A SMALL HOARD FROM POLSTEAD, SUFFOLK DEPOSITED  
c. 1035

MARK BLACKBURN and JOHN NEWMAN

A farmer in the parish of Polstead, some twelve miles south-west of Ipswich, has been regularly metal-detecting on his own land. Between about 1980 and 1990 he discovered five late Anglo-Saxon coins on a ploughed field within an area approximately 20 metres wide (location recorded on the Suffolk Sites and Monuments Record, site PL009). The only other find of late Saxon date from this field is a ninth-/tenth-century strap-end, and recent field-walking by one of us (J.N.) in the vicinity of the coin finds revealed no pottery sherds at all. The first coin discovered by the farmer was shown at the Moyse's Hall Museum, Bury St Edmunds in the early 1980s. More recently he reported the whole group to the Suffolk Archaeological Unit and kindly lent them for photography and further study.

Four of the coins are of Cnut's the Short Cross type in issue c. 1030-5. They are illustrated on plate 13 and may be described as follows:

1. Cnut (1016-35), Short Cross type (Hildebrand H; BMC xvi), c. 1030-5. Lincoln, moneyer Lifinc.
   
   Obv. +CNV:/T RE+.
   Rev. +LIFINC ON LINCO: (additional bar on first I, NC ligatured)
   
   Weight: 0.84g (12.9gr.). Die-axis: 0°.

   Struck from the same dies as SCBI Lincolnshire 488 (= Mossop pl. 52, no. 22), and same reverse die as SCBI Lincolnshire 495a and Hildebrand 1638 (= Mossop pl. 52, no. 23). The four die-linked coins weigh 0.84g, 0.91g, 0.94g, and 1.06g, which falls essentially in the lower quartile of the weight distribution for the type at Lincoln, suggesting that this coin was struck towards the end of the issue.

2. As last. Norwich, moneyer Ælfric.
   
   Obv. +CNV:/T RE+.
   Rev. +ÆLFRI ON NOR: (additional bar on first R)
   
   Weight: 0.83g (12.8gr.), fragmentary. Die-axis: 0°.

   Struck from the same dies as SCBI Copenhagen iiiic 3143-4 and the same reverse as SCBI Copenhagen iiiic 3145-6. The weights of these four whole die-linked coins range from 1.13g to 1.18g, implying that they were produced somewhat earlier than no. 1.

3. As last. Wallingford, moneyer Ælfwine.
   
   Obv. +CNV:/T RE+.
   Rev. +ÆLFRI ON PELIN
   
   Weight: 1.13g (17.4gr.). Die-axis: 90°.

   Struck from the same obverse die as SCBI Copenhagen iiiic 3926 and SCBI Oxford 731, and same reverse die as SCBI Copenhagen iiiic 3928-9. The weight range of these die-linked coins is 1.05-1.16g, is typical of Wallingford coins of this type.

4. As last. Uncertain mint, moneyer Ælfric.
   
   Obv. +CNV:/T RE+.
   Rev. +ÆLFRE:
   
   Weight: 0.39g (6.0gr.), fragment. Die-axis: 90°.

   A moneyer Ælfric is known to strike coins of this type at Canterbury, Hastings, London, Salisbury, and Wilton, but no published coins have been found that die-link with this specimen.

The fifth coin is of Æthelred II's Helmet type struck c. 1003-9, and hence some twenty-five years older.

   
   Obv. +ÆÆLRE[ ]ED REX ANGLO (NG ligatured)
   Rev. +PVLFSTAN ANO MOO LYN (VN ligatured)
   
   Weight: 1.35g (21.0gr.), chipped. Die-axis: 270°.

   Same obverse die as SCBI Helsinki 416.

The four coins of Cnut are almost certainly associated losses. It is usual of small purse hoards of this period to contain coins of a single issue, e.g. Bottisham (3 Cnut, Short Cross type); Titchmarsh (9 Harold I, Fleur-de-lis type); Bowthorp (3 Harthacnut, Arm and Sceptre type). The presence of coins from the mints of Lincoln and Norwich is not at all surprising. The Wallingford coin, from a smaller and more distant mint, is notable but only as a reminder of the rapidity with which coinage circulated in the late Anglo-Saxon period. The youngest coin in the group

appears to be no. 1, which was probably struck towards the end of the Short Cross issue to judge from the weight distribution of this and die-linked specimens. On this basis a date of c. 1035 for the loss or deposition of the group seems reasonable.

It remains to consider whether the coin of Æthelred II is likely to have been part of the same deposit. As we have already indicated, the pattern of English hoards is that finds of the period c. 975–1040 generally consist of only one issue or of two successive issues, while after c. 1040 although the smaller finds are usually of single or dual types, larger ones often include a considerable number of older coins. The significance of this pattern has been much debated, and it remains an open question the extent to which older coin types remained in circulation during the reigns of Æthelred and Cnut. It is conceivable, then, that the Æthelred coin from Polstead could have been lost with the four Cnut coins, but given the unusual nature of such a hoard, for the present we should perhaps assume that it was an independent loss.

