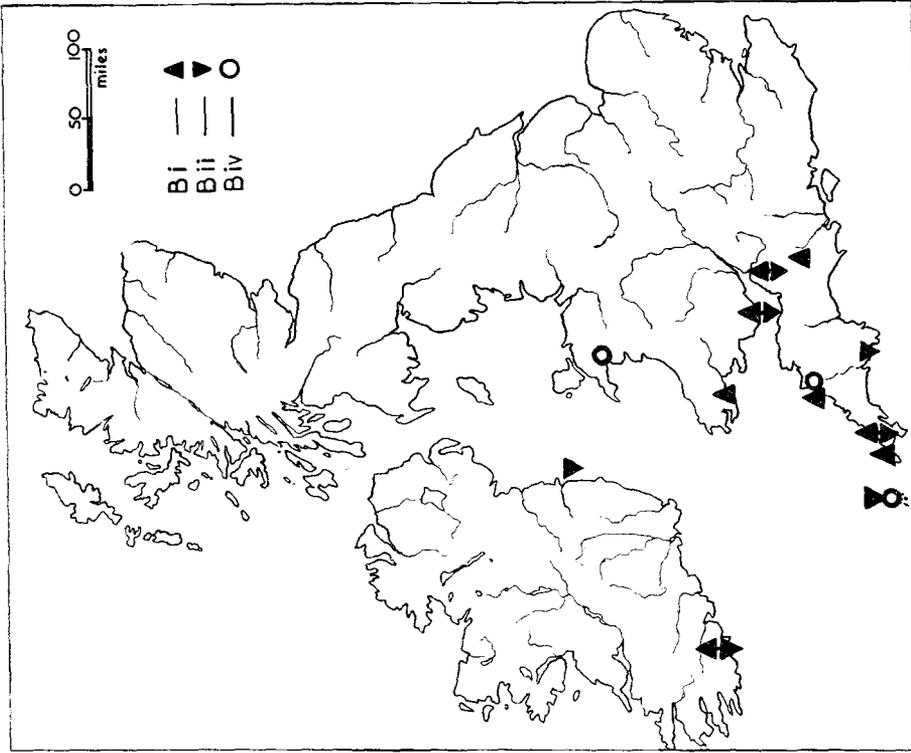
CHRONOLOGY—BRITAIN

One can derive an outline chronology of sites producing imported wares through such extraneous methods as the use of historical or pseudo-historical dates for such sites. Such a time-scale, of course, can tell us little we did not already know, and leaves unaffected those sites too small or too unimportant to have attracted annalists. It is almost axiomatic that western dark-age sites are undatable mainly because of the total lack of coin evidence. Ironically, this is best shown by the Ulster sites, where the standards both of excavation and presentation are now of the very highest, but where a closer date than a quarter-millennium can rarely be extracted.

Any form of chronology that can be won from a study of the imported wares is thus of great value, particularly since on a number of occasions they have been associated with native wares, themselves still largely undated, with the exception of Cornwall. The starting-point is indeed Cornwall, geographically athwart the trade routes to the western British shores and archaeologically sensitive to any incoming influences. The stratified sequence at the small domestic settlement of Gwithian, Cornwall, has yielded a wide range of imported wares: an analysis of the positions of classes B and E, the only ones to occur in any real quantity, can be given. There are three major levels at Gwithian. Layer C, the lowest, contains the native sub-Roman pottery ('Gwithian style' pottery), layer B a somewhat different type believed to have been introduced from northern Ireland in the early sixth century ('grass-marked pottery'), and layer A has the same kind of pottery modified by the addition of the bar-lip or bar-lug. The break-up into layers of sherds of classes B and E gives the following picture.

<i>Layer</i>	<i>B i</i>	<i>B ii</i>	<i>B iii</i>	<i>E</i>	<i>Approx. date</i>
C	7	37	5	48	A.D. 450—525
B	2	17	12	54	A.D. 525—800
A	nil	nil	10	1	A.D. 800—1000

This table, which takes account of subsequent disturbance of the site by rabbits, and displacement of material by the digging of rubbish-pits (and scattering of spoil) from higher into lower layers within the period of occupation, still serves to confirm an idea which could, independently, be shown from other sites. Wares of class B i and B ii (and we could add A i and A ii here) are on the whole earlier than those of class E, and probably of B iii too.

