THE ASHDON (ESSEX) HOARD AND THE CURRENCY OF 
THE SOUTHERN DANELAW IN THE LATE NINTH 
CENTURY 

M. A. S. BLACKBURN

In a woodland in the parish of Ashdon in north Essex, Mr Bob Spall was about to return to 
felling further diseased elm trees after his lunch when he took out his metal detector for a 
few minutes and to his surprise found in the surface mud fragments of three Viking silver 
coins. Between then, 20 March 1984, and 4 October 1984 he returned with his wife Barbara 
on sixteen occasions and painstakingly recovered twelve intact coins and 102 fragments, 
the remains of some 65–70 pennies of the late ninth century.1

The hoard,2 which was deposited c.890–5, is only the fifth that we know of from the last 
two decades of Alfred's reign (871–99); the other four were of quite different compositions 
as well as being rather incompletely recorded. It sheds new light on the earliest phase of 
Anglo-Viking coinage and shows how this had come to dominate the currency of the 
southern Danelaw even before the introduction of the St Edmund Memorial issue. It also 
provides the first known coin of King Guthfrith of York (c.883–95).

Recovery and condition of the coins

The woodland in which the coins were discovered is one known, as ‘Home Wood’ on the 
medieval manor of ‘Waltons’. It is within the parish of Ashdon, but actually nearer to the 
hamlet of Steventon End3 than the village of Ashdon itself. The hoard was found just to 
the north side of the trackway that runs through the wood (NGR TL59524357), and the 
findspot is a mere 150 yards from the Essex-Cambridgeshire border.

The coins were dispersed through the top soil over an area of approximately 10 feet by 
12 feet (3.0m by 3.7m), and from the surface down to a depth of 18 inches (0.45m). The 
acidity of this highly organic soil had reacted with the silver leaving it extremely brittle and 
labile to crumble. This was especially pronounced in the coins which came from near the 
base of a large hornbeam tree, rapidly turning purple when first exposed to the air and then 
black on contact with water. Most of the coins had been broken and dispersed by some 
prior disturbance of the ground, perhaps the grubbing up and replanting of trees, for it 
appears to be an old mixed deciduous wood that has been intensively managed and 
coppiced. Some of the trees are evidently several hundred years old. A few of the

Acknowledgements. I am grateful to Mr and Mrs Bob Spall 
for their kind consideration and assistance during the recovery 
of the hoard. Michael Bonser was also a considerable help 
at this stage. Miss Marion Archibald kindly invited me to 
prepare the find for the coroner's inquest and subsequently 
for publication. Paul Bibire (Dept. of Anglo-Saxon, Norse 
and Celtic, Cambridge) has advised me on the name forms 
appearing on the coins. Keith Howes (British Museum) and 
Miss Julie Dawson (Fitzwilliam Museum) have conserved the 
coins. Bryon Bache (Dept. of Applied Biology, Cambridge) 
and Peter Northover (Dept. of Metallurgy and Science of 
Materials, Oxford) have provided the analytical appendices. 
Helpful comments on an earlier draft of this paper were 
received from Philip Grierson, Simon Keynes, Michael 
Metcalf and Ian Stewart. I am grateful to them all.

1 The hoard was declared Treasure Trove at an inquest 
held at Saffron Walden on 8 January 1985. Subsequently four 
coins were acquired by the British Museum, two by Saffron 
Walden Museum, and the remainder by the Fitzwilliam 
Museum, as detailed in the catalogue below.

2 For a preliminary report see M. A. S. Blackburn. 'A 
preliminary account of the 9th-century coins in the Ashdon 
(Steventon End) hoard 1984', NC 1985, 43–4; and for a 
popular account of the discovery see M. Bonser and B. Spall, 
'A day to remember', Treasure Hunting. April 1985, 14–18.

3 Spelled on some maps Stevington End.
fragments broke further with handling, and these new breaks showed that the metal although silvery on the surface had been corroded to a white compound throughout.

On the discovery of the first three coins, Mr Spall had promptly informed Michael Bonser and me, and we were present on a number of occasions while he was searching the site. It was also visited by two archaeologists, Mr David Buckley of Essex County Council and Mr David Haigh of Cambridgeshire County Council, who confirmed our impression that there was no evidence of a container or any other archaeological context for the find. It was decided to leave the recovery of the coins to Mr Spall, who was exercising great skill and patience in the task. After running his metal detector over the exposed ground surface, he would remove a clod of soil with a trowel or fork and break it up on a clean surface before running his detector over it again. After digging out a wider area than that in which the coins were found, he went back and rechecked the spoil that he had removed using the same procedure, finding a small number of additional fragments. In this way he was able to recover pieces weighing as little as 0.05g, so small that when coated in soil they could hardly be discerned with the naked eye. There is no doubt that he was able to retrieve the hoard more effectively than would have been possible using conventional archaeological techniques, including sieving. Such was Mr Spall’s dedication to the task that one small fragment found during his lunch break he carried all afternoon in his mouth until he could put it in a place of safety at home that evening. Since 1984 he has returned to search the site on several occasions but has made no further discoveries there.

Trying to match together the 102 fragments in order to reconstruct the broken coins has been as frustrating as doing a jigsaw puzzle from which two-thirds of the pieces have been lost. While many have been found to fit together to form larger groups, the majority of the coins are still very incomplete. It is likely that the missing portions of the many partial coins had simply disintegrated into small particles rather than been present in larger pieces but not recovered by Mr Spall. Table 1 shows the sizes of the reconstructed pieces, the number of items having been reduced from 114 (i.e. 12 intact coins and 102 fragments) as found to 71 listed in the catalogue. However, it is likely that a few of the smallest fragments do in fact belong to others in the hoard without our realising it, so that the total number of coins represented is probably nearer to 65. But the original deposit may well have been larger, for given that over a third of the surviving coins are only small fragments (Table 1) it is probable that there were more that have completely perished leaving no trace at all.

<table>
<thead>
<tr>
<th>Whole coins</th>
<th>More than two-thirds</th>
<th>Two-thirds to a quarter</th>
<th>Less than a quarter</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>13</td>
<td>14</td>
<td>31 (c.25)</td>
<td>71 (c.65)</td>
</tr>
</tbody>
</table>

Hoard in such a poor state of preservation are rare, but the large Norwegian hoard from Slethei containing mainly English coins of Æthelred II was in a similar fragile and fragmentary state when discovered in 1866. Both hoards serve as a warning to archaeo-
logists that in certain soil conditions even fine silver coins can decay leaving little or no 
trace, so that an apparent absence of single-finds in such a situation could be very 
misleading to those interpreting the history of the site. Although such soil conditions may 
be unusual, their effect on coin and metal artefacts deserves further investigation.6 
Analyses of soil samples taken from the Ashdon hoard site suggest that the corrosion was 
caused by soluble organic acids passing through the soil (see Appendix 1).

Composition of the hoard
There are three basic elements in the hoard – Anglo-Saxon, Viking, and Carolingian – and 
it appears to have consisted entirely of pennies, for there is no trace of either round or cut 
halfpennies. A summary of the coins found is given in Table 2, from which it can be seen 
that among those that can be firmly attributed the Viking issues dominate and there are 
surprisingly few official Anglo-Saxon issues. Among the 32 uncertain pieces, mostly small 
fragments that cannot be identified, there may be a somewhat higher proportion of 
Anglo-Saxon coins, but overall they still constitute only a minor element in the hoard, as 
also do the Carolingian coins. The Anglo-Saxon element will be described first, with an 
account of the criteria used for distinguishing official coins from imitations. The Viking 
issues follow, divided into several categories according to whether they carry the name of a 
Viking ruler or that of Alfred, and whether the moneyer was one actually working in the 
Danelaw or one from Greater Wessex or Mercia whose name had been merely copied. 
Finally, the four Carolingian coins will be discussed. Three coins from the hoard have been 
analysed (see Appendix 2).

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>Summary of the contents of the hoard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anglo-Saxon</strong></td>
<td></td>
</tr>
<tr>
<td>Alfred, Two-line type</td>
<td>1</td>
</tr>
<tr>
<td><strong>Viking (all Two-line type)</strong></td>
<td></td>
</tr>
<tr>
<td>Guthrum</td>
<td>5</td>
</tr>
<tr>
<td>Guthfrith</td>
<td>1</td>
</tr>
<tr>
<td>‘Alfred’, Danelaw moneyers</td>
<td>12</td>
</tr>
<tr>
<td>‘Alfred’, Copying names of West Saxon or Mercian moneyers</td>
<td>9</td>
</tr>
<tr>
<td>‘Alfred’, blundered or uncertain moneyers’ names</td>
<td>7</td>
</tr>
<tr>
<td><strong>Uncertain Anglo-Saxon or Viking</strong></td>
<td></td>
</tr>
<tr>
<td>(all Two-line type)</td>
<td>32</td>
</tr>
<tr>
<td><strong>Carolingian</strong></td>
<td></td>
</tr>
<tr>
<td>Charles the Bald (or later)</td>
<td>3</td>
</tr>
<tr>
<td>Odo</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>71 (c. 65 coins?)</td>
</tr>
</tbody>
</table>

6 The subject is discussed in several papers in Coins and Archaeology, edited by H. Clarke and E. Schia, BAR-5556.
16 THE ASHDON HOARD

a) Anglo-Saxon element – Two-line coins of Alfred (871–99)

The majority of coins in the hoard carry the name of Alfred and are of his Two-line type. However, most of these are thought to be not official coins but Viking imitations. The Two-line type was the principal issue of the third and final phase of Alfred's coinage. Dolley and Blunt, in their classic study of the reign, dated its introduction c.887, following immediately upon the London Mongram issue which they associated with the events of 886 when, as they thought, Alfred gained control of the city from the Vikings. It now appears that his authority in London was recognised well before that, and there are reasons for thinking that the London Monogram and Two-line issues began in the early 880s. The arguments will be developed elsewhere in connection with a study of the second phase of Alfred's coinage, but they rely in part on the attribution to London of Cross and Lozenge coins of Alfred and Ceolwulf II. The issue of this type seems to have ceased by c.880.