A summary of the find in modified Inventory format is as follows:

Polstead, Suffolk, c. 1980–90.
Disposition: with the finder.4


4 We would like to thank the finder, who wishes to remain anonymous in order to protect the identity of the site.

A SMALL PURSE HOARD OF HARTHACNUT COINS FROM BOWTHORPE, NORFOLK

MARK BLACKBURN and ANDREW ROGERSON

In September 1991 Mr A. Webster found three coins of Harthacnut while searching with a metal-detector on a ploughed field at Bowthorpe, a village five kilometres west of Norwich on the edge of the city’s suburbs. The findspot is recorded on the Norfolk Sites and Monuments Record; Costessey parish, site no. 9310. He took the coins on 23 September to show at the Norwich Detectors Club, which one of us (A.R.) attends regularly in order to record finds for the Norfolk Sites and Monuments Record. Mr Webster kindly lent the coins to us for study and gave permission for them to be published here. A few weeks earlier while detecting on the same field at Bowthorpe, Mr L.P. Carriage had found two other Anglo-Saxon coins, one of Beonna of East Anglia (749–57 or later) and the other of Coenwulf of Mercia (796–821), which he had shown at the Norwich Castle Museum on 16 September 1991. These are described in the ‘Coin Register’ elsewhere in this volume (nos 119 and 124).

The three Harthacnut coins were each of the Arm and Sceptre type, struck during his second reign, 1040–42. They are illustrated on plate 13 and may be described as follows:

1. Norwich, moneyer Leofwine.
   
   Obv. +CNV/ T REX ANGL
   Rev. +L EOFOINE ON NORD:
   Weight: 1.06g (16.4gr.). Die-axis: 270°.
   From the same dies as SCBI Stockholm iv 1903.

2. Norwich, moneyer Leofwine.
   
   Obv. +HAR |
   Rev. + I N NORD
   Weight: 0.67g (10.3gr.), fragment. Die-axis: 90°.
   From the same dies as SCBI Stockholm iv 1688.

3. Norwich, moneyer Rinulf (Hringwulf).
   
   Obv. +CNV/ T REX ANGL
   Rev. +RINULF ON NORDP
   Weight: 1.04g (16.0gr.). Die-axis: 320°.
   From the same dies as SCBI Stockholm iv 1906.

They were apparently found close to each other in the field, and since coins of Harthacnut are generally scarce as finds, there can be little doubt that these were associated losses. No further specimens have turned up despite intensive searching of the area, and it is likely that the three coins belonged to a small
purse hoard lost accidentally, rather than being part of a larger deposit deliberately concealed. The absence of eleventh-century pot sherds on the ploughed surface of the field indicates that the coins were not lost within an area of contemporary settlement.

The three coins are all of the local Norwich mint, but one bears Harthacnut's name in full while the other two have the shorter version, 'Cnut'. Talvio has hinted that the coins reading 'Cnut' may have been struck after those with 'Harthacnut', a theory which he plans to develop in a special study of the Arm and Sceptre type. The weights of the two 'Cnut' coins here are on the lighter end of the weight distribution for the type generally and for the Norwich mint itself, which would support Talvio's suggestion that they belonged later in the issue. It would seem then that the small Bowthorpe hoard was probably lost during 1041 or 1042 rather than 1040.

A summary of the find in modified Inventory format is as follows:

**BOWTHORPE, Norfolk, Sept. 1991**

| KINGS OF ENGLAND: Harthacnut, Arm and Sceptre type – Norwich, Leofwine 2, Rínulf, 1 |

Disposition: with the finder.

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**THE LOCATION OF EDINBURGH MINT, 1358 TO 1463 – AND LINLITHGOW MINT**

**JOAN E.L. MURRAY**

The first two of the moneyer's accounts rendered in James II's reign give details of the location of the mint in Edinburgh. Later such accounts, however, include rents which are puzzling at first sight, and which have, understandably, been taken to indicate the use of different houses for the Edinburgh mint. In fact, there are other contemporary records, by which one can establish that the mint was in the same location up to 1448 and also in 1463. Likewise there is some evidence that this was also the case from 1358. The main reason for the present article is the recent discovery of records by which one can deduce some dates for the use of Linlithgow as a mint; the evidence of the Edinburgh rents is relevant to the interpretation of these records.

In the table of mint rents, brackets have been used for the few cases where the source is other than the moneys' accounts. The accounts of Robert Gray are available for 1434 to 1450, with a gap of one year, for which the exchequer rolls are missing. His tenure probably also covered the earlier years of the Fleur-de-lys coinage, since he was granted quittance under the great seal in 1427 for his dealings with the exchange and fabrication of new money. Two other Edinburgh burgesses, William Cameron and Robert Lauder, had similar quittances at the same time. The accounts of all three may have been rendered to the treasurer, an office introduced into Scotland at the beginning of James I's personal reign.

There is a real distinction between the two types of rent occurring in these accounts, although this may not be clear from the basic meaning of the Latin terms. The ferme – firma, a fixed payment – was in this case a rent paid to the owner by the occupier. The

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2. This was discussed in a short paper read to the British Numismatic Society in June 1979. The conclusions were included in: N.M. McO. Holmes, *WeiW Wrōtch & Cunyeit: The Edinburgh Mint and its Coinage*, (Edinburgh, 1982), pp. 17–18.
3. The table gives detailed references (which are not repeated) to *ER* - The Exchequer Rolls of Scotland, vols i, ii, iv and v, edited by G. Burnet (1878–82). The moneys' accounts, except for 1438–40, are also in R.W. Cochrane, *Records of the Coinage of Scotland*, i (Edinburgh, 1874), under the reign, but the rents are omitted in a number of cases. The sums have been converted to marks, which makes for greater clarity.
5. The treasurer's accounts are not available until James IV's reign, except a fragment for 1473.
**TABLE OF MINT RENTS**