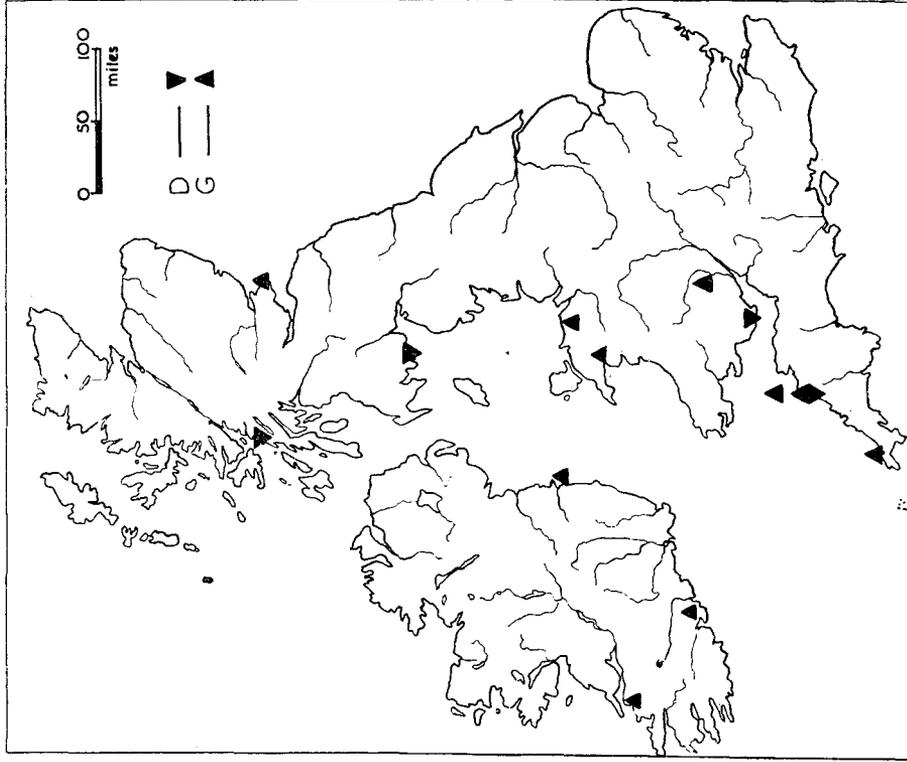


(a)

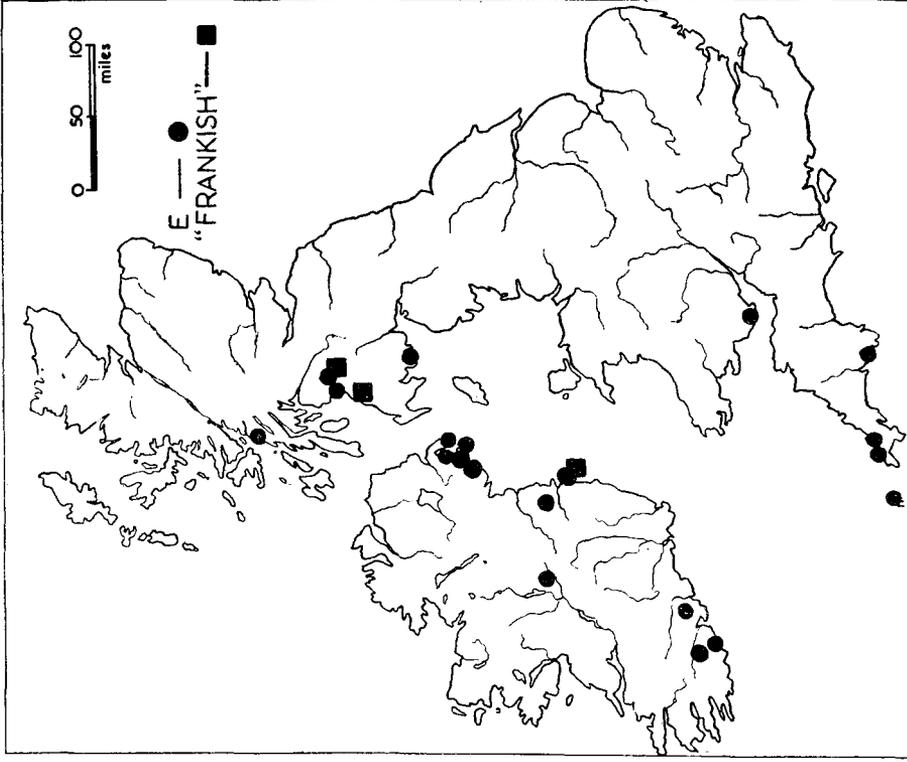
FIG. 44

Distribution-maps of Mediterranean wheel-made wares (classes A and B, less B iii) in post-Roman Britain, June, 1959 (p. 100)

(b)



(a)



(b)

FIG. 45

Distribution-maps of wheel-made wares of (a) classes D (sub-Romano-British?) and G (late colour-coated); and (b) class E and related Frankish or north Gaulish wares, June, 1959 (p. 100)

This may be tested. At Garranes, there were numerous sherds of classes A and B (especially B), and only a few of E. The date should thus be nearer to 500 than to 600, and the report suggests a bracket (based on extraneous literary evidence) of 450–475 to 560. In the north, Dunadd cannot have been occupied before the Dalriadic immigration, nor indeed can it have been receiving trade goods much before 475–500. Records exist that it was besieged (and thus was then occupied) in 683, and again in 736. We should expect class E ware to be predominant there, as indeed it is, covering 95 per cent of the sherds.