The Two-line coinage was a very large one, struck in the names of some eighty moneyers and evidently produced at a number of different mints. Dolley and Blunt distinguished four main styles of die-cutting within the issue which they attributed to Canterbury, London ('early' and 'late' styles), and west Mercia, and they recognized the existence of a significant number of Viking imitations. Their study was only preliminary, however, and they did not attempt to provide detailed descriptions of the scope of these stylistic groups, of the moneyers represented in them, or of the division between official issues and Viking imitations. In order to assess the significance of this new hoard it has been necessary to make a detailed stylistic analysis of the Two-line type generally. A full account of this will appear in due course, but the results so far as they concern this report may be summarised as follows.

The identification of four major stylistic groups has been broadly confirmed. They are associated with London, Canterbury, Winchester (Dolley and Blunt's 'late London' style), and west Mercia. The London group comprises the work of eight moneyers including Tilewine, who is named on some London Monogram coins, and three other moneyers who also struck the London Cross and Lozenge coins referred to above. The Canterbury series is much larger, embracing nineteen moneyers, and it is identified through coins of the archbishops and the late variety with DORO(vernia) added to the obverse legend. The Winchester group contains seven moneyers some of whom continued into Edward the Elder's reign (899–924) using a style of die that can be traced ultimately to moneyers of the mint-signed coins of Athelstan (924–39). For each of these three series some sub-division between early and late styles can be made, although it is difficult to place absolute dates on them. The fourth group from west Mercia is rather different, for it embraces five distinct styles of die-cutting and may represent the work of several quite distant mints. The seven moneyers involved are each in some way linked with the distinctive west Mercian coinage of Edward the Elder, including his pictorial issues. In addition to these four main groups, there are also a number of minor styles associated with moneyers who may have been working at other centres in Greater Wessex or Mercia. Together these styles account for some 50 of the moneyers. The remaining 30 or so are thought to have been working at mints in the Danelaw (see below). Of course, in every case it is the source of the dies rather than the mint-place that we are identifying through their styles, and while the dies will often have been used by moneyers operating in the

9 Dolley and Blunt, pp. 84–6.
10 The Winchester identification was first suggested in C. S. S. Lyon, "A significant "Winchester" die-link in the reign of Edward the Elder (899–924)", NCirc 1983, 261–2.
same town, some may have been sent for use at mints elsewhere. Where in this paper there is a reference to a London or Canterbury moneyer, etc., it should be understood as meaning a moneyer who uses London or Canterbury style dies.

The Viking imitations of Alfred's coins are not always easily distinguished. Their identification is based on three criteria: anomalous style, light weight, and poor literacy. If two of these characteristics are present one can be reasonably sure that the piece is imitative, but one should be wary of condemning a coin on grounds of style or weight or literacy alone unless it is an extreme case. The style of a coin is judged by the detailed form and arrangement of its lettering and decorative features, but these will vary to some extent even within an official style. It is only by assembling a fair number of specimens of full weight and good literacy that one can become familiar with the normal range of a die-cutter's work, and so distinguish this from imitative products. Even so the task can be difficult, for some of the Danelaw craftsmen tried to copy the style of lettering as well as the legends and did so tolerably well. Often one's opinion that the style is official or imitative is confirmed by the weight of the coin, but where with a fragment this check is not available and only a few letters are visible it may be impossible to decide what its status is. For this the reason many of the smaller fragments in the hoard have been placed in an uncertain category.

The difference in weight between the Anglo-Saxon and Viking issues arises because mints in the Danelaw did not adopt the higher weight standard that Alfred had introduced at the start of the third phase of his coinage. Official Two-line coins were struck to a standard of c.1.60g (24.5gr.) and they rarely fall below 1.45g (22.5gr.), whereas Viking issues were struck to a standard of around 1.35g (21.0gr.) or less and they rarely reach 1.45g (22.5gr.). This lighter standard can also be seen in the contemporary coins of Guthrum, and it continued to be used in the St Edmund Memorial issue, the regal Viking coinage of York, and the St Peter issue. As with style, the criterion is not absolute, for some official coins weight below 1.45g while the occasional Viking one will exceed it. With damaged coins one can sometimes guess at the original weight, but that will only be useful if it lies very clearly above or below the 1.45g mark. A similar clear margin will be required for coins, such as those in this hoard, that have been affected by corrosion and leaching.

The degree of literacy in the Viking issues varies greatly, for while the inscriptions on some are heavily blundered or quite meaningless, many are perfectly correct. Moreover errors do occasionally occur in the official series, not usually among the major stylistic groups of London, Canterbury, and Winchester, but some smaller workshops, notably that supplying dies to the moneyer Ecgwulf, regularly make mistakes. When an error is found in a coin inscription then, in order to assess its significance it is necessary to consider the stylistic group to which the coin belongs.

Adopting this approach to the identification of the Viking issues, only one coin in the hoard among the 55 or so Two-line coins in Alfred's name can be identified as an official Anglo-Saxon product with any confidence. It is a substantial fragment of a coin of the London moneyer Hereferth (no. 1). Even here the attribution is not certain, for it has the exceptional feature of four pellets around the central obverse cross which is only otherwise found among London style dies on BMC 338, also of Hereferth. This latter coin is of full weight (1.65g/25.5 gr.) and good style, but it has a worrying intrusive X in the obverse legend, XEL XFR ED RE. Of the remaining 'Alfred' Two-line coins in the hoard, 28 have been identified as probable Viking issues and 32 small fragments have been assigned to an

11 Coins in a hoard may have consistently lost weight through corrosion even where this is not immediately obvious from their condition; see the example cited in D. M. Metcalf, 'The monetary history of England in the tenth century viewed in the perspective of the eleventh century'. Anglo-Saxon Monetary History, edited by M. A. S. Blackburn (Leicester, 1986), pp. 133-57, at 151-3.
'uncertain' category. However, the ratio 1:28 among the positively identified coins probably understates the proportion of official coins in the hoard. One of the coins attributed to the Vikings in the name of the moneyer Ludig (no. 25) may actually be Anglo-Saxon, and among the uncertain fragments there are nine pieces which are quite likely to be official (nos 38-43, 45-6, and 50) and others that might be. It is probable, therefore, that the number of official coins of Alfred in the hoard is nearer to ten than the one actually identified, but even so this would still mean that the great majority of the coins (some five-sixths) are Viking.

b) Viking issues in the name of Guthrum ('Æthelstan')

Five coins in the hoard are in the name of Guthrum, king of the southern Danelaw in 880-90. These bring the number of known coins of his to 40, of which at least 20 came from the Cuerdale hoard and three from the Morley St Peter hoard. They carry his baptismal name, ‘Æthelstan’, and the title rex, together normally contracted to eight or nine letters and arranged in four sections as in Alfred's coins, e.g. ED EL ZN RE, ED EL TA RE. One coin in this hoard is novel in having an unabbreviated form in a continuous inscription, XEDELSTAN REX (no. 6). The literacy of the obverse, however, is not carried over on to the reverse, for the moneyer's name is quite garbled. It is not clear whether this coin belongs early or late in the issue. The other four coins add little to our knowledge of Guthrum's coinage, three of them being die-linked to coins from the Cuerdale hoard. This degree of die-linking is a little higher than we would expect, for a die-study of the whole issue to be published elsewhere suggests that we know only about a third of the dies originally used. Although Guthrum died in 890, in principle some of the coins in his name could be posthumous imitations, his name having been copied in the same way that Alfred's was. However, if such imitations do exist they cannot at present be distinguished.

c) Viking issue in the name of Guthfrith

The most interesting coin in the hoard is undoubtedly one with a quite new obverse inscription XGV DE F [ ] RE (no. 7). These letters are clear, save for the penultimate one of which only the angled right-hand foot is visible. It could be an A or an R, but R for rex is the letter one would expect in this position. Part of the surface of the die face between the V and the D had evidently flaked away before striking leaving an area of the metal raised, but it does not appear to have effaced any of the inscription. The legend was apparently laid out in four groups of two letters as on most of Alfred's and Guthrum's coins, so the portion missing from the edge of the coin would presumably have carried one letter, the last of the ruler's name.

Although the obverse inscription is incomplete, the first five letters GVDEF- are sufficient to identify the name, for they could only reasonably represent Guthfrith or related forms of it. The presence of a D rather than an Ð (eth) could be a simple die-cutter's error, but it may reflect a genuine sound change. This substitution is often found in other late ninth-century coin inscriptions, e.g. on Guthrum's coins where his baptismal name Æthelstan always begins ED-, on one by his moneyer Guthhere spelt GVDHEIE,12 and on coins of Alfred's moneyer Cuthberht who is regularly spelt CVDBERHT. The introduction of a medial E could suggest an attempt to Anglicize the name or reflect influence in the die-cutting of the Continental Germanic name Godafred.13 The second element beginning

12 BMC Alfred 329.
13 As has been argued in the case of later frequent occurrences of 'Godefrid' in Denmark: G. Fellows Jensen, Scandinavian Personal Names in Lincolnshire and Yorkshire (Copenhagen, 1968), p. 110. The form 'Godcuert' for Guthfrith occurs in Domesday Book: Fellows Jensen, p. 110.
with F is only likely to be -ferth, -freth, -frid, -frithr, -fr0thr, etc., which are related and in practice were interchangeable according to the language and dialect of the user. The name could be of Old English, Continental Germanic, or Scandinavian origin, but in the context of a late ninth-century ruler in the Danelaw we should presumably interpret it as the Old Norse Guthfrithr/Guthfr0thr. As on Guthrum’s coins, the name must have been contracted or abbreviated so that with the title it would fit into eight letters, and the legend is probably to be completed +GV DE FD RE or +GV DE FR RE.