<table>
<thead>
<tr>
<th>Account dates</th>
<th>Sum paid</th>
<th>Recipient</th>
<th>Type of rent</th>
<th>Reference</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1358-59</td>
<td>£5</td>
<td>John Corry</td>
<td></td>
<td>ER i, 615</td>
<td>pro conduccione domorum for 2½ years</td>
</tr>
<tr>
<td>1359-61</td>
<td>£15</td>
<td>–</td>
<td></td>
<td>ER ii, 65</td>
<td>Edinburgh customars account (1434) for one term of 1434-35 for three terms</td>
</tr>
<tr>
<td>(1437-38)</td>
<td>18s. 4d.</td>
<td>Robert Nudry</td>
<td>annual</td>
<td>ER v, 38</td>
<td></td>
</tr>
<tr>
<td>(1434-35)</td>
<td>£1 16s. 8d.</td>
<td>Robert Nudry</td>
<td>annual</td>
<td>ER iv, 621</td>
<td></td>
</tr>
<tr>
<td>1434-35</td>
<td>10 merks</td>
<td>Thomas Cranston</td>
<td>ferme</td>
<td>ER iv, 625</td>
<td></td>
</tr>
<tr>
<td>1436-38</td>
<td>£3 13s. 4d.</td>
<td>Robert Nudry</td>
<td>annual</td>
<td>ER v, 65</td>
<td></td>
</tr>
<tr>
<td>1438-40</td>
<td>£3 13s. 4d.</td>
<td>Altar of BVM</td>
<td>annual</td>
<td>ER v, 89</td>
<td></td>
</tr>
<tr>
<td>1440-41</td>
<td>4 merks</td>
<td>John Swift</td>
<td>ferme</td>
<td>ER v, 102</td>
<td></td>
</tr>
<tr>
<td>1441-42</td>
<td>4 merks</td>
<td>John Swift</td>
<td>ferme</td>
<td>ER v, 119</td>
<td></td>
</tr>
<tr>
<td>1442-43</td>
<td>4 merks</td>
<td>John Swift</td>
<td>ferme</td>
<td>ER v, 127</td>
<td></td>
</tr>
<tr>
<td>1443-44</td>
<td>2 merks</td>
<td>John Swift</td>
<td>ferme</td>
<td>ER v, 151</td>
<td></td>
</tr>
<tr>
<td>1444-47</td>
<td>£2 6s.</td>
<td>John Swift</td>
<td>ferme</td>
<td>ER v, 278</td>
<td></td>
</tr>
<tr>
<td>1447-48</td>
<td>4 merks</td>
<td>John Swift</td>
<td>ferme</td>
<td>ER v, 303</td>
<td></td>
</tr>
<tr>
<td>1448-50</td>
<td>10 merks</td>
<td>John Dalrymple</td>
<td>ferme</td>
<td>ER v, 388</td>
<td></td>
</tr>
<tr>
<td>(1463)</td>
<td>£1 10s.</td>
<td>Edinburgh</td>
<td></td>
<td>see footnote 9</td>
<td></td>
</tr>
</tbody>
</table>

annual rent was a ground rent, which would be fixed in perpetuity, paid by the owner of the property. Thus the accounts audited in 1438 and 1440 include annual rents for 'tenemento spectante domino nostro regi et situato ad portam cimiterii ecclesiae beate Egidii de Edinburgh, in quo dicto monete fabricatur'; this is the 1440 description, the 1438 one giving 'hospitii domini Regis prope portam de Kirkstil'. The annuals of £1 13s. 4d. to Robert Nudry and 10s. to the altar of the Blessed Virgin Mary were probably originally a single one, which may be expressed as 3½ merks, from which the feudal superior at some stage gave this endowment for the Lady altar. This benefaction must have occurred before 1369, the date of a rental of this altar, of which a copy is preserved in the register of St Giles church. This is the only case of a rent of 10s., and it is described as 'de terra Walteri de Corry prope cimiteriu'.

With only slightly less confidence, this can be taken to be the same as the property of John Corry which was used as the mint in David I's reign. To reinforce the inherent probability of this, that is of the mint remaining in the same location, there is the fact that the burgh laws, in Scotland as elsewhere, included a provision that relatives could prevent a burgess from disposing of inherited property outside the family.

The history of this property in the mid-fifteenth century is unusually well-documented. By the advice of a general council it was transferred to John Swift, in September 1439, in full settlement of a royal debt of £437, to revert to the king on payment of this sum. Of this debt, £250 was incurred in connection with James I's purchase of the property from Robert Lauder, for £400. Apparently John Swift had paid £100 of this on the king's behalf, and had also accepted an obligation for £150 which was outstanding after a payment of £50 by the Edinburgh customars, in the period July 1436 to August 1437. The purchase must have been effective by 1434, since there is a record of the payment of one term's annual rent for that year, to Robert Nudry. This payment, in the 1437 to 1438 account of the Edinburgh customars, illustrates two points: any official receiving revenue might be required, by letters of precept, to make a payment, while rents actually paid did not always correspond with those due in the accounting period. The yearly ferme to John Swift was clearly four merks, but the surprising sum of 46s. may indeed have been all that was paid in nearly three years, 1444-47. The ten merks paid in 1448-50 is perhaps more likely to be the ferme for 2½ years than for two years at an enhanced rate. This was paid to John Dalrymple, who was associated with Robert Gray as moneyer in this period, but presumably it was destined for John Swift, or was repaying what Dalrymple had already paid him.

After 1450, no rents for the mint have been traced in the moneymers' accounts, until it was situated in its final location, in the Cowgate, from 1581. From about 1500 the mint was in royal property, in the Abbey Close at Holyrood. But there is no reason to doubt that the earlier location, east of St Giles churchyard,
remained in use until then, in spite of the changes in ownership of the tenement. The rent may have been made the responsibility of the master moneyer, out of his own proceeds from the coinage. The rent is known for 1463, as part of 'the rentale and set of ane tenement pertaining to the town' of Edinburgh. This included: *Aula cum camera et sellarijs in hora ecclesiastic assedantur Thoma Swift pro v mercis xijd., plegio thone Swift, Le cungziehous assedaturo Alexandro Tod pro xxx., plegio sepiso.* With various other chambers and booths, the total was over £10.9 (Alexander Tod's accounts as master moneyer at Edinburgh over 1455–68, with one missing year, with no rent in the discharge part.10) This 1463 rental makes it clear that the value of the mint building was only a small part of that of the whole property. This was also indicated by the modest ferme paid to John Swift, £2 13s. 4d. for 'domus dicte cone et fabrica', when the capital value of the whole was £147.