The British evidence therefore suggests that wares of east Mediterranean type, classes A and B (less B iii), were introduced late within the fifth century. (At Porthmeor, in Cornwall, a few sherds of A i were found, in a native village of the Roman period that may have continued in use well into the fifth century: this is probably the earliest instance of an imported ware of this kind.) Both A and B—certainly B, less certainly A—seem to have continued in use through the sixth century. It is hard to show any clear case of their importation in the seventh. Class E ware, on the other hand, though present in the fifth century (e.g. at Garranes, Gwithian, and very probably Dinas Powis too), is stronger in the post-Roman layer at Gwithian, and occurs at sites in the north which are certainly seventh-, if not early-eighth-century in date.

CHRONOLOGY—EUROPEAN

Radford's able discussion of the continental dating of class A ware (Radford, 1956) unfortunately cannot be used here, in an article which has already done its best to refute his identification, and to substitute the eastern late-Roman wares as a source. The general dates are nevertheless the same in both instances. Precise brackets are not yet available, but Waagé's careful work (note 4, *supra*) allows a range of *circa* 100 to 650 for late-Roman B, and *circa* 425 to 600 for late-Roman C. The range of time represented by the latter seems more suited to the British occurrences, and it should be pointed out that class A could, without straining facts, be said to lie closer to late-Roman C than B (in this viewpoint, I am joined by Mr. Alcock and Mr. Wailes).

In class B, varieties i and ii are clearly connected. As has been shown, they frequently occur together both in Britain and in the Mediterranean. Mr. Robert Stevenson has been good enough to show me sherds of B ii from the Great Palace at Byzantium which should be dated *c.* 425, and it must be about this time that they first reached Britain. At Albintimilium (Ventimiglia) the excavator regarded classes B i and B ii as occurring from a little before 400 to slightly later than 450. In the Rumanian Black Sea sites (note 8, *supra*), Parvan and his colleagues variously allot well-illustrated instances of class B (B i and B ii) sherds to 'couches byzantines'—more precisely, the fourth to sixth centuries. At Ulmetum, also in Rumania, where a good deal of this material was found, the *vicus*, transformed into a fort in the third or fourth century, was still occupied in 400 and 500 on the evidence of inscriptions. Three layers of burning, at close intervals, around the fort are referred to the activities of Huns, Slavs, and Avars, and nothing much seems to have survived into the seventh century.

If we take it, then, that pottery of classes A (A i, A ii) and B (B i, B ii, and B iv) was being brought directly by sea from the Byzantine world through the Straits of Gibraltar (the negative evidence from the Narbonne-Bordeaux region suggests this), we have to give a general date of about 400 to about 600 to this trade. Such a date fits both the British and Mediterranean evidence. Mr. Alcock has raised the point that the Vandal control of the western Mediterranean entrance in the mid-fifth century might be thought to have interrupted, if not disrupted entirely, such a trade; there is, however, no evidence that it did so. But the trade was clearly a thing of the past by the time of the Arab advance along north Africa and into Spain by the early eighth century. Somewhere between these two poles lies the final date. The end of the sixth century is indicated by archaeology. Historically, this would represent the collapse of the original Justinian attempt to reconquer the western empire.²⁶ The merchant ships which had made the long and hazardous voyage with wine and oil to the distant northern islands ceased to find it worth-while. There can never, in any event, have been many that did come so far.²⁷

But the Channel was as yet unaffected by the events of the warmer south. It is also possible to suggest dates for the use of class E—on the assumption that all instances reported in this paper belong to this class, and that they have a common source between the Somme and the Rhine. On these assumptions, which at the moment look valid, the upper date for class E would be about 425–450, since sherds occur in layer C at Gwithian, and with classes A and B at Garranes. This does not conflict with the idea of a temporary break in production in the very early fifth century (from earlier times) referable to the Germanic incursions across the Rhine. The lower date can be demonstrated generally by the preponderance in the middle layer at Gwithian, and absence in layer A: specifically, by such associations (if meaningful) as a seventh-century Anglo-Saxon coin at Buston,²⁸ use at Dunadd until 736, and use at Lagore at a somewhat similar, though less well-attested, time. The British distribution of the well-known red roulette-stamped Argonne ware (detailed references in the Appendix) is shown against that of class E to demonstrate what seems to be a complete break. A second and later break, equally dramatic, would be the swing of Rhenish trade in the eighth century to the southern and eastern English ports, as studied by G. C. Dunning.²⁹

Continental instances of class E are not susceptible to close dates. There is a resemblance to the seventh century and later material from Trier, but such contexts as sixth-century Frankish graves seem to be usual in northern French examples of the ware. Some supporting evidence comes from Harden's work³⁰ on post-Roman glass in the Celtic west. This is clearly apposite. For instance, Tintagel has produced predominantly east Mediterranean types of imported pottery: four

²⁶ I am indebted to Mr. Radford for suggesting this.

²⁷ It is essential to keep a sense of proportion. If all the vessels represented by all the sherds of all classes of imported ware of this date found in Britain were reconstructed, they would scarcely fill the hold of a very small galley.