The moneyer of Guthfrith’s coin is ‘Theie’ (DEIE), which is probably to be interpreted as OE Dæg (modern ‘day’), a rare name in this uncompounded form, but more familiar in Dægbeorht and Deagem. The moneyer is otherwise known only from another coin in the Ashdon hoard (no. 16), in this case in the name of Alfred. Both specimens are in a similar style that may give some clue to their origin. They have a large plain inner circle leaving a narrow margin for the inscription which is in small delicate letters. On the reverse the O in MONE has short lines radiating from it like a sun. This type of O is also found on a blundered halfpenny of ‘Iæg’ from the Stamford hoard (Grierson14 no. 37). It has the same narrow margin and delicate lettering and seems to be the work of the same die-cutter. Several other coins exhibit this narrow margin although the style of lettering varies to some extent, e.g. pennies: Guthrum, Iudelberd (SCBI Merseyside Museums 146): ‘Alfred’, Winig(her) (BMC 392); and ‘Alfred’, blundered moneyer (BMC 362); halfpennies: all ‘Alfred’ and from Stamford hoard, ‘Tilewine’ (Grierson nos 33 and 44), ‘Rafing’ (Grierson no. 36), and ‘Erifer’ (with Lincoln monogram, Grierson no. 49). Several factors suggest that this style was popular in the north-east Midlands, namely the Lincoln monogram halfpenny, the penny of Winiger who went on to strike the St Edmund Memorial type and later coins of Edward the Elder in a style that Lyon associates with the Five Boroughs region, possibly Stamford,15 and thirdly the presence of so many coins of this style in the Stamford hoard. There is therefore a strong possibility that Guthfrith’s coin was struck not at York but in the region of the Five Boroughs.

Who was the Guthfrith who issued this coin? The name was borne by a number of Viking rulers, including the famous king of Denmark (d.810) and two tenth-century Viking kings of Dublin. Keeping in mind that the coin must have been struck sometime between the early 880s, when the Two-line type was introduced, and c.895, the latest likely date for the deposit of the hoard, there is only one plausible candidate recorded in the sources. The next Viking king of York mentioned after Halfdene I is Guthfrith (called Guthred in one text), who ruled from c.881 or c.883 until his death on 24 August 895.16 He was apparently a Christian, and there is a colourful account of his election and swearing of an oath over St Cuthbert’s remains, but otherwise we know little about his reign. He was buried in York Minster. As Guthrum’s counterpart in the northern Danelaw he is a person one could expect to have issued coins, as his successors did. Indeed, until 1961 the late York regal coinage in the name of Cnut was generally attributed to Guthfrith.17

The fact that the new coin was probably struck not in Northumbria but in the Five Boroughs need not prevent its being attributed to the king of York. The history of this period derives almost wholly from West Saxon sources which say little about the internal affairs of the Danelaw. Guthfrith may have enjoyed some authority south of the Humber – the chronicler Æthelweard records some activity of the York Danes in an area west of

Stamford, although it may have been no more than raiding. Moreover, the Vikings had a plural notion of kingship so that several leaders might have been recognized in the same region at one time, including the unidentified King Halfdene of the coins. The geographical pattern of minting in this imitative phase is still very unclear, but if as seems probable the coinage in York started later than that in the south and Guthfrith had required coins in his own name for some political purpose, he might well have commissioned them from a moneyer in the southern Danelaw. Alternatively, this new coin may be merely a southern imitation of a coinage issued at York. Several explanations are therefore available, and while we cannot rule out the possibility that there was another Viking leader of the same name in the southern Danelaw, the probability is that the Guthfrith of the coin was the well known and powerful king of York. Whatever the circumstances lying behind this issue, it is evident that Guthfrith’s coinage can only have been very small. It would be an over-simplification to say that based on surviving specimens Guthrum’s named coinage was 40 times larger, but comparing the numbers of their coins does give some idea of the relative scale of production.

d) Viking issues in the name of ‘Alfred’ by Danelaw moneyers

It has recently been argued that a significant proportion of the moneyers named on the Two-line coinage in Alfred’s name were men operating at mints in the Danelaw quite outside Alfred’s control. The use of Alfred’s name rather than that of a local ruler is explained as a desire to emulate the designs and legends of a successful neighbouring coinage, a practice common among states that are issuing coins for the first time as the Anglo-Vikings were.

In the Ashdon hoard twelve coins fall into this category. Elda (no. 10) was also a moneyer for Guthrum, and Theie (no. 16) struck the coin of Guthfrith. Winig (nos 18–19) was a prolific moneyer in the succeeding St Edmund Memorial issue and after the reconquest of the Danelaw he produced coins for Edward the Elder of a style associated with the east Midlands. The moneyer Simun (nos 11–15) is shown by the weight distribution of his coins and the find evidence to have been working in the southern Danelaw, and it is probable that he is the same moneyer as the Sigemund, Simund, etc. who struck St Edmund Memorial coins. Coin no. 8 reading BALDO may be by the St Edmund moneyer Bado or possibly a corrupt version of another called Wigbald. The moneyers of the two remaining coins in this class, Balere (no. 9) and Varolf (no. 17), are not recorded in other types, but the poor literacy and light weight of their coins show them to be Danelaw issues.

e) Viking issues in the name of ‘Alfred’ and copying names of West Saxon or Mercian moneyers

Nine coins with the name of ‘Alfred’ appear to be direct copies of official coins; further examples may also be present among the coins of uncertain attribution. The criteria for
distinguishing imitations from the originals have been discussed above, and the specific grounds for each coin are set out in the catalogue. Of the nine coins, six are copies of moneyers of the London group (five of Ludig, although no. 25 may be official, and one of Tilewine), one copies a moneyer of the Canterbury group (‘Diarwald’), and two copy a west Mercian moneyer (Cuthberht). The high proportion of imitations of Ludig can also be seen among the imitations in the Cuerdale hoard, and they occur among the few recorded single-finds of this period. This is perhaps not surprising since Ludig was a prolific London moneyer during the early and middle years of the Two-line issue, the period when most of this class of imitation appears to have been produced. Imitations of Cuthberht and Tilewine are also well known from the Cuerdale hoard, but that of Diarwald is not. Most of the known imitations of the Canterbury group belong to a single phase late in the issue, for they mainly copy coins of the DORO type of Alfred or Archbishop Plegmund. The lettering on these is clearly based on the Canterbury style, but many have badly blundered legends. The Diarwald coin in the Ashdon hoard (no. 22) does not belong to this imitative group, for its style is different, making little effort to emulate Canterbury work.

Only one coin has been found to die-link with coins outside the hoard (no. 27, a die-duplicate of BMC 349 from Cuerdale), which is a much lower rate than among the coins of Guthrum, but this may be because a more complete photographic record of Guthrum’s coins exists as they are so scarce that those that are not in museums have mainly been illustrated in sale catalogues.

f) Viking issues in the name of ‘Alfred’ with blundered or uncertain moneyers’ names

Seven fragmentary coins have reverse inscriptions that are clearly blundered. Were they more complete, it might be possible to discern the names of Danelaw or official Alfredian moneyers underlying the legends. One piece (no. 34) has been found to die-link with coins outside the hoard enabling the reverse inscription to be completed, although it still makes little sense. Another (no. 35) appears to have a blundered form of a moneyer’s name ending -berht, while a third (no. 33) may be a blundered version of ‘Tilewine’. For the remaining four fragments no close parallels have been found.

g) Uncertain Anglo-Saxon or Viking issues

For 32 fragments I have hesitated to give positive attributions largely because they are too small for one to be able to judge their style or weight with any confidence or to recognize die-links with other coins. For several of them suggestions as to the moneyer concerned can be made, e.g. nos 38–46, but whether they are official coins or imitations is uncertain. Others have reverse legends that are otherwise unrecorded, such as nos 36–7 and 47–8. Some of the smallest pieces are no more than part of the central cross or outer border, and, although a careful check has been made, we cannot be sure that these do not belong to other fragmentary coins in the hoard.

The group is none the less interesting. It includes three coins (nos 39, 40, and 50) that may be of the Winchester style or imitations based on it. They would not affect date of deposit of the hoard, however, for they could belong to either the early or the late sub-groups that have been distinguished in the Winchester style. Another coin (no. 44) is by a moneyer He...stan, presumably Heahstan or Herestan although neither name has been previously recorded in the Two-line type. There was a Heahstan who used Winchester-style dies in the preceding Cross and Lozenge issue, but if this is the same

21 SCBI Oxford 247.
man the Ashdon coin is probably a Viking copy of a lost original for it is not in the Winchester style. One coin (no. 43) appears to be of the Canterbury style or an imitation of it, and like the Diarwald imitation it is of the main Two-line type rather than the later DORO variety. Five coins (nos 38, 41-2, and 45-6) may be coins or copies of the London style, of which the first is the most significant. It is most likely to be a coin of Beagstan who was the sole moneyer at London towards the end of the reign, but if it is one of his it would appear from the lettering to belong to the middle of the issue when he was also active.

h) Carolingian element

The four Carolingian deniers provide the terminus post quem for the hoard and potentially some insight into Viking contacts with the Continent. Three are of the Gratia Dei Rex type in the name of Charles the Bald (840–77), one from the mint of Rouen and two from Curtisasonien. The type was introduced in 864 and it continued unchanged at many mints after Charles' election as emperor in 876 and even after his death down to the end of the century or later. This is especially likely for the coins of Curtisasonien, for the three French hoards in which they were a major or dominant constituent – Juaye-Mondaye, Issy l'Evêque, and ‘near Autun’ (Luzy) – are all of the early tenth century. No satisfactory division has as yet been made between the coins issued during Charles’ reign and those produced in the following decade or two, so that the specimens in the Ashdon hoard cannot be closely dated. This is not true of the fourth coin, however, which is a Paris denier of Odo (888–98).

Geographically the coins form a reasonably compact group, with Paris and Rouen on the Seine and Curtisasonien in the same region but probably further south-west between Paris and Brittany, although its location has long been debated; it has been identified most recently with Courcassin near Corbon (Orne). The one recorded Carolingian coin from the Stamford hoard, which was deposited at much the same time as the Ashdon hoard, or perhaps a little earlier, was also from the Seine valley, a Gratia Dei Rex obol of Saint-Denis. This pattern is different from that of the mints represented in the earlier hoard from Laxfield, Suffolk deposited probably during the later 870s, which had six coins of the Gratia Dei Rex period, of which one was from Rouen but five were from mints further north: Quentovic (two coins), Nivelles, Saint-Géry (Cambrai), and Laon. Admittedly, the numbers of coins involved are so small that comparisons must be treated with caution. Much more significant is the contrast shown by the c.1,050 Carolingian coins in the Cuerdale hoard (dep. c.905) which were predominantly from Aquitaine and the Loire valley, with a smaller but significant group from Flanders, Lotharingia, and the Somme valley. From the Seine valley there were very few coins considering the size of the hoard – Rouen (-), St Denis (1), Paris (2), Chelles (-), Meaux (-) – and fewer still from the area to the south-west – Evreux (1), Lisieux (-), Bayeux (-), Deux-Jumeaux (-), Curtisasonien (1).