The town's tenement in 1463, which was undoubtedly that owned previously by John Swift, had presumably been acquired in preparation for the erection of St Giles into a collegiate church, for which the pope granted commission early in 1468, the king having already given his consent. The manse of the provost of the collegiate church was in this situation. Having already given his consent, the manse of the collegiate church was in this situation. The register of St Giles contains a copy of a 1448 charter, settling on Thomas Swift this tenement wadsed by the king, together with the annual rent wadsed by the late Robert Nudry.11 This charter created a strict entail. Similar charters settled other properties on John Swift's three younger sons and one of his two daughters. Ten years later, however, the king declared all these to be null and void, as prejudicial to Thomas Swift, thus opening the way for the acquisition by the burgh of the tenement which included the mint.12

Linlithgow occurs as a mint in the Fleur-de-lis coinage only, and around 1434 has been suggested for the 'period of considerable output' of group I groats.13 This can now be regarded as established, since the Linlithgow baiies were allowed 15d. as discharge, in their account rendered in 1434, 'de tribus particularis terre quondam Johannis Ker, occupatis per regem'. Likewise in their next account, covering three terms, there was an allowance of 22d., with the extra information that this was 'pro firma burgali' — perhaps the sum which would normally have been paid on this property, towards the total due from the baiies, fixed at £5 a year by feu-charter.14 Of course, the king's occupation of this tenement was not in person, Linlithgow palace being habitable by the summer of 1434, when the exchequer audit was held at Linlithgow because of the king's residence there. As some evidence that the occupation of this tenement was as a mint, there is the payment of ten merks to Robert Cranston 'pro firma domus cone regis', in Robert Gray's 1435 account. As Cranston was treasurer at this time, the payment need not mean that he owned that mint-house. Although the same account includes some repairs to the buildings of the royal tenement near the kirktyle, it is unlikely that they made it necessary to move the mint to another location in Edinburgh. The ten merks can be accepted as payment for the Linlithgow property, presumably for the same 2½ years as in the baiies' accounts. Royal use of the late John Ker's tenement may have lasted for more than the attested 2½ years, since there is a gap in the exchequer rolls of about two years before this, and of one year after 1435 in the moneyer's accounts, which are then solid for 1436–50. For some reason, accounts of the Linlithgow baiies are absent until July 1448, but there are no further rents in the moneyer's accounts which could refer to Linlithgow. Perhaps part of the palace housed the mint for the brief use of Linlithgow for group III Fleur-de-lis groats.

R.W. Cochran-Patrick stated that 'local tradition has it that the silver' for the coins struck at Linlithgow 'was found about three miles from the town, and was minted at a house on the west side of the market place still known as the "Cunyie Neuk"'.15 The house name may have been misinterpreted; it has also been recorded for Kinghorn, a mint of Alexander III only, and likewise a Cunyie House at Anstruther, which was never a mint. As Edward Burns commented, 'Cunyie-Nuik, as defined by Jamieson, however, signifies simply "a very snug situation; literally, the corner of a corner"'.16

The Linlithgow house of this name was probably not the same as 'the so-called "Mint"' or town-house of the Knights Hospitallers, since Macgibbon and Ross made no mention of the name Cunyie Neuk, nor of any tradition that it was the mint.17 This fine stone building stood until the late nineteenth century, drawings and plans being available. It was considered to date from the second half of the fifteenth century, or the early sixteenth century. Its frontage of about 45 feet is too different from John Ker's tenement, if the three

9 Extracts from the Records of the Burgh of Edinburgh, i, edited by J.D. Marwick, Scottish Burgh Record Society, (Edinburgh, 1869), pp. 21-22. The set was probably for a year at a time, as for other burgh property, but this is the only entry by the original transcriber, in the latter half of the sixteenth century, for the tenement in question.
10 ER vi, 311, 502; vii, 291, 368, 429, 580.
11 Edinburgh St Giles Registrum, p. 33.
14 ER iv, 588, 681.
15 ERs, vol. i, p. xlv.
particulates were linear roods, each six elnes of 37 inches, as one would expect in a burgh. There is no historical ground for maintaining the ordinary tradition that this building was the Hotel of the Knights Hospitallers', whose principal place in Scotland was at Torphichen, near Linlithgow. 'It is said to have belonged to the Knights Templars.' That order was abolished in 1312, but the endowments were given to the Hospitallers: the term 'Temple tenements' continued to be used, and was also applied to other endowments of the Hospitallers, which included a toft in every burgh, granted by Malcolm IV. The building in question may have had no stronger connection with the Hospitallers than its site being such a toft, for which the ancient rent was paid to the order. Similarly, John Ker's tenement could have been a Temple one, but only if the term *firma burgalis* could apply to the old fixed rent even when it was not due to the king, as originally, and later to the burgh, by the feu-charter.