²⁸ R. Munro, *Ancient Scottish Lake-Dwellings* (1882), fig. 246.

²⁹ G. C. Dunning, *op. cit.* in note 24 *supra*.

³⁰ D. B. Harden, 'Glass Vessels in Britain and Ireland, A.D. 400-1000,' in *Dark-Age Britain* (Ed. Harden, 1956), p. 132.

of the five pieces of glass there are thought by Harden to resemble Egyptian glass-ware. If we examine the finds of fifth- to seventh-century glass of Merovingian type in the western province, however, we see that they involve nine sites,³¹ eight of which also have class E ware. But the source for this Merovingian glass, as described by Harden, is in precisely the area in which it has been postulated that class E ware was made. Were the two commodities imported together?

CONCLUSION

Undoubtedly the mechanics of the trade in imported pottery form one of the more interesting facets of the problem. Under whose auspices were such long journeys made? To what extent did the ships which came with table-wares, wine and oil, return with pilgrims as well as with such classic invisible imports as corn, fleeces, slaves and Irish wolfhounds? Common sense would suggest the presence of merchant adventurers as much as the large-scale *entrepreneur*. Would that we had a tithe as much literary evidence, to bear on this trade, as we have archaeological.

For the connexion between western Britain and the Rhineland, less well-known trade links must be postulated. Columbanus in 591 seems to have travelled across southern Britain, perhaps across Cornwall, to the Channel shore, and not directly to Nantes, the port from which this prickly cleric was later nearly expelled from France.³² In travelling from Ireland across south-west England to northern France he was defining neatly the range of class E ware at the very period when this pottery was being shipped. But who shipped it? What part may the Frisians be taken to have played in this commerce? There is now limited evidence that, by the end of the eighth and the start of the ninth century, they were affecting the north coast of Cornwall, perhaps in connexion with a temporary revival of tin-streaming there.³³ In the heyday of their marine supremacy, the Frisians may well have opened a western route to carry cooking-pots and glass to the Celtic principalities; but there is as yet no confirmation of this.

Lastly, there is the problem of the chronology. So much rests ultimately on the eastern Mediterranean material—the British classes A and B are merely the dregs of mass-produced pots and containers common all over the Levant in early Byzantine times, so common indeed that almost no one has bothered to study them. It is hard to believe that a series of firm dates cannot be attached to these wares. The pioneer work of F. O. Waagé and Frances Jones has pointed the direction. In the west, Italian, French and Spanish scholars largely refrain from exploring the oriental links implicit in their basic palaeochristian domestic finds. For British workers, the expense of a field-trip around the necessary eastern sites is pretty nigh prohibitive. Yet it seems today that it is there, amongst the rubbish-

³¹ At Gwithian, Dinas Powis, Mote of Mark, Garranes, Ballycatteen, Lagore, Garryduff (probably), and Ballinderry Crannog No. 2. At South Cadbury Castle, Somerset, it occurs without class E ware.

³² *Sancti Columbani Opera*, ed. G. S. M. Walker (Script. Lat. Hibern. II, Dublin, 1957), pp. xi, xix, is a convenient recent source.

³³ Thomas (1958), p. 70.

heaps of Byzantium, Tarsus, Antioch, Ulmetum, even such distant settlements as Axum and Meröe, that the solution to the dating of classes A and B must be found: from it, the rest will flow, and one basic way of dating western British dark-age sites will have been established.

APPENDIX

CATALOGUE OF SHERDS OF IMPORTED WHEEL-MADE POTTERY, JUNE, 1959

The following abbreviated references to museum collections, where such material may be seen, have been employed:

CO	..	Cork Museum, Fitzgerald's Park, Cork.
DO	..	Museum of Archaeology and Ethnology, Downing Street, Cambridge.
DU	..	National Museum of Antiquities, Dublin.
ED	..	National Museum of Antiquities, Edinburgh.
GW	..	West Cornwall Field Club collection, Gwithian, Cornwall.
HU	..	Hunterian Museum, Glasgow.
LE	..	Castle Museum, Lewes, Sussex.
TA	..	Castle Museum, Taunton, Somerset.
TO	..	Torquay Municipal Museum, Torquay, Devon.
TR	..	Royal Institution of Cornwall, Truro, Cornwall.

References to frequently-cited periodicals are abbreviated thus:

<i>Ant. J.</i>	..	<i>Antiquaries Journal.</i>
<i>BBCS</i>	..	<i>Bulletin of the Board of Celtic Studies.</i>
<i>Med. Arch.</i>	..	<i>Medieval Archaeology.</i>
<i>P.P.S.E.A.</i>	..	<i>Proceedings of the Prehistoric Society of East Anglia.</i>
<i>PRIA</i>	..	<i>Proceedings of the Royal Irish Academy.</i>
<i>UJA</i>	..	<i>Ulster Journal of Archaeology.</i>

Items cited by author's name and date appear in the Bibliography immediately following this appendix.