Dolley and Morrison, p. 79. The deposit date must be later than c.875 suggested there, for it apparently contained an ‘IMPERATOR AVGST’ coin of Saint-Géry (Cambrai) which dates after 876 if of Charles the Bald or after 882 if of Charles the Fat. The hoard is in fact strong evidence for the former attribution, since the Anglo-Saxon element in so far as it is described could hardly be later than the 870s. However, I have been unable to find the partial hoard listing among the Banks MSS in the British Museum cited by Dolley and Morrison.

Dolley and Morrison, pp. 80–81.

If the majority of the coins in Cuerdale belong to the later ninth century a number of these mints may not have been operating then, but some certainly were including Paris, St Denis, Meaux, and Curtisasonien.
Danelaw are one of *Curtisasonien* from Beachamwell, Norfolk, 31 one of Quentovic from Thetford, Norfolk, 32 and an obol of Visé from the Thetford area. 33

The Carolingian coins in the Ashdon and Cuerdale hoards were clearly drawn from sources of different composition, but how far either find was representative of a pool of Carolingian coins circulating in the Danelaw rather than discrete parcels that had been brought from the Continent is debateable. The evidence of the ‘peck-marks’ on the Cuerdale coins suggests that they had seen some circulation in the Danelaw; approximately 50 per cent of those in the British Museum have ‘pecks’ (between one and seven per coin) which is a higher percentage than in some of the insular elements in the hoard. 34 But just how effective that circulation was in mixing the coins and to what extent the heavier Continental deniers would have been preferentially selected or rejected for transactions or for hoarding we do not know. The stock of Carolingian coins in the Danelaw was probably small enough for its composition to have been significantly influenced if large sums of money from one region of France were brought over, for example, on the arrival of the Great Army. The differences that are apparent between the Laxfield, Ashdon, and Cuerdale hoards suggest that this was the case. It is also likely that there was in addition some Frankish coinage arriving through regular contact with Vikings on the Continent or with the Franks themselves.

It is tempting to try to correlate the compositions of these hoards, and in particular the concentration of coins from the Seine region in the Ashdon hoard, with the known movements of the main Viking army on the Continent and its excursions to England in 884–5 and 892–6. The result is not particularly convincing. For the five years prior to 884 the army had been active in Flanders, the Somme valley, and Lotharingia, but not apparently further south. On their return to the Continent in 885 they did spend five years principally in the Seine valley and Burgundy, laying siege to Paris in 885–6 and taking tributes there in 886 and 889, but they moved north again for two years prior to their return to England in 892. A second army that joined them in Kent in 892 had spent the previous two years in the Somme valley. One would expect any coinage that the armies brought with them to have had a substantial northern element even if it also included plunder from earlier years and part of Odo’s Paris tribute of 889. Unfortunately, the four coins in the hoard are not a sufficient number that we may assume them to be representative. They could therefore have come to England with one of the armies in 892, but it is perhaps more likely that they came by some other means possibly spread over a number of years in the period 885–90 when the Vikings were actively raiding up and down the Seine.

**Pecking and bending**

The Ashdon hoard provides clear evidence that ‘pecking’, testing the metal by cutting or stabbing with the blade of a knife, was practised by the Vikings in the southern Danelaw. This was widely employed in Scandinavia and the Slav lands around the Baltic from the late ninth until the late eleventh century. 35 In the British Isles it has been noted in

---

31 To be published by Blackburn and Bonser.
33 Of Louis the German; information from Dr Marcus Phillips.
34 Detailed comparisons must await the publication of Miss M. M. Archibald’s study of the ‘peck-marks’ on Cuerdale coins, but one’s impression is that the Carolingian coins are much more heavily pecked than the St Edmund or York regal series and possibly more than the Two-line coins.
Northumbria on the coins, ingots, and hack-silver in the Cuerdale hoard, and on three single-finds from the southern Danelaw: the denier of the Gratia Dei Rex type found at Thetford, Norfolk mentioned above, an ‘Alfred’ Two-line coin by the Danelaw moneyer Simun found at Cambridge, and a Sword St Peter coin struck c.920–7 found near Louth, Lincolnshire. Peck marks will no doubt be noticed on other finds now that attention has been drawn to their significance, for it is only comparatively recently that Miss Marion Archibald first noted them on Cuerdale coins. Irish hoards in particular deserve to be studied.

In the Ashdon hoard 26 of the 71 pieces carry peck marks, but many of the fragments are so small that one would not expect them to be marked even if the coins they came from were. More significantly, of the 24 complete or substantially complete coins in the hoard 13 (i.e. 55 per cent) are peck marked. They are present in all the significant categories – Viking issues with rulers’ names, those of Danelaw moneyers, those imitating official Alfredian coins or with blundered legends, and the Carolingian coins. The absence of pecks on the few fragmentary pieces that are or may be Anglo-Saxon issues is probably of no significance. Their presence on the coins of Guthrum and on those in the name of ‘Alfred’ by the moneyers Elda, Simun, and Winnig is of particular interest in demonstrating that pecking was carried out in the southern Danelaw, for as undoubted southern Viking issues it is most unlikely that these pieces received the peck marks while circulating in Northumbria. The number of marks on individual coins varies between one and three, and they do not seem to be concentrated in any particular category of coin. Given the fragmentary state of many of the pieces, the degree of pecking in this hoard is not amenable to detailed statistical analysis.

Another feature common among coins from Scandinavian finds and thought to have been an alternative method of testing the resistance, and hence the purity, of the metal is deliberate bending and rebending. Seven (or possibly nine) coins in the Ashdon hoard (nos 9, 10, 13?, 18, 19, 33?, 58, 68, and 70) appear to have been treated in this way, each with one bend but sometimes bent flat again leaving a ridge. Nos 9 and 19 have peck marks on and at right angles to the ridge, suggesting that they had been bent before being pecked. Unlike pecking, bending seems also to have been practised by the Anglo-Saxons, for Professor Maimer has noted bent coins among a number of tenth- and eleventh-century English hoards, although no systematic study has yet been carried out.

Date of deposit and significance of the hoard

The coin of King Odo (no. 71) provides a strict terminus post quern for the hoard of 888, but other elements present enable one to place further limits on the likely period of deposit. The Two-line coins that are probably Anglo-Saxon or are based on Anglo-Saxon models belong to sub-styles of early and middle date, while the wide range of Viking imitations and derivatives also suggests in general terms an assembly made well into the currency of the Two-line issue. Based on Dolley and Blunt’s dating of c.887–99 for the type, the hoard could hardly be much earlier than the mid 890s. But as noted above it can now be argued that Alfred introduced the type in the early 880s, so that a date of deposit as early as c.890 can be contemplated.
It is still more instructive to consider what is not represented in the find. There are no coins or imitations of the later varieties and sub-styles of Alfred's Two-line type, such as the DORO variety at Canterbury, the neat London style of the moneyer Beagmund, or the more regular late Winchester style, each of which probably belongs to the last five years or so of the reign. The prolific Orsnaforda and Canterbury-style imitations, both of which also appear to be late groups, are likewise absent, and so too the Viking regal coinage of York which probably commenced in the later 890s.

The most significant absentee, however, given the location of the findspot, is the St Edmund Memorial issue. The large scale of production evident from the Cuerdale hoard suggests that the type soon dominated the currency of much of the southern Danelaw, and it may well have effectively demonetized the Two-line and other issues previously in circulation there. Blunt, in his study of the St Edmund issue, dated its introduction c.892 on the basis of three die-duplicates which combine a St Edmund obverse with a reverse(?) reading +ÆLFRED REX DU. These he regarded as official products of the Canterbury mint, and since this was thought to have been closed in 892 with the arrival of the Viking armies in Kent, the 'St Edmund/Alfred' coins could not have been struck later than that year. However, although these coins are of good workmanship and copy (incorrectly) a Canterbury inscription, they are not in fact in the style of the Canterbury die-cutter, and their weights conform to the lighter Danelaw standard rather than that of Alfred. They should be seen, then, not as official Canterbury issues but as products of the Danelaw, either copying regular St Edmund and Alfred issues or perhaps leading the St Edmund series in a transitional phase when the die-cutter was experimenting with new designs. Moreover, in the British Museum there is a coin of Archbishop Plegmund's simple Two-line type, contemporary in style and fabric with Alfred's, that has been overstruck on a coin of the St Edmund Memorial issue, demonstrating that the Canterbury mint was still in operation after the beginning of the St Edmund issue. Indeed, I would argue that the continuity of moneyers at Canterbury from Alfred to Edward the Elder is such that the mint appears to have been active until virtually the end of the reign without any obvious sign of a previous interruption. One is, therefore, thrown back on other evidence for dating the start of the St Edmund coinage, albeit of a less decisive character. The relative size and complexity of the St Edmund issue and of the preceding imitative phase are matters to be weighed, but they are difficult to quantify. The fact that in the Cuerdale hoard the majority of Viking imitations that one might give to the southern Danelaw (save for the late 'Canterbury' group which is difficult to locate) copy official coins of early and middle styles rather than the later ones suggests that this phase had ceased by the mid 890s. But the firmest evidence for dating the issue is that it lay after the deposit of the Stamford and Ashdon hoards and, because of the Plegmund overstrike, before the last years of Alfred's reign. A realistic estimate would be c.895 with latitude of several years either way.