While there is no mention of this 'so-called "Mint"' in the Statistical Account of Scotland, nor in the mid-nineteenth century one, the writer of the Linlithgow article in the former does refer to the town being a mint. After mentioning the profitable silver mine 'in the southern extremity of the parish', he stated that silver 'from it was also coined here during the residence of the royal family, and some of the groat pieces are still in the repositories of the curious'. It was in 1606 that silver ore was found at Hilderston, which was profitably mined for some years, but there may have been an earlier find in James I's reign. It is only for 1427-29 that the exchequer rolls show payments to a miner, Gerard Frange or France of Frome, who is also called the refiner, but there may have been payments by the treasurer too, and doubtless there was continuing interest in establishing royal mines for precious metals.

As Ian Stewart wrote in 1971, 'most of the Linlithgow obverse dies do not link with Edinburgh; many of them are of varieties not represented at Edinburgh, so perhaps minting was temporarily transferred to Linlithgow at this period'. Further obverse die-links for Linlithgow, with Edinburgh and with Perth, have come to light since that was written, but they do not invalidate this conclusion of a temporary transfer, which may apply to Perth, too, except for the group II groats with the different head and crescents, die-linked with Stirling. If there was, indeed, a find of silver ore near Linlithgow in the 1430s, the transfer of mint personnel from Edinburgh might have been required for refining this on the spot. (For the Hilderston silver mines, fining and stamping mills were built at Linlithgow loch, in 1608.) It is, admittedly, so natural to postulate a causal relationship between local silver and locally minted groats that it is doubtful whether the local tradition was any more soundly based than this. Nevertheless, it may be thought unlikely that a more satisfactory explanation will be found for the use of Linlithgow as a mint. Before finding the records to date this, I had searched for evidence of pestilence, as a reason for moving the mint from Edinburgh, as in 1585, but the known years of pestilence are 1431 and 1439, neither of which appeared suitable, even without the attested dates.

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19 *ER* iv, pp. 436, 437, 443, 470.
20 ‘Scottish Mints’, p. 235.

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FURTHER NOTES ON THE YORK MINT OF CHARLES I

EDWARD BESLY

Since a study of the York mint of Charles I was published in volume 54 of this Journal, further specimens of its products have been examined, notably a significant private collection containing specimens of most of the recorded die-combinations. Four further Civil War period hoards containing York coins have also come to light and new evidence relating to its organisation has been discovered. This note updates the facts and conclusions presented in the former article.

Three newly-discovered hoards may be summarised as follows:

i. Breckenbrough, N. Yorks, 1985. 30 AU, 1552 AR, £93. 5. Od approx. Latest coins: Tower Is (P) (4)

and specimens detailed here, and to Mark Stoye for drawing my attention to York's mint master.

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While Caunton adds little, the other three hoards, all buried 1643–4, form a useful supplement, and tend to confirm that the sequence of the York issues matches that suggested for the cutting of its die-sets. Apart from the exceptional Pocklington deposit, which contained a significant mint-fresh batch of group 3 halfcrowns, Breckenbrough and Grewelthorpe provide the largest hoard groups for York yet recorded and may perhaps represent a more realistic view of the mint’s output, at least as far as the two largest denominations are concerned, and the general abundance of group 2 halfcrowns relative to groups 1 and 3 is confirmed. Both of these hoards are probably 1644 deposits – Breckenbrough, on the basis of the two receipts, certainly so. Grewelthorpe, with its higher proportion of the (P) issue from the Tower (pyxed 15 July 1644) may be the later of the two. The presence of a group 3 halfcrown in Grewelthorpe, poorly produced but not noticeably worn (pi. 11, 292), may therefore confirm its late place in the York sequence. Table 1 summarises the hoard evidence for York as it now stands, down to hoards closing in 1645.

<table>
<thead>
<tr>
<th>York halfcrowns</th>
<th>York shillings</th>
<th>Latest Tower</th>
</tr>
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<tbody>
<tr>
<td>1 2A–F 2G–L 3 1 2</td>
<td></td>
<td>T-in-C (1641–3)?</td>
</tr>
<tr>
<td>Chesterfield</td>
<td></td>
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<tr>
<td>E5</td>
<td></td>
<td></td>
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<tr>
<td>Constable Burton</td>
<td>-</td>
<td>-</td>
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<td>E6</td>
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<td>Fountains Abbey</td>
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<td>E8</td>
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<td>Caunton</td>
<td>-</td>
<td>-</td>
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<td>E16</td>
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<td>St Annes</td>
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<td>E17</td>
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</tr>
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<td>Breckenbrough</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>E2</td>
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<tr>
<td>Grewelthorpe</td>
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<tr>
<td>E13</td>
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<td>Pocklington</td>
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<td>E13</td>
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<tr>
<td>Ashdon</td>
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<td>E3</td>
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<tr>
<td>Penybryn</td>
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<td>-</td>
</tr>
<tr>
<td>E3</td>
<td></td>
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</tr>
<tr>
<td>‘Cotswolds’</td>
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</tr>
</tbody>
</table>

The examination of sixty or more new specimens has produced no new dies and no new combinations of dies. The machine trial halfcrown of type 1A illustrated from Folkes has been found, amongst the Charles I patterns in the Hunter Collection (pi. 14, 1), but no further examples of such trials have come to light. One further halfcrown obverse die (2C) proves to show signs that its EBOR signature was recut using larger letters, a feature previously noticed only on 2D; this was observed on the Breckenbrough specimen, an unusually heavy (15.57 grams) and well struck coin. The heaviest York coin yet noted, excepting the uncut ‘trials’, is a specimen of 3A in the American Numismatic Society collection, at 15.69g. The additional material also permits an updated weights summary, as follows:

- Halfcrowns 1: 14.21g (28 specimens, 94.4% of standard)
- 2A–F: 14.08g (44, 93.6%)
- 2G–L: 14.23g (39, 94.3%)
- 3: 14.61g (63, 97.1%)

1 C.P. Barclay, pers. comm., see this vol., pp. 76–81
6 For summaries and references, see Besly, Hoards, pp. 86–93.
Shillings 1: 5.77g (36, 95.8%)
2: 5.73g (46, 95.2%)
Sixpences 2.93g (20, 97.4%)
Threepences 1.31g (62, 87.0%)

The overall averages are very little changed, even where (in the case of halfcrows, 2G-L) the sample size has nearly doubled in the interim, increasing one's confidence that these are indeed representative of what was achieved at York.