Instances of sherds which have been lost, or which I have for various reasons been unable to see, are placed in 'dubious' or 'possible' groups, unless checked by colleagues who are familiar with the various wares. The county location of each find-spot is given only on the first occasion such location is mentioned.

MEDITERRANEAN WHEEL-MADE WARES

Class A i

Tintagel, Cornwall	..	TR, CO. Radford (1956), fig. 13.
Porthmeor, Cornwall	..	GW. Thomas (1957), fig. 5, nos. 2 and 4.
Gwithian, Cornwall	..	GW. Thomas (1957), fig. 5, nos. 1, 3 and 5.
S. Cadbury, Somerset	..	TA. <i>Proc. Somerset Nat. Hist. and Archaeol. Soc.</i> , xcix-c (1956), 111, no. 12.
Longbury Bank Cave, Pemb.	..	<i>BBCS</i> , xviii (1958), 77, fig. 1, no. 1.
Dinas Powis, Glamorgan	..	Alcock (1955), 250.
Garranes, co. Cork	..	CO. 1 rim, and sherds nos. 305, 153.

Class A i—dubious or lost instances

Padstow, Cornwall	..	Lost. Radford (1956), 62.
Trebarveth, Cornwall	..	Lost. <i>Antiq. J.</i> , xxix (1949), 173.
Dinas Emrys, Caern.	..	Unpublished: info. Dr. H. N. Savory.
Cae'r Mynydd, Caern.	..	<i>Antiq. J.</i> , xxxix (1959), 33-60.
Catterick, Yorks.	..	Lost. Radford (1956), 63.
Dunadd, Argyll	..	ED. Radford (1956), 63. Small, dubious.

Class A ii

Tintagel	..	TR. Radford (1956), fig. 14.
Dinas Powis	..	Unpublished, info. L. Alcock.
Garranes	..	CO. <i>PRIA</i> , XLVII, C 2 (1942), fig. 23, no. 249.

Intermediate in fabric, but within class A

Goodrich, nr. Ross-on-Wye	..	Info. N. P. Bridgewater, Llangarron, Ross.
Garranes	..	<i>PRIA</i> , XLVII, C 2 (1942), fig. 23, nos. 227, 480. Also, unpublished, CO. no. 255.
Ballybunion, Kerry	..	<i>PRIA</i> , L C 3 (1947), 66 and no. 96.

- Class B i*
 Chun, Cornwall .. TR. *Antiq. J.*, xxxvi (1956) 75, illus.
 Tintagel .. TR. Radford (1956) 62, pl. vi.
 Gwithian .. GW. Thomas (1956), 12.
 South Cadbury .. TA. Nos. 55-A-7, 5 sherds.
 Cadbury, Yatton, Som. .. Unpublished: info. Keith S. Gardner.
 Dinas Powis .. Alcock (1955), 248, pl. viii a, no. 7.
 Longbury Bank Cave .. *BBCS*, xviii (1958), 77, fig. 1, no. 2.
 Garranes .. CO. *PRIA*, XLVII, C 2 (1942), fig. 21.
- Class B ii*
 Tean, Scilly .. GW. Unpublished, about 6 sherds.
 Gwithian .. GW. At least two vessels represented.
 Bantham, Devon .. TO. Fox (1955), 55, her class I, fig. 2.
 Cadbury, Yatton .. Unpublished: info. Keith S. Gardner.
 Dinas Powis .. Alcock (1955), 248, pl. viii a, nos. 5 and 6.
 Garranes .. CO. *PRIA*, XLVII, C 2 (1942), fig. 21, e.g. no. 125.
 Dalkey Is., co. Dublin .. Unpublished: info. Dr. G. F. Mitchell and D. Liversage.
- Class B iv*
 Tintagel .. TR. Unpublished group of sherds.
 Tean .. G.W. Unpublished, about a dozen sherds.
 Dinas Emrys .. Unpublished: info. Dr. H. N. Savory.
- Related to classes B i and B ii*
 Tintagel .. TR. Large sherd with corrugated surface.
 South Cadbury .. TA. Unpublished, sherd no. 55-A-28.
- Miscellaneous but almost certainly Mediterranean*
 Tintagel .. TR. Unpublished sherd, 1933-4-2, with numerous tiny parallel lines.
 Cf. Trapuco, Majorca, sherds 37.792, 37.7996b, in DO.
 Tintagel .. TR. Rim-herd of A ii type with grey surface—Radford (1956), 62;
 Thomas (1957), fig. 5, no. 6.
 Tintagel .. TR. Two coarse greenish-white sherds, from 1918 cliff fall. Cf. water
 jars, 5th-9th cents. A.D., Al Hira, Samarra (Mesopotamia). Info. from
 Prof. D. Talbot Rice, Edinburgh.

PLAIN WHEEL-MADE AMPHORAE, AND POSSIBLE AMPHORA SHERDS

- Class B iii*
 Hellesvean, Cornwall .. TR. Single sherd.
 Gwithian .. GW. Thomas (1956), 13, numerous variants.
 Constantine Bay, Cornwall .. GW. As above.
 Looe Island, Cornwall .. As above: info. T. J. Scantlebury.
 Tintagel .. TR, CO. Numerous sherds, rims and handles.
 Bantham .. TO. Fox (1955), 55, her classes II and III.
 Dinas Powis .. Unpublished: info. L. Alcock.
 Dalkey Island .. Unpublished: info. Dr. G. F. Mitchell and D. Liversage.