The other coin type that is notably absent from the hoard is the London Monogram issue and its imitations. Here there is a marked contrast with the Stamford hoard which contained at least ten London Monogram imitations and derivatives among the 39 recorded coins. The hoard is also unusual for its large number of halfpennies (at least 24). What is not clear is whether the difference is one of geography or date. The London Monogram prototype belongs early in the Two-line phase, so judge from the use of a
portrait and the evidence of the London (Bucklersbury) hoard. This poorly recorded find appears to have been composed largely of London Monogram coins with just a few of the Two-line type, the only moneyer recorded being Wulfred who operated at Winchester throughout the issue. We may infer that the Monogram issue then dominated the currency in London because few if any Two-line coins had been struck there, although the type had already been introduced at Winchester and perhaps at other mints. The imitations may also be generally early, as that in the name of Halfdene surely is since it mules a London Monogram reverse with one of the earlier and much rarer Two Emperors type. Two regular coins overstruck at Canterbury and at a west Mercian mint suggest that its currency was in practice limited regionally or chronologically or both. One would expect London’s influence to have been greater in north Essex than at Stamford in Lincolnshire, and among the Two-line coins from Ashdon a high proportion are in the name of London moneyers. The absence of the Monogram type, then, implies either that the Ashdon hoard is later than that from Stamford or that the London Monogram imitations have a more northerly origin and perhaps that the currency in East Anglia was largely limited to Two-line issues by a preference for the locally produced type.

Weighing all these factors, the Ashdon hoard is likely to have been deposited between c.890 and c.895. As we have seen, the Carolingian coins may have been brought to England in 892 by the two Viking armies that had been campaigning for many years in central and then in northern France, one having taken tribute from Odo at Paris in 889. But they could have come over with some smaller band or through trade in earlier years. Nor can we with any assurance link the hoard’s non-recovery with the activities of the same armies in England between 892 and 896 when, with reinforcements from East Anglia and Northumbria, they rampaged around England engaging in conflicts that tested the new English defences to their limits.

The political status of Essex in the 890s is somewhat uncertain, for although it was within the Danelaw according to the boundary described in the treaty between Alfred and Guthrum, the Anglo-Saxon Chronicle annal for 896 refers to the death of one ‘Beorhtwulf, ealdorman of Essex’ implying that Alfred may either have retained or recently regained control of at least part of that region. However, Ashdon, lying in the extreme north, on the boundary with East Anglia, is likely to have remained in Danish hands. That the hoard was the property of a resident of the Danelaw, be he Viking or Anglian, there can be no doubt. The predominance of light Danelaw issues, the Carolingian element, and the presence of ‘pecked’ and bent specimens distinguish the coins from those that circulated in Wessex and English Mercia. A very different picture is presented by the Leigh-on-Sea hoard, which appears to have consisted entirely of regular issues of Alfred, predominantly of Canterbury style, and without peck marks, to judge from the published photographs which admittedly is hazardous. The presence of both the simple Two-line type and the DORO variety suggests a date of deposit of c.895–900, rather than 893 as proposed by Blunt and Dolley. If the find were typical of the coinage in local circulation rather than a purse taken from Kent, of which we cannot be certain, it would imply a very different currency and political authority in the south from that in north

45 BMA 300; illustrated Dolley and Blunt (note 7), pl. 10. 7.
46 Banks and Purvey; MEC 1:1363.
47 Keynes and Lapidge (note 18), pp. 171–2; but for an alternative interpretation of the treaty see D. N. Dumville, ‘Alfred and Guthrum’, in his Wessex and England from Alfred to Edgar (Woodbridge, forthcoming).
49 Blunt and Dolley, pp. 235–8.
Essex. However, the grave in which the coins were found appears to have been a pagan one, the skeleton being accompanied by a horse and sword, so that the evidence is ambiguous.

Conclusions

The Ashdon hoard provides a valuable insight into the nature of the coinage circulating in the southern Danelaw during the early 890s, prior to the introduction of the St Edmund Memorial issue. It implies a surprisingly uniform currency consisting almost entirely of two-line coins, the great majority of them Viking issues. The technical standard of production at the Danelaw mints was very variable, ranging from the excellent products of the moneyers Elda and Simun, good enough to have been regarded until recently as official issues of Alfred, to extremely crude illiterate imitations. The two Danelaw coins analysed metallurgically have finenesses of c. 95 per cent ‘silver’ (see appendix 2), which are as good as those of Alfred’s official issues. The weight distributions of many of the Danelaw coins are, however, both lighter and wider than those of Alfred’s, but it is clear that the lighter standard was intentional, following the old Anglian weight system, and was not merely the product of lax or fraudulent administration on the part of the Vikings. Indeed the use of such a standard implies some participation of the indigenous Anglian community in economic affairs, as one might expect. The Stamford hoard, so far as one can judge from the surviving information, equally implies a currency dominated by Viking issues, although whether its different range of types represents a difference in the composition of the currency in the east Midlands rather than in date is open to question. We will be in a better position to judge this when more work has been done on the chronology and origin of the various issues of this initial phase of Viking coinage.

CATALOGUE OF COINS IN THE HOARD

Arrangement

All the coins are illustrated on the plates. In the transcriptions of the legends, a pellet below a letter indicates that it is only partly visible and the reading is conjectural. An upright stroke has been represented as an I with a pellet below it even where it is likely to be part of another letter.

The coins were cleaned and some fragments stuck together at the British Museum, while further pieces that were subsequently matched were joined at the Fitzwilliam Museum, using a soluble glue. Four coins (nos 8, 11, 17, and 20) were deliberately left uncleaned to show the state in which they were found; their recorded weights will be a little higher than if they had been cleaned. The die-axes have been recorded to the nearest 10° using an instrument made from a protractor, unless the piece is so fragmentary that the orientation of the design is uncertain.

The coins are all in the Fitzwilliam Museum, Cambridge, save for four in the British Museum (nos 6, 7, 16, and 71) and two in Saffron Walden Museum (nos 12 and 25).

I. OFFICIAL ANGLO-SAXON ISSUE

Alfred of Wessex (871-99)

<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks</th>
</tr>
</thead>
<tbody>
<tr>
<td>obv./rev.</td>
<td>obv./rev.</td>
<td>0.56g (9.3gr.)</td>
<td>3 frags.</td>
<td>180°</td>
<td>-</td>
</tr>
</tbody>
</table>

1. Moneyer Hereferth (OE). London style, probably official

XE| |
R| HER| |]| | |
(HE ligatured)

Probably a regular coin despite the four pellets around the obverse central cross, which is found on one other coin of Hereferth's (BMC 338). The detached fragment appears from its distinctive surfaces to belong to the other two pieces.

For other coins possibly official issues, see nos 25 and 36-67, particularly 38-43, 45-6 and 50.

II. VIKING ISSUES

Guthrum ('Æthelstan'), king in the southern Danelaw (880-90)

2. Moneyer Aelven (OE Ælfinew?)

XEDELIARE  AEL:-/-/VEN | 1.12g (17.3gr.) | whole coin | 260° | - |

From the same dies as the only other known specimen of this moneyer (BMC 91).

3. Moneyer Berter (OE Beorhthere or CG Berter)

XE| |EL| |E| RE | |ER| |ER| 0.82g (12.7gr.) | 2 frags. | 0° | 1/- |

From different dies from the other four known specimens. The name could but need not be of Continental origin, for this would be an acceptable Anglian form of Beorhthere although the loss of the final e is unusual.

4. Moneyer Berter

|ED| EL|A| RE | BER/|-/TE|R 0.78g (12.0gr.) | 4 frags. | 90° | - |

From same dies as a coin in the Assheton collection, ex Cuerdale hoard.

5. Moneyer Elda (OE)

[XE|ED|EL|AN| RE | | | MEEE] | 0.49g (7.6gr.) | frag. | 300° | - |

From the same obverse die as BMC 99 and its die-duplicate in the Assheton collection, ex Cuerdale hoard. Elda is the only moneyer for Guthrum who uses the formula me fecit. See also no. 10 below.

6. Uncertain moneyer

XEDELSTAN  REX  EIVDI/ | LGIL| or | LGIL/ | PIDAE | (letters reversed or inverted)

1.24g (19.8gr.) | 5 frags. | 340° | I/1 |

This coin has the longest and most literate obverse inscription known, combined with a quite blundered reverse that has defied interpretation. [British Museum]

Guthfrith, king of York (c.883-95)

7. Moneyer Thie (OE Daeg?)

XGV DE | RE- | DGEIE/- | | | | (rays from O) | 0.83g (12.8gr.) | frag. | 340° | - |

For a discussion of the attribution and significance of this coin, the first recorded of Guthfrith, see text above. Same moneyer as no. 16 below. [British Museum]

In the name of 'Alfred' by Danelaw moneymen

8. Moneyer Baldo, Bald or Wigbald? (CG Baldo, OE Beald, or OE or CG Wigbald)

+EL| FR| RE- | BULD/- | |OME | 1.08g (16.7gr.) | uncleaned, | slight chip | 120° |
This reverse inscription was not represented in the Cuerdale hoard, but a coin with the same readings (thus possibly from the same dies) was in the F. J. Shand sale (Glendining 8 March 1949, lot 319, not illustrated). Their poor literacy and the weight of the Ashdon specimen show this to be a Danelaw issue. This may be the same moneyer as Bado of the St Edmund Memorial coinage, whose name is there rendered as BADOAIME, BADAHEIN, etc. However, this coin is very similar in style to one of the moneyer Wигbald (BMC 387), suggesting the possibility that the inscription is in fact a blundering of VIGBALD. Wигbald was also a St Edmund moneyer.

<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>obv.rev.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This reverse inscription was not represented in the Cuerdale hoard, but a coin with the same readings (thus possibly from the same dies) was in the F. J. Shand sale (Glendining 8 March 1949, lot 319, not illustrated). Their poor literacy and the weight of the Ashdon specimen show this to be a Danelaw issue. This may be the same moneyer as Bado of the St Edmund Memorial coinage, whose name is there rendered as BADOAIME, BADAHEIN, etc. However, this coin is very similar in style to one of the moneyer Wигbald (BMC 387), suggesting the possibility that the inscription is in fact a blundering of VIGBALD. Wигbald was also a St Edmund moneyer.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**9. Moneyer Balere (OE Bealdhere?)**

<table>
<thead>
<tr>
<th>XEL FR ED RE</th>
<th>BALERE/•:-:SOMON</th>
<th>1.05g (16.2gr.)</th>
<th>whole, bent 160°</th>
<th>1/1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O with rays.</td>
<td></td>
<td>(once and bent back)</td>
<td></td>
</tr>
</tbody>
</table>

Moneyer previously unknown. This is an acceptable Anglian form of the West Saxon name Bealdhere. The light weight, anomalous style and inverted letters show this is a Danelaw issue.