Discussion of the minting technique and the illustration in BNJ 54 of clear examples from each die might seem to indicate an output of uniform excellence, though the poor control of weights hints otherwise. At their best, York coins are also surpassed by those of any contemporary English mint (pl. 14, 2), but while their rotary coining method, by eliminating the double striking which marred so many 'hammered' coins, ensured a clear image, other faults combined to produce a far from uniform coinage. The design was not always fully impressed, perhaps because of poor adjustment of the coining machine, while some specimens are unevenly impressed across the width of the design, as a result of uneven adjustment of the cylinders forming the die set. (pl. 14, 3; pl. 11, 288, 292). Signs of die clashing, another feature of early mechanised coining, are also to be found, on most of the halfcrown set 2A-F. These too confirm poor adjustment, taking the form of incuse letters of part of the obverse legends...[OLVS:D:G:MAG... (i.e., the right hand portion, as struck), visible on the left of the reverses of some specimens of varieties 2A, B, D, E and F (pl. 14, 4). Poor preparation of the silver strip-ingots also left its mark. They were not necessarily trimmed before coining, for instance, as may be seen from pl. 14, 5, a group 2 halfcrown seemingly cut from the very end of a strip. Insufficient annealing of the strip at any stage of production might result in cracked coins or weak images (pl. 14, 6). A very few York halfcrows are oval in shape, a phenomenon noted mainly in group 2G–L (pl. 14, 7). Though one explanation might be the distortion of round blanks fed singly into the coining machine, this is more likely to result from a distortion of the cutter punch, since two uncapped oval specimens (21 and 2L) from Grewelthorpe have the characteristic raised burred edges of specimens cut out after coining (pl. 11, 288, 291). A new punch was used for the group 3 halfcrows.

One recantation is necessary, regarding the date of the 'base' halfcrows discussed in Appendix 4. I argued that there was no convincing evidence for an early date for halfcrows of 'York' and 'Tower' types, of common origin, similar low weights and highly debased metal, illustrated on pl. 8, nos 6–9. An example of the 'Tower' type, with privy-mark Star, in Breckenbrough (no. 1575) now shows conclusively that these are indeed contemporary, and presumably local, creations. (Another, p.m. Triangle, said to have been found in north-eastern England, was shown at the BM in November 1984.) Their very baseness and light weights nevertheless condemn them as counterfeits, albeit skilful ones. The arsenic detected in the three that have been analysed (two 'York' and the Breckenbrough specimen) was a standard ingredient of the counterfeiter's recipes of the time.

Another northern counterfeiting operation, which copied York shillings, is also of interest here for its technical competence. A shilling from Breckenbrough (no. 1582) is closely related to two in the BM, sharing some of the punches used to create their dies (pl. 14, 8–10). From their clearly-pressed images, these would appear to have been made using a rotary press, while their metal is apparently good silver. The profit to their creator lay in low weights: 4.27g, 4.01g and 3.81g respectively, the Breckenbrough shilling thus having an intrinsic value of around 8d. Such coins will have circulated without difficulty in the north of England, because of the clipping prevalent in the area, evidenced by the Wyke (Bradford), Breckenbrough and latterly Grewelthorpe hoards.

One important reference regarding the York mint's establishment in 1642 was not encountered in time for the article in BNJ 54. In her memoir of her husband, the Duchess of Newcastle refers to his receiving various commissions from the King as General of all forces 'Trent-North', etc., including the power to coin money. The date is not given, but the context places these commissions in the autumn of 1642, and that for coinage presumably refers to York. From this it would appear that, for reasons previously suggested, the royal warrant of 15 July 1642 was a dead letter. In the aftermath of Edgehill, as an extended struggle became reality, the King seems to have issued a series of commissions regularising aspects of the war effort. A similar sheaf of commissions sent to the royalists isolated in Cornwall included one dated 14 November 1642 to Sir Richard Vyvyan which, empowering him to 'coyne or cause to be coyned at such place or places as you shall think fitting...'. established the Truro mint. Newcastle was no doubt similarly empowered to delegate his minting and it appears that the identity of his mintmaster has now been discovered. On 23 May 1650, information was laid before the Committee for Advance of Money that William Martin, attorney, of York 'had correspondence with the Earles of Cumberland and Newcastle and was in arms with...

9 Wyke: Besly, Hoards, pp. 33–42.
12 Vyvyan MSS, Cornwall Record Office V/BO/18.
them in Yorke against the Parliament and was Mint Master under their command from the beginning of their troubles until Yorke was reduced to the obedience of Parliament. The following day, order was sent to the county commissioners to 'take examinations against him and send them up.'

The county committee's reply leaves us in little doubt that Martin was indeed York's mint master:

Gentlemen

We send you herinclosed certaine depositions of witnesses taken under oath before us by vertue of yr pticuler order of the 24th day of May last ant Mr. Will Martin whereby it appeares he acted much for the Lord Newcastles Army against the p'liament both by coyneing money for their maintenance and alsoe for making of pistolls for them, we crave yo' further Orders herein for direction how to proceed and soe rest

Yo' most humble servants
John Geldart
Tho: Bourchier
Yoer 22 Octob 1650 Ro Rymeire

Martin was admitted to composition for delinquency, having been 'in Yorke when it was a garrison for the late King', on 27 September and on 15 October his fine, of one-third of his goods and personal estate, was set at £83. Like Vyvyan, Martin was a local man of some standing – 'gent & Attorney' – with no previous experience of minting and who served the King in more than one capacity. Unlike Vyvyan, he failed to make his peace promptly, and was in due course found out and fined heavily in proportion to his personal estate.