Unspecified red sherds, probably class B rather than Class A

- Lough Faughan, co. Down .. *UJA*, xviii (1955), 68, and pl. viii, no. 1.
 Mote of Mark, Kirkcub. .. ED. One sherd, unpublished (? B iii).
 Ronaldsway, I. of Man .. *Antiq. J.*, xx (1940), 72 et seq. Unspecified red wheelmade sherds in
 monastic(?) site.

WHEEL-MADE WARES OF SUB-ROMAN (OR ROMANO-BRITISH) CHARACTER

- Class C, no subdivisions*
 Tintagel .. Radford (1956), 60-61.
- Class D, no subdivisions as yet*
 Tintagel .. TR and Brit. Mus. Radford (1956), 60.
 Dunadd .. ED. Radford (1956), 63. Nos. HPO 349.
 Mote of Mark .. ED. Radford (1956), 63. Several sherds.
 Dinas Powis .. Info. L. Alcock. Variety of forms represented.
- Small grey bowls (former classification as A iii now abandoned)*
 Gwithian .. GW. Thomas (1957), fig. 5, no. 9.
 Castle Dore, Cornwall .. TR. Thomas (1957), fig. 5, no. 8.

NORTHERN GAULISH OR FRANKISH WHEEL-MADE WARES

- Class E i (cooking-pots)*
- Teane .. GW. Unpublished, rims of 7 or 8 pots.
 Hellesvean .. TR. Unpublished, single sherd.
 Gwithian .. GW. Thomas (1956), 14, about 3 pots.
 Dinas Powis .. Unpublished: info. L. Alcock. 2 pots.
 Garryduff, co. Cork .. *PRIA*, LI, C 3 (1947), 69, fig. 8. 2 pots, in CO.
 Ballycatteen, co. Cork .. *PRIA*, LI, C 3 (1947), 71, fig. 9. 3 pots, in CO.
 Garranes .. *PRIA*, XLVII, C 2 (1942), 126, fig. 18. 3 pots, in CO.
 Ballinderry 2, co. Offaly .. *PRIA*, LI, C 3 (1947), 71, fig. 9. 1 pot in DU.
 Lagore, co. Meath .. Hencken (1950), 125. 3 pots in DU.
 Dalkey Is. .. Unpublished: info. Mitchell and Liversage. 3 pots.
 Lough Faughan .. *UJA*, xviii (1955), pl. viii. no. 3—single sherd.
 Downpatrick, co. Down .. *UJA*, xvii (1954), 100, seen *per* Dr. V. B. Proudfoot.
 Nendrum, co. Down .. Unpublished: single sherd seen *per* D. M. Waterman.
 Dunadd .. ED. Minimum of 6 pots.
 Mote of Mark .. ED. Minimum of 5 pots.
- Class E ii ('Buston Beakers')*
- Gwithian .. GW. Complete profile, GM/I-56-152.
 Bantham .. TO. Unpublished basal-angle sherd.
 Dinas Powis .. Unpublished: seen *per* L. Alcock. 2 beakers.
 Garryduff .. CO. nos. 163, 271, 276, 306, seen *per* Prof. O'Kelly.
 Lagore .. DU. Hencken (1950), 125, fig. 59, no. 1559.
 Spittal Ballee, co. Down .. *UJA*, xxi (1958). Seen *per* D. M. Waterman.
 Ballyfounder, co. Down .. Waterman (1955), 47, fig. 5.
 Buston Crannog, Ayr .. ED. Waterman (1955), 47, fig. 5.
 Dunadd .. ED. nos. HPO 440, 452.
 Mote of Mark .. ED. nos. HH 264, 265, and 266.
- Class E iii ('Dunadd Bowls')*
- Teane .. GW. Two rims, TN 188, TN 349.
 Dinas Powis .. Unpublished: seen *per* L. Alcock. Single rim.
 Lagore .. Hencken (1950), 125, fig. 59, no. 270. Also (in DU) no. E-14-222, seen *per* Dr. Raftery.
 Dunadd .. ED. nos. HPO 429 and GP 241.
 Mote of Mark .. ED. no. HH 263.
- Class E iv (handled pitchers)*
- Teane .. GW. Handle-base, TN 98.
 Dinas Powis .. Unpublished: seen *per* L. Alcock. Handle.
 Stevenston, Ayr .. HU. Rim and handle-base, no. A-1928-12.
 Dunadd .. Waterman (1958), 52, n. 7. ED. GP 232, GP 244.
 Dunadd .. Handles and spout or lip fragments, in ED. nos. HPO 440, HPO 446, GP 241, GP 246.
- Class E v (flattened conical pot-lids)*
- Dalkey Island .. Unpublished: seen *per* Mitchell and Liversage.
- Possible class E sherds, not yet examined, or dubious*
- Hamwih, Hants. .. *Trans. Hants. Field Club*, xvii (1952), 128, illus.
 Castle Point, Kirkcub. .. *Trans. Dumfr. & Gall.*, xxxiii (1956), 201.
 Crawthat Cottage, Dunfr. .. *Ibidem*.
 Hut site, Isle of Skye .. Sherds, Inverness Mus., *per* D. Simpson.
 Broch, Caithness .. ED, pointed out by Mrs. Alison Young.
- Possible Frankish sherds, somehow related to class E*
- Buston Crannog .. ED. no. HV 122. Waterman (1958), 52, n. 7. Top of tubular spouted pitcher.
 Buston Crannog .. Dick Institute, Kilmarnock. Pot of E i form with corrugated shoulder, cf. Dalkey Is. E i pot, but fabric as Buston 'Frankish'. Joins ED. no. HV 122
- Argonne ware (formerly Marne ware)*
- (Note: distribution given by Chenet, after G. C. Dunning, in G. Chenet, *La céramique gallo-romaine d'Argonne du IV^e siècle . . .*, Macon, 1941.) British instances (from London, Chichester, Cirencester, Colchester, Lympne, *Margidunum*, Mildenhall (Wilts.), Pevensey, Richborough, Silchester, Wroxeter and York) do not seem to be later than the fourth century: but it is perhaps conceivable that the Richborough, Silchester and York instances, on other evidence, are sub-Roman. To this list should be added a new, more probably sub-Roman, one:
- Moel Fenlli, Denbigh .. *Antiquity*, xxxii (1958), 22, *per* C. A. R. Radford.