**10. Moneyer Elda (OE Elda)**

<table>
<thead>
<tr>
<th>XEL FR ED RE</th>
<th>ELDA/•/ME FEC</th>
<th>1.30g (20.1gr.)</th>
<th>chipped, bent 320°</th>
<th>1/-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(once)</td>
<td></td>
</tr>
</tbody>
</table>

Elda was a Danelaw moneyer who struck coins in the name of both Guthrum and Alfred (cf. no. 5 above).

**11. Moneyer Simun (OE or GC Sigemund or OF from Hebrew Sinutn)**

<table>
<thead>
<tr>
<th>XEL FR ED RE</th>
<th>SINH/•/HE FEC</th>
<th>1.25g (19.3gr.)</th>
<th>5 frags., 250°</th>
<th>-/1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(suspension mark over VII)</td>
<td></td>
<td>complete, uncleaned</td>
<td></td>
</tr>
</tbody>
</table>

The moneyer 'Simun' was apparently working in the southern Danelaw. All his coins have the formula me fec(it), which is otherwise found only on coins of the moneyer Elda and in the St Edmund Memorial issue. Their weights are aligned with the Danelaw standard of c. 1.45g (22.5gr.) rather than the West Saxon and Mercian c.1.6g (25 gr.). Moreover the presence of five or six specimens in the Ashdon hoard compared with only three in the much larger Cuerdale hoard suggests that the mint was nearby, especially since the only single-find is one from Cambridge. The name 'Simun' was regarded by Smart as the biblical Simon, but it is perhaps more likely to be equated with the St Edmund moneyer SIGEMUND, SIMUND, etc. On each of his dies in the name of 'Alfred' there is what appears to be a mark of abbreviation over the last part of the name which could represent the loss of the D from Sigemund or VS from Latin Simunus. On four specimens in this hoard the mark above the VN has a curious tadpole-like form with its 'head' to the right, which prompted the suggestion from one colleague that it could perhaps be a 'minuscule' D, but on MEC 1:1367 the 'head' points to the left while on BMC 370 the mark is a bar with two tapering ends so that the interpretation, although possible, is unlikely.

The style of the eight substantially complete specimens is reasonably consistent, with strong clear lettering and a fairly thick inner circle. A notable feature of several obverse dies is the use of wedge-shaped uprights for the letters F, L, and R (e.g. on nos 11, 12, and 14), and the way in which the letters slope backwards. This style has also been observed on other Danelaw coins including some imitations of the official moneyer 'Ludig' (e.g. nos 23 and 24), and these are probably the work of the same die-cutter.

**12. Moneyer Simun**

<table>
<thead>
<tr>
<th>EL FR ED REX</th>
<th>SHV/•/HE FEC</th>
<th>1.17g (18.1gr.)</th>
<th>whole 10°</th>
<th>-/1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(contraction mark over VII)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Saffron Walden Museum]

---

51 Two are cited in Hardy's listing of the hoard and one is among the Armitage fragments in the British Museum.

52 MEC 1:1367.

<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moneyer Simun</td>
<td>XEL FR ED RE</td>
<td>1.18g (18.2gr.)</td>
<td>chipped, bent</td>
<td>200°</td>
<td>1/-</td>
</tr>
<tr>
<td>Moneyer Simun</td>
<td>EL FR</td>
<td>0.87g (13.4gr.)</td>
<td>2 frags.</td>
<td>160°</td>
<td>-</td>
</tr>
<tr>
<td>Moneyer Simun</td>
<td>0.20g (3.1gr.)</td>
<td>2 frags.</td>
<td>30°</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Coins of Simun are the only ones known to carry this contraction mark. These fragments do not appear to belong with any others in the hoard.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moneyer Theic (OE Ducg?)</td>
<td>XEL FR ED RE</td>
<td>1.14g (17.6gr.)</td>
<td>complete</td>
<td>290°</td>
<td>-/3</td>
</tr>
<tr>
<td>The moneyer is only otherwise known from the coin of Guthfrith (no. 7 above). [British Museum]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moneyer Varolf (CG)</td>
<td>XEL ER EL RE VAROLF</td>
<td>1.25g (19.3gr.)</td>
<td>5 frags., O not ligatured</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Two coins from the Cuerdale hoard appear to be by the same moneyer: BMC 197 reading VAROLFDI (L inverted) weighing 1.33g/20.5gr. and BMC 363 VAROLF (retrograde) weighing 1.35g/20.8gr. Taking the three inscriptions together, the intended form of the name would appear to be Varolf, the additional D in two of them being presumably space fillers (cf. no. 8). This name form, particularly the A and O, suggests that it is the Continental Varolf, although it could be OE Wcerwtdf as interpreted by a Continental die-cutter.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moneyer Wing (CG Winiger)</td>
<td>XEL FR ED RE</td>
<td>1.19g (18.4gr.)</td>
<td>whole, bent</td>
<td>260°</td>
<td>1/2</td>
</tr>
<tr>
<td>The first two letters of the reverse have an unusual form and may have been intended as Old English wynns.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moneyer 'Cuthberht'</td>
<td>XEL FR ED RE</td>
<td>1.05g (16.2gr.)</td>
<td>whole, uncleaned</td>
<td>170°</td>
<td>1/-</td>
</tr>
</tbody>
</table>
The irregular style, error in the reverse legend, small flan, and light weight show this to be an imitation of the prolific West Mercian moneyer Cuthberht; cf. BMC 248 and Carlyon-Britton 939, also imitations.

21. Moneyer ‘Cuthberht’

<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight (g)</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks</th>
</tr>
</thead>
<tbody>
<tr>
<td>XELFREREDRX</td>
<td></td>
<td>1.28g (19.4gr.)</td>
<td>5 frags., small 190° chip missing</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Weakly struck in parts. The form of the lettering, particularly the Rs, and the lack of ornamental pellets on the reverse suggest this is an imitation.

22. Moneyer ‘Diarwald’

<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight (g)</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks</th>
</tr>
</thead>
<tbody>
<tr>
<td>[R] [R]</td>
<td>[RE]</td>
<td>0.71g (11.0gr.)</td>
<td>2 frags.</td>
<td>150°</td>
<td>-</td>
</tr>
</tbody>
</table>

Diarwald is a regular Canterbury moneyer, but the style of this coin is quite different from that of the Canterbury die-cutter. The V which should be at the end of the top line of the reverse is missing. The pellet in the centre of the obverse cross is reminiscent of Winchester-cut dies, but this is coincidental for it has an obverse legend divided into four parts and its style is otherwise anomalous.

23. Moneyer ‘Ludig’

<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight (g)</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks</th>
</tr>
</thead>
</table>
| [L] [FR] | [FR] | 0.62g (9.6gr.) | 3 frags. | 110° | 1/-

The division between official coins and imitations of the prolific London moneyer Ludig is difficult to draw since some of the imitations strive to copy both the letter forms and the text of the originals. Official London dies typically have light thin strokes with minimal wedges and serifs, as found on coins of consistently good literacy and weight of the moneyers Tilewine, Hereferth, Ludig, Beagstan, and others. A number of imitations of the first three of these moneyers are easy to recognize, but there are borderline cases of good weight and literacy where the style is equivocal. The two forms of M that commonly occur – one with a crescent top and the other with a central vertical stroke – can be found on both official coins and imitations. With the letter O, official coins generally have the simple round form while on imitations it is often surrounded by four rays, but is questionable whether some coins with this latter form (such as BMC 359 and no. 25 below) may not be official issues, for otherwise there is little in their style and weight to doubt them.

Of the five ‘Ludig’ coins in the Ashdon hoard, four are fairly clearly imitations. The reverse inscription of no. 27 is blundered and its die-duplicate is light in weight (1.32g/20.4gr.). Nos 23 and 24 are not in the London style, having lettering and a central cross that are too heavy and with wedges too pronounced. Their weights, making due allowance for the missing parts, are also much too light for official coins at c.1.10g (15gr.) and c.1.25g (19gr.). In fact the dies of these two coins appear to be the work of the same die-cutter as those of the moneyer Saimun, with wedge shaped uprights to the F and R and certain letters on the obverse leaning backwards (cf. nos 11, 12, and 14). No. 26, of which little more than half survives, is probably also imitative, for although the lettering is close to the London originals, the trefoil of pellets at the top and sides is otherwise unrecorded on official London dies and the weight (c.1.00g/15gr., if whole) is much too light for an official coin, even allowing for the corrosion.

As already indicated, the status of the fifth coin (no. 25) is less certain, since in composition and form it lies between no. 24 and the best official coins. Its letters and central cross are thinner with less pronounced wedges, but they are slightly larger than is usual and the weight (1.36g) is rather light. It remains to be seen whether this and the related BMC 359 are imitations or regular London coins.