**KEY TO PLATE**

1. Half crown, 1A no. 8; trial piece. 18.83g, 0°. Hunterian.
2. Shilling, 2Dd no. 6. 5.60g. NMW.
4. Half crown, 2B no. 5. 14.46g (detail of rev.). NMW.
6. Half crown, 2A no. 4. 14.79g. NMW.
8. Shilling, counterfeit. 4.27g. (Breckenbrough hoard). Yorkshire Museum.
9. Shilling, counterfeit. 4.01g. BM.
10. Shilling, counterfeit. 3.81g. BM.

**JOHN BAYOCE AT YE BLACK DOG: AN UNPUBLISHED SEVENTEENTH CENTURY TOKEN FROM YORK**

**MELINDA R. MAYS**

This token, which is not recorded by Williamson or Dickinson, is in the collection of the York Castle Museum.

Obv. "JOHN BAYOCE AT Y E BLACK[?]- Dog
Rev. "IN PETERGATE IN YORKE 1667 - HIS/HALFE/PENY" (pl. 13)

Acknowledgements I am most grateful to Arthur Benson and Richard Stansfield (both from the York Castle Museum) for their help and cooperation, and to David Scott for commenting on an earlier draft of this note.

The surname 'Bayoce' is spelled in a variety of ways in contemporary documents, but usually incorporates the letter k (e.g. Bayocke and Bayock, Baoce and Baock). An innkeeper's bond signed by John Bayocke in 1663, and witnessed by John Brice and John Buckle, is recorded in the parish of St Michael le Belfrey. Here the name is spelled 'Bayake'.

1 G.C. Williamson Trade tokens issued in the seventeenth century (1889, 1891), and M. Dickinson Seventeenth century tokens of the British Isles and their values (1986).
2 The innkeeper's bond is preserved at the York City Archives (K 68-11).
The sign of the inn is almost certainly a dog: the head might conceivably be that of a horse, but the tail and legs are decidedly canine.3

There is no firm evidence that the token issuer was related to the other Bayockes known in York at this period. In the same parish there was a barber-chirurgeon called John Bayocke (Freeman of York in 1665, and son of the tailor John Bayocke), who died in 1682.4 There was also the merchant Matthew Bayocke, who held office in the city (Chamberlain in 1678 and Sheriff in 1688), and was buried at St Michael le Belfrey in 1714.5 John Baocke of St Michael le Belfrey parish is listed as having six hearths in the hearths and stoves tax list for 1670;6 this could refer either to the innkeeper or to the barber, but the large number of hearths makes it more likely to be the former.

3 See, for example, the Talbot of 1683 and the Spotted Dog of c. 1760, in Sir Ambrose Heal’s Sign Boards of Old London Shops (1988), pp. 54, 161.

4 John Bayocke’s will (Borthwick Institute of Historical Research (York University), Prob. 59/429) was written in 1678, and he describes himself as ‘Barber’. He leaves to his eldest son, Samuel, ‘that house or tenement scituate in Boudam with the garth and other appurtenances after my father John Baockes decease’. Matthew Bayocke is appointed one of the supervisors of the will. The seal at the bottom of the original (as opposed to the transcribed) will depicts a flaming sun with a smiling face.

5 Details about Matthew Bayocke may be found in R.H. Skaife’s Civic Officials of York and Parliamentary Officials (manuscript in three volumes, c. 1900; York City Reference Library). His will was written in October 1714, and he died a month later.

6 The hearth and stove list for 1670 is in the York City Archives (M 30.24).

A LATE SEVENTEENTH-CENTURY HOARD FROM FAULDHOUSE, WEST LOTHIAN

J.D. BATESON

This hoard of one hundred and seventy-nine silver coins was found by two building workers on a site just behind the police station in Fauldhouse early in February 1987. The village of Fauldhouse lies mid-way between Edinburgh and Glasgow about three miles south of the M8 motorway and the approximate NGR for the discovery is NS 933606. It was declared to be treasure trove and acquired in its entirety by the Royal Museum of Scotland, Edinburgh.

The top soil had been removed prior to the laying of the foundations of the first house and subsequent to heavy rain a number of the coins were found on the surface close to this building. A thorough search of the top soil the same day and the use of a metal detector the next morning recovered the remainder of the hoard, all within an area of approximately four square metres. Some fragments of ‘blue velvet’ were said to have been found adhering to a number of the coins but disintegrated on exposure to the air. This may indicate a cloth purse or bag as a container.1

The majority of the coins consist of shillings and sixpences of Elizabeth I and James I and halfcrowns and shillings of Charles I. There are nine Scottish and three Irish pieces in addition to thirty-nine continental issues, mainly ‘dollars’. There are few pieces of specific numismatic interest but the merk and half merk dated 1666 of Charles II’s first Scottish silver coinage should be noted Burns did not list this date for either coin though he noted their existence and no specimen is included in the Ashmolean/Hunterian Scottish Sylloge.2 Also noteworthy is the inclusion of the Commonwealth halfcrown in the hoard; less importantly the second I of the II of the value has been double-struck rather giving the appearance of III.VI. The continental issues come mainly from the United Netherlands and Austria but include a number of issues of the Imperial cities and various German

Acknowledgements. The author is grateful to David Caldwell and Nicholas Holmes for their help in the preparation of this report.