WHEEL-MADE WARES OF UNCERTAIN ORIGIN

Class F, no subdivisions

- Dalkey Island .. Unpublished: *per* Mitchell and Liversage. No. 252 and several others.
 Dunadd .. ED. About six unpublished fragments.
 Huckhoe, Northumbld. .. *Archaeol. Aeliana*, xxxvii (1959), 258.

WHEEL-MADE WARES OF 'LATE COLOUR-COATED' TYPE

Class G, no subdivisions

- Hellesvean .. TR. Thomas (1957), fig. 5, nos. 10, 11.
 Tintagel .. TR. A-72, feather-stroke rouletted base.
 Dinorben, Denbigh .. *Med. Archaeol.* 1 (1957), 150. *Not* A ii bowls.
 Dinas Emrys .. Sherd with A and Ω.
 Monmouth .. Unpublished: info. N. P. Bridgewater.
 Garryduff .. *PRIA*, LI, C 3 (1947), fig. 8, no. 79. Seen CO *per* Prof. O'Kelly. Wrongly drawn and not, as stated, *ibid.*, of A ii ware.
 Ballybunion .. *PRIA*, LI, C 3 (1947), 66. Dubious.
 Dalkey Island .. Unpublished: seen *per* Mitchell and Liversage.
 Elie, Fife .. ED. Rims of two bowls, no. HR 517.
 Lundy Is., N. Devon .. Sherd as for Hellesvean: info. K. S. Gardner.

SELECTED COMPARATIVE MATERIAL FOR CLASS E

Instances of Class E type ware in Romano-British context.

- Kingston Buci, Sussex .. LE. As pink or buff class E, one pot of E i form with a corrugated shoulder.
 Colchester, Essex .. See Garranes report (Ó Ríordáin (1942), 127) and ref. there given by A. W. G. Lowther.
 St. Albans, Hertford .. Inst. of Archaeology, London, collection: complete profile of pot, no. VER 55 B. III-27.
 Abingdon Piggotts, Cambr. .. *P.P.S.E.A.*, iv (1924), 211. In DO, *per* B. Wailes. Not illus. Like fine class E ware pot of E i type with corrugated shoulder.

Continental instances of class E (supplied by B. Wailes)

- Channel Isles:
 Longy Bay, Alderney .. Guille-Alles Mus., Guernsey. Body sherd.
 Brittany:
 Les Cléons, Loire-Atl. .. Musée Dobrée, Nantes. E i pots from later occupation of a Roman villa.
 Mene-geren, Plaudren, Morbihan .. Vannes museum. Rim and base of an E i pot, uncertain context.
 Guissény, Finistère .. Mus. Nat. Préhist., Penmarc'h. Rim and base of E i pot from local sand-dune site.
 Northern Gaul:
 St. Loup, Marne .. Brit. Mus., ML 3262. Small jar of E ware from local Frankish cemetery.
 Waban, near Montreuil .. Ashmolean, Oxford. Evans collection. Four pots from Frankish cemetery: nos. 96 and 97, very like E ii and small E i. Nos. 98 and 99, less so.
 Holland:
 Broekeneind, N. Brabant .. Glasbergen, *Varia Bio-Archaeologica*, II (1955), 33 (Groningen), fig. 26—an E i pot?