24. Moneyer ‘Ludig’

<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight (g)</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks</th>
</tr>
</thead>
<tbody>
<tr>
<td>XELFREREDRX</td>
<td></td>
<td>1.18g (18.2gr.)</td>
<td>chipped</td>
<td>40°</td>
<td>-</td>
</tr>
</tbody>
</table>

(stroke after X) (O with rays, N retrograde)

25. Moneyer ‘Ludig’

<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight (g)</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks</th>
</tr>
</thead>
<tbody>
<tr>
<td>XELFREREDRX</td>
<td></td>
<td>1.36g (21.0gr.)</td>
<td>whole</td>
<td>350°</td>
<td>-</td>
</tr>
</tbody>
</table>

Possibly an official issue; cf. BMC 359. [Saffron Walden Museum]

26. Moneyer ‘Ludig’

<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight (g)</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks</th>
</tr>
</thead>
<tbody>
<tr>
<td>XELFREREDRX</td>
<td></td>
<td>0.48g (7.4gr.)</td>
<td>3 frags.</td>
<td>70°</td>
<td>-</td>
</tr>
</tbody>
</table>
THE ASHDON HOARD

<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks obv./rev.</th>
</tr>
</thead>
</table>
| 27. Moneyer ‘Ludig’
[EL FR [ED REX]] [VDE::: -[VEMIO]|
|          | obv. I rev. | 0.56g (8.6gr.) | 4 frags.  | 220°      | -/3             |
| Same dies as BMC 349. |

28. Moneyer ‘Tilewine’
[XU FR [ED REX] TIEL:: -[VEMIO] |
|          | (N retrograde. Nr. ligatured) | 1.16g (17.9gr.) | whole | 220°      | - |
The style, the exceptional form of obverse legend commencing AL, and the blundered reverse shows this to be an imitation. The use of an initial A in Alfred reflects Anglian dialect and contrasts with Kentish Elfred found on most Canterbury and London dies.

In the name of ‘Alfred’ with blundered or uncertain moneyers’ names

29. [| [FL| | [FL] | | -:| 1| 0.20g (3.1gr.) | frag.  | 180° | -/1 |
Reverse inscription hitherto unrecorded. |

30. [| [FRED] R| | [R]E-| -| [BOD (O with rays)| 0.61g (9.4gr.) | 2 frags. | 210° | - |
Reverse inscription hitherto unrecorded. |

31. [FL FR ED I R] [R]E::| /| 0.88g (13.6gr.) | 2 frags. | - | 1/ |
| [FL] R| [FDR | (letters reversed or inverted, O with rays) |
No close parallels have been found for the curious letter forms used here. |

32. [FL FR ED I R| | | | 0.75g (11.6gr.) | frag.  | 90°? | - |
The lower line of the reverse may represent MON blundered. |

33. [E| [FRED I X| | [DE(OR R)] | 0.67g (10.3gr.) | 2 frags. | bent? | 1/ |
The second line looks like a blundered ‘Tilewine’ coin (cf. BMC 374–8), but the D is quite inappropriate. |

34. [ | R ED [E]E| | 0.64g (9.9gr.) | 3 frags. | 90° | 1/1 |
| (T inverted) |
From the same reverse die as BMC 323 (1.30g/20.0gr.), on which the inscription is weakly struck. The first letter of the reverse appears to be an F or V, neither of which makes sense of the legend. |

35. [X| [R| | | | 0.22g (3.4gr.) | frag.  | 200° | - |
There are no coins in BMC with a reverse ending like this. The small letters and narrow margin, the obverse inscription ending with R and the blundered reverse suggest that this is a Dunclaw issue. The reverse may be a blundering of a name ending in -berht, such as Cuthberht, Humberht, or Wynberht. |

III. UNCERTAIN ANGLO- SAXON OR VIKING ISSUES

36. Moneyer A..de..?
[EL FR E] | | [X| [-| [DE]E] | 0.47g (7.3gr.) | 3 frags. | 30° | -/ |
No moneyer with DE in this position on the lower line was previously known, but no. 37 has a similar reading. The obverse has wedge shaped uprights and backward sloping letters as on some coins of Simun, but unlike those this piece (but not no. 37) has a beaded inner circle. |

37. Moneyer as last?
[EL] | | [E]E| | [DE]E] | 0.35g (5.4 gr.) | 2 frags | 180° | - |
38. Moneyer Beagstan?

Possibly an official coin of the London moneyer Beagstan. If so the beginning of the obverse inscription suggests that it belongs not to the late phase of London die-cutting, as the majority of his coins do, but earlier as BMC 202.

39. Moneyer Beornnuer or Byrnhelm?

The close spacing of DR on the obverse suggests that this is a Winchester style die with the legend divided into three rather than four parts, in which case it would be a coin of Beornnuer or Byrnhelm, although neither is known with a pellet before his name. The arrangement of the letters DR would be consistent with both early and late styles of Winchester die-cutting.

40. Moneyer Beornmaer?

The two visible letters on the obverse are probably the AL or AEL in Alfred. (It is unlikely to be a coin of Guthrum on which A occurs either as XED EL IA RE or XED EL SA RE.) If as seems likely this is of Winchester style in which the ALF form is common, it should be a coin of Beornmaer or Byrnhelm, and probably the former since his coins commonly have RH rather than RN at the end of the first line as here. This fragment is not, however, part of the same coin as no. 39 for the positioning of the obverse legend is different. Otherwise A is found only on coins of Ecgwulf, who has his own style of die-cutting, or the occasional Danelaw imitation (cf. no. 28 above).

41. Moneyer Boga, Dealla, or Goda?

Possibly official of the London style and by the moneyer Dealla or Goda moneyer Boga who uses a different style which is similar to London work imitation after these.

42. Moneyer Dealla, Goda, or Ludig?

This has the appearance of regular London-cut dies, and if so it would be by a moneyer with a short name such as Dealla, Goda, or Ludig, followed by moneta. The only known moneyer with a name beginning with O is Oswulf, but this is probably not a coin of his since the four recorded specimens are not of London style and their inner circle is beaded while here it is solid. We cannot rule out the possibility that it is an imitation after these.

43. Moneyer Eth... ?

The second letter of the reverse appears to have a bar through the upright suggesting it is a D. If so the coin will be of one of the four moneyers, Ethelred, Ethelstan, Ethelwine, or Ethelwulf, who all use Canterbury style dies, but whether this is official or imitative it is difficult to tell from such a small piece. It is not a coin of the variety with DORO at the end of the obverse inscription, which was introduced at Canterbury towards the end of Alfred's reign.

44. Moneyer He...stan? (OE Heahstan or Herestan)

Moneyer otherwise unknown in this issue. A Heahstan struck Cross and Lozenge coins for Alfred of Winchester style. This fragment does not appear to be of the Winchester style, but it may be a Danelaw imitation of a coin of that moneyer, as the unusual style and obverse legend suggests.

45. Moneyer Tilewine?

Probably a coin of the London moneyer Tilewine, but whether it is official or one of the many imitations is difficult to tell from such a small fragment.
<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks</th>
</tr>
</thead>
</table>
| 46. Moneyer Tilewine???
| | | | | |
| 47. Moneyer . . .ei. .?
| | | | | |
| 48. Moneyer . . .ei. .?
| | | | | |
| 49. Moneyer . . .ulf
| | | | | |
| 50. AL | | | | |
| 51. | | | | |
| 52. | | | | |
| 53. | | | | |
| 54. | | | | |
| 55. | | | | |

The only element of the reverse legend visible may be the upright stroke of a T. and if so this may perhaps be a coin of the moneyer Tilewine. The identification is most uncertain and the fragment too small to assess its style.

No moneyer with EI in this position on the lower line was previously known, but no. 48 has a similar reading. The style has not been recognized.

See comment on last coin.

The following regular Anglo-Saxon moneyers have names ending in -ulf: Æthelwulf, Cuthwulf, Eadwulf, Egwulf, Heawulf, Herewulf, and Oswulf. The style of this fragment is not particularly close to that of any of these moneyers, although coins of Egwulf are very variable in style.

The two letters on the obverse probably represent AL for Alfred and the coin may have been struck from Winchester style dies as in the case of no. 40, or it may be a Danelaw issue as no. 28. The reverse reading is somewhat uncertain.

There are no regular coins commencing with A or ending with V on the reverse except for some of the moneyer Egwulf. This small fragment does not appear to be in his style, and it is likely to be a Danelaw issue.

The last letter of the reverse appears to be a small C with a pellet at each end of the curve; it does not seem to be part of an S. This cannot be the C of me fec(it) on the coins of Simun since those have a square form, nor that on Elda's coins which has a round C but terminating in wedges rather than pellets.

A further tiny piece, subsequently detached and decayed, showed a top horizontal bar projecting from the upright of the letter on the reverse, showing it to be an E, F, square C or G. or inverted L.

Distinctive Vs or As with a pellet at the apex of each. Probably a Danelaw issue.

The wedge-shaped upright for a letter F, L, or R on the obverse suggests this belongs to the group of Danelaw coins referred to under no. 11 above. With an N in this position this may indeed be a further specimen of the moneyer Simun.
<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks obv./rev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>57.</td>
<td>[Ele]</td>
<td>[Ve]</td>
<td>or</td>
<td>0.08g (1.2gr.)</td>
<td>frag.</td>
</tr>
<tr>
<td>58.</td>
<td>[El]</td>
<td>[El]</td>
<td>[F]</td>
<td>0.12g (1.9gr.)</td>
<td>frag., bent</td>
</tr>
<tr>
<td>59.</td>
<td>[RE]</td>
<td>blank, part of outer border</td>
<td>0.13g (2.0gr.)</td>
<td>frag.</td>
<td>-</td>
</tr>
<tr>
<td>60.</td>
<td>[F( or E)]</td>
<td>trace of letter and outer border</td>
<td>0.07g (1.1gr.)</td>
<td>frag.</td>
<td>-</td>
</tr>
<tr>
<td>61.</td>
<td>part of central cross</td>
<td>[MM]</td>
<td>0.09g (1.4gr.)</td>
<td>frag.</td>
<td>2</td>
</tr>
<tr>
<td>62.</td>
<td>part of central cross</td>
<td>[U]</td>
<td>0.10g (1.5gr.)</td>
<td>frag.</td>
<td>-</td>
</tr>
<tr>
<td>63.</td>
<td>central cross</td>
<td>[E]</td>
<td>0.09g (1.4gr.)</td>
<td>frag.</td>
<td>-</td>
</tr>
<tr>
<td>64.</td>
<td>blank</td>
<td>[F]</td>
<td>0.10g (1.5gr.)</td>
<td>frag.</td>
<td>-</td>
</tr>
<tr>
<td>65.</td>
<td>part of inner circle, faint letters</td>
<td>0.08g (1.2gr.)</td>
<td>frag.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>66.</td>
<td>part of outer border</td>
<td>0.06g (0.9gr.)</td>
<td>frag.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>67.</td>
<td>part of inner circle</td>
<td>[L( or F)]</td>
<td>0.04g (0.6gr.)</td>
<td>frag.</td>
<td>-</td>
</tr>
</tbody>
</table>

IV. CAROLINGIAN ISSUES

Charles the Bald (840–77)
Gratia Dei Rex type (864–77, and later)

68. Mint Carantonia (Courcecy?)

+Gratia + DEI REX + I[CVR]TISASOEIH

Karlus monogram (KC ligatured, lozenge Ω)

1.28g (19.8gr.) 3 frags. 150° part missing, bent (once and rebent)

Ref. Prou⁵⁴ 411; Gareil⁵⁵ pl. 28.94; Morrison and Grunthal⁵⁶ 895; MEC 1:860–4. The type was immobilized and so this coin may have been struck after Charles's death. For the suggested mint attribution see MEC 1:635–7.