NOTE

Detailed illustrations of each class of pottery mentioned above are not yet available—for instance, complete class B shapes are not known with any certainty. The Appendix contains references to all illustrations published up to June, 1959. I feel that it may be of greater use to other workers in this field to have a general survey, and a catalogue, rather than a detailed and necessarily speculative account of, say, class E ware alone. It is hoped that such detailed accounts will eventually appear as the required evidence turns up. In the meantime, a structural background against which such occurrences can be seen is the outstanding need, and this paper attempts to fill it, however inadequately.

After this paper was in proof, a conference on the topic of dark-age pottery in Britain was held at Truro under the auspices of the Council for British Archaeology (*infra*, p. 293). The main point to emerge is, I think, that the *later* fifth century is a safer starting date for class A, if not for class B: also that to a limited extent the Welsh material stands outside my classification.

The following finds of E ware in Scotland should be added: two sherds of class E from Elie, Fife (found by Mr. M. J. Macalister in a refuse pit in 1959), two small class E i jars from a crannog in Loch Glashan, Argyll, and a base of a class E i jar from Clatchard's Craig hill-fort, Fife. I am grateful to Mr. P. R. Ritchie, Inspectorate of Ancient Monuments, Edinburgh, for the last two instances.

ACKNOWLEDGEMENTS

The greatest help and kindness has been shown to me by a vast number of people all over Britain, by allowing me to see and handle material in their care, by permitting discussion of their excavated finds prior to publication elsewhere, and by advice and correspondence on many of the points made in this article. They include, necessarily, the curators of local museums who allowed me to search, usually without success, in their reserve collections. Special thanks are due to: Mr. George Boon, Mrs. Elizabeth Fowler, Mr. A. E. P. Collins, Mr. William Culican, Mr. H. L. Douch, Mr. R. W. Feachem, Professor Idris Foster, Lady Fox, Mr. Keith Gardner, Mr. P.-R. Giot, Mr. Michael Gough, Mr. W. E. Griffiths, Professor Christopher Hawkes, Professor K. H. Jackson, Mr. George Jobey, Mr. E. M. Jope, Miss B. S. E. Kistruck, Dr. David Liversage, Dr. G. F. Mitchell, Professor M. J. O'Kelly, Dr. V. B. Proudfoot, Dr. Joseph Raftery, Dr. H. N. Savory, Mr. R. B. K. Stevenson and Mr. Dudley Waterman.

I am, in addition, grateful to Mr. Leslie Alcock, whose discoveries in Wales have kept pace with my own in Cornwall, and who read this paper in draft and made numerous suggestions: to Mr. Bernard Wailes, co-excavator of five of the sites mentioned, who so generously placed the result of his researches in France and Spain at my disposal, and helped to compile the Appendix: and, lastly, to Mr. C. A. Raleigh Radford, *doyen* of western dark-age archaeology, the pioneer in this particular field, for continuous and corrective help, advice and encouragement.

BIBLIOGRAPHY

- Alcock, L. (1955) .. 'The hill-fort in Cwrt-yr-Ala park, near Dinas Powis (Glam.): I. The defences,' *Bull. Board of Celtic Studies*, xvi (1955), 242.
- Fox, Aileen (1955) .. 'Some evidence for a dark age trading site at Bantham, near Thurlestone, south Devon,' *Antiq. J.*, xxxv (1955), 55.
- Hencken, H. O'N. (1950) 'Lagore Crannog: an Irish royal residence of the 7th to 10th centuries A.D.,' *Proc. Royal Irish Acad.*, LIII (section C, no. 1, 1950).
- Hussong, L. (1936) .. 'Frühmittelalterliche Keramik aus dem Trierer Bezirk,' *Trierer Zeitschr.*, xi (1936), 75.
- Ó Riordáin, S. P. (1942) 'The excavation of a large earthen ring-fort at Garranes, co. Cork,' *Proc. Roy. Irish Acad.*, XLVII (sect. C, no. 2, 1942).
- Radford, C. A. R. (1956) 'Imported pottery found at Tintagel, Cornwall,' in *Dark-age Britain, studies presented to E. T. Leeds* (ed. D. B. Harden, 1956), pp. 59-70.
- Thomas, A. C. (1954) .. 'Excavation of a dark age site, Gwithian, Cornwall: interim report, 1953-54,' *Proc. West Cornwall F.C.*, n.s. 1 (1954), 59.
- Id. (1956) .. 'Excavations at Gwithian, Cornwall, 1955—catalogue of imported pottery,' *Proc. West Cornwall F.C.*, n.s. 1 (1956), appendix, 10-18.
- Id. (1957) .. 'Some imported post-Roman sherds in Cornwall and their origin,' *Proc. West Cornwall F.C.*, n.s. II (1957), 15.
- Id. (1958) .. 'Cornwall in the dark ages,' *Proc. West Cornwall F.C.*, n.s. II (1958), 56.
- Waterman, D. M. (1958) 'Excavations at Ballyfounder rath, co. Down,' *Ulster J. Archaeol.*, xxi (1958), 39.