⁵⁵ E. Gareil, Les monnaies royales sous la race carolingienne, 2 tomes (Strasbourg, 1883–4).
### THE ASHDON HOARD

<table>
<thead>
<tr>
<th>Obverse</th>
<th>Reverse</th>
<th>Weight</th>
<th>Condition</th>
<th>Die-axis</th>
<th>Pecks obv./rev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mint Curtissaxonien (Courcessein?)</td>
<td>+GRAT1A D-I RE</td>
<td>0.99g (17.7gr.)</td>
<td>6 frags.</td>
<td>320°</td>
<td>2/-</td>
</tr>
<tr>
<td>Karolus monogram (HC ligatured)</td>
<td>+HCVRTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ref. as last coin.</td>
<td>+HCVRTI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mint Rouen</td>
<td>+GRAT1A D-I RE</td>
<td>1.16g (15.4gr.)</td>
<td>4 frags, part missing, bent</td>
<td>40°</td>
<td>1/-</td>
</tr>
<tr>
<td>Karolus monogram</td>
<td>+ROTVIIACVS CIVIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ref. Prou 378 var.; Gariel pl. 33,205 var.; Morrison and Grunthal 878; MEC 1:894 var.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mint Paris</td>
<td>+CRAT1A D-I REX</td>
<td>0.91g (14.0gr.)</td>
<td>whole coin</td>
<td>300°</td>
<td>1/-</td>
</tr>
<tr>
<td>with ODO REX around a cross</td>
<td>+PARISH CIVIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ref. Prou 47.39; Gariel pl.; Morrison and Grunthal 1284; MEC 1294 var.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Odo (Eudes) (888-98)

Odo Rex type

### APPENDIX 1

Analysis of Soil Samples from the Hoard Site

Dr B. W. Bache

Two samples of soil from the area in which the coins were discovered were analysed in the University of Cambridge's Department of Applied Biology. One sample was apparently taken from close to the base of the hornbeam tree and the other was taken from a spot some 3 metres away from the tree.

The results, which are displayed in the table below, are not remarkable in any way. Although the pH of the sample from under the tree is a little less (i.e. the soil is more acid) than that from further away, neither are very acid. Also the salt concentrations in the 'saturation extract' are not in any way noteworthy.

As the coins were found by the roots of a hornbeam tree, they would have experienced the percolation of a fair amount of soluble organic acids ('fulvic acid' = brown coloured polycarboxylic acids, and probably also low molecular-weight acids such as oxalic acid) over the course of centuries. Even though the pH of these solutions may not be particularly low, the complexing action of the organic acids for metal cations would hasten the decay of the coins.

Determinations on the saturation extract of the soils provided

<table>
<thead>
<tr>
<th>Under tree</th>
<th>3m from tree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical conductivity, uS/cm</td>
<td>314</td>
</tr>
<tr>
<td>pH</td>
<td>4.43</td>
</tr>
<tr>
<td>Chloride, mg/l</td>
<td>30</td>
</tr>
<tr>
<td>Nitrate-N, mg/l</td>
<td>7</td>
</tr>
<tr>
<td>Sulphate-S, mg/l</td>
<td>17</td>
</tr>
</tbody>
</table>

N.B. The sample from under the tree also contained more organic matter than the other soil sample.
Analysis of Three Coin Fragments from the Ashdon Hoard

Dr Peter Northover

Three coin fragments from the Ashdon hoard (nos 1, 5 and 8 in the catalogue) were submitted for analysis. They were mounted vertically and a flat was ground and polished on the edge of each piece. Analysis was by electron probe microanalysis using the CAMEBAX Instrument in the Department of Materials, University of Oxford. An area 50μm square was analysed at each of three points on the polished area on each fragment, the fragments being placed in the instrument with the polished areas normal to the electron beam. The operating conditions were an accelerating voltage of 25kV and an absorbed current of 30nA. Twelve elements were sought, as indicated in the attached table, where the individual results for the three analysed areas on each sample are presented. The detection limits for most elements are 0.01-0.02%, except for gold where it is 0.04% and zinc where it is 0.03%. With the experimental configuration used here are also problems with the detection of tin in silver; tin was not recorded in any of these analyses and is certainly under 0.05%.

Mean analyses are not presented for any of the coins because of the variable quality of the analyses. Before analysis the coin fragments were seen to be corroded and embrittled; to protect them during mounting and polishing each one was wrapped in lead foil and this proved sufficient to prevent further damage. Examination of the polished area on each fragment both optically and using the back-scattered electron image in the microprobe showed that corrosion had penetrated each to a variable extent. Were the silver alloy much more base it would be easy to correct for this effect because it would be clear that almost all the missing mass was copper and using a combination of the analysis and the microstructure the original copper content could be estimated. Where the silver is of a high alloy standard there is a greater tendency for the silver itself to be corroded, and even electrochemically redeposited back on the surface. Without metallographic evidence it is impossible to estimate whether any missing mass is copper or silver. With this problem in mind we can examine the individual analyses.

No. 1: Alfred/Hereferth: It proved impossible to find a sensible basis for reconstructing the original alloy of this coin, and it is suspected that some redeposited silver might be present; the gold contents are very high and suggest some electrochemical process has enriched the sample area in gold. Normalising the results to 100% gives around 95% silver, 1.5-2% copper and 2-2.5% gold. It is probable that the original composition approximates to that of no. 8, but perhaps with a lower copper content than that coin.

No. 5: Guthrum/Elda: One analysis square gave a result that was clearly from sound metal; this showed 94.43% silver, 3.97% copper, 1.05% lead and 0.28% gold. There were also significant zinc and bismuth impurities. The second square probably had lost mainly copper and was corrected on that basis to give 94.68% silver and 3.67% copper. Gold had been enriched to 0.66%, a degree of enrichment which can be regarded as typical. The third square was more difficult to correct and it is clear that both silver and copper have been removed; the correction has almost certainly under-estimated the local copper content while the gold has been enriched still further. An estimate can be made that the original alloy contained around 94% silver, 4% or a little more copper, 1% lead and somewhere between 0.3 and 0.5% gold.

No. 8: Danelaw issue in name of Alfred/Bald: Again one analysis square gave results very close to 100% which therefore did not require correction. The composition of the alloy at this point is 92.65% silver, 5.19% copper, 0.86% lead and 0.91% gold. Two other squares required correction on the basis of missing copper and gave results that were very close, albeit with some enrichment in gold. We can suggest that the original alloy was close to 92.5% silver, 5% copper, 1% lead and 0.9% gold, again with zinc and bismuth impurities.

Despite the difficulties of analysis it is clear that all three coins are of a good silver standard of approximately 95-96% silver (Ag+Pb+Au). There appears to be a rather wide range of gold contents and this is consistent with what is known about the alloys of the period.

Analysis of three coins from the Ashdon hoard

<table>
<thead>
<tr>
<th>No.</th>
<th>Coin</th>
<th>Fe</th>
<th>Co</th>
<th>Ni</th>
<th>Cu</th>
<th>Zn</th>
<th>As</th>
<th>Sh</th>
<th>Sn</th>
<th>Ag</th>
<th>Bi</th>
<th>Pb</th>
<th>Au</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Alfred/Hereferth</td>
<td>0.02</td>
<td>-</td>
<td>-</td>
<td>1.118</td>
<td>0.15</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>95.718</td>
<td>0.16</td>
<td>0.37</td>
<td>2.478</td>
</tr>
<tr>
<td>2</td>
<td>Guthrum/Elda</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.328</td>
<td>0.09</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>94.818</td>
<td>0.03</td>
<td>0.79</td>
<td>1.958</td>
</tr>
<tr>
<td>3</td>
<td>Danelaw issue</td>
<td>-</td>
<td>1.508</td>
<td>0.15</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>95.218</td>
<td>0.05</td>
<td>0.63</td>
<td>2.368</td>
</tr>
<tr>
<td>No.</td>
<td>Coin</td>
<td>Fe</td>
<td>Co</td>
<td>Ni</td>
<td>Cu</td>
<td>Zn</td>
<td>As</td>
<td>Sb</td>
<td>Sn</td>
<td>Ag</td>
<td>Bi</td>
<td>Pb</td>
<td>Au</td>
</tr>
<tr>
<td>-----</td>
<td>--------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>5</td>
<td>Guthrum/Elda</td>
<td>0.01</td>
<td></td>
<td></td>
<td>3.97</td>
<td>0.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>3.67*</td>
<td>0.12</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
<td>94.68*</td>
<td>0.07</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.03</td>
<td>0.03</td>
<td>2.24*</td>
<td>0.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>96.28*</td>
<td>0.02</td>
<td>0.40</td>
</tr>
<tr>
<td>8</td>
<td>’Alfred/Baldo</td>
<td>0.03</td>
<td></td>
<td></td>
<td>4.97*</td>
<td>0.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>92.63*</td>
<td>0.02</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
<td>0.02</td>
<td>5.21*</td>
<td>0.38</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
<td>92.29*</td>
<td>0.07</td>
<td>0.98</td>
</tr>
</tbody>
</table>

* indicates result corrected by first-order approximation for missing copper; enrichment in gold not corrected.
§ indicates result uncorrected for missing copper normalised to 100wt%.