1 Details of the finding were recorded by the Procurator Fiscal for Linlithgow.

states as well as Switzerland and Denmark. Twenty-seven of these are 'dollars' and twelve 'half dollars'.

Many of the English and Scottish issues are affected by corrosion especially the sixpences of Elizabeth and the coins of James I and Charles I. Weights are therefore not helpful and are not recorded here. The contents have suffered a certain amount of clipping but on the whole this is not as prevalent as might be expected. Six of the coins of Elizabeth and James are scratched in a manner as to suggest this was deliberate and may be classed as defacement. One of the Irish shillings is bent to such a degree that this too seems deliberate though whether for testing or again defacement is difficult to say. Two of the shillings of Charles I are bent twice, in opposite directions, thus resulting in an s-shaped profile reminiscent of the later eighteenth-century love tokens.

The latest coin in the hoard is the patagon of 1675 issued by Maximilian Heinrich of Liége and which displays only slight signs of wear. Its deposition could therefore be as early as its year of issue or perhaps as late as 1680. There are also the four merks dated 1671 which are fairly worn and could have circulated throughout the 1670s. The 1671 issue was by far the largest yearly output of the merk coinage though substantial numbers were also struck in 1672, 1673 and 1675. Large numbers of the new quarter dollar were minted in 1675 and 1677 so that the further the decade is advanced the more surprising it would be to find the 1671 merks constituting the latest Scottish element in the hoard. A date of deposition around 1675 rather than 1680 would seem more likely therefore.

The Fauldhouse hoard fits into the later of the two major groupings of seventeenth century coin hoards from Scotland, associated with the civil war years and the period 1665–1696 respectively. A dozen hoards from the latter period are confined to the fifteen years from 1670 to 1685 and share similarities in their small size and range of contents. The Fauldhouse find with almost two hundred coins lies at the upper end of size but otherwise presents no surprise. There may be an association with the Covenanting unrest or these finds may merely represent the expected number of hoards from any period not recovered for quite mundane reasons. In any event the sum involved is not large, the coins from Fauldhouse adding up to approximately fifteen pounds Sterling or one hundred and eighty pounds Scots.

**CATALOGUE**

**ENGLAND**

<table>
<thead>
<tr>
<th>Coin</th>
<th>Date</th>
<th>Description</th>
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</thead>
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<td>Philip and Mary groat</td>
<td>N.1973</td>
<td>lis (1), lis? (1), marllet (2)</td>
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<td>Elizabeth I shilling</td>
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<td>pheon 1561 (4), 1565 (1), uncertain (1)</td>
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<td>N.2014</td>
<td>A (1), tun (4), two (1)</td>
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<td>sixpence</td>
<td>N.1997</td>
<td>portcullis 1556</td>
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<td></td>
<td>coronet 1567 (2), 1568 (1), 1569 (1)</td>
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<tr>
<td></td>
<td></td>
<td>ermine 1572</td>
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<tr>
<td></td>
<td></td>
<td>acorn 1573</td>
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<tr>
<td></td>
<td></td>
<td>eglantine 1574 (2), 1575 (2), 1576 (1), uncertain (1)</td>
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<td></td>
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<td>plain cross 1578</td>
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<td></td>
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<td>long cross 1580 (1), 1581 (1)</td>
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<td>N.2015</td>
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<td>escallop 1585 (1), 1586 (1)</td>
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<td>crescent 1587</td>
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<tr>
<td></td>
<td></td>
<td>hand 1591</td>
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<td></td>
<td></td>
<td>tun 1592 (1), 1594 (1)</td>
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<td>woolpack 1594</td>
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<td></td>
<td></td>
<td>anchor 1599</td>
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3 There is a full record of the weights in the Royal Museum of Scotland and the Hunterian Museum, Glasgow, which also has a complete photographic record. 
1 Murray, p. 121. 
6 To be added to these is the 1981 Inverary, Argyllshire, hoard (J.D. Bateson, NC, forthcoming). 
### James I

<table>
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<th>Currency</th>
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<td>2/3</td>
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<td></td>
<td>2/4</td>
<td>rose (2), escargot (2), grapes (2)</td>
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<td>3/6</td>
<td>rose (1), lis (2)</td>
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<tr>
<td>Sixpence</td>
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<td>2/4</td>
<td>rose 1605 (1), key 1610 (1)</td>
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<td>3/6</td>
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### Charles I

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<tr>
<td>III/1</td>
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</tr>
<tr>
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<tr>
<td>III/3</td>
<td>R in brackets (4), eye (3)</td>
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<td>7</td>
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<td>IV</td>
<td>star (2), triangle in circle (7), P in brackets (1)</td>
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</tr>
<tr>
<td>V</td>
<td>sun</td>
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<td>N.2223</td>
<td>harp</td>
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<td>2</td>
</tr>
<tr>
<td>N.2225</td>
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<tr>
<td>N.2230</td>
<td>anchor</td>
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<tr>
<td>N.2231</td>
<td>triangle (3), star (4), triangle in circle (3+2?), uncertain (1)</td>
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<td>P in brackets (1), R in brackets (1), eye (1), sun (4), uncertain (1)</td>
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</tr>
<tr>
<td>N.2247</td>
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### Commonwealth

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<tbody>
<tr>
<td>N.2722</td>
<td>sun</td>
<td>1652</td>
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### SCOTLAND

#### Charles I

- **Second coinage 1636 (Briot's hammered issue)**
  - half merk

- **Third coinage 1637-42 (III. Falconer's first issue)**
  - 40 pence

#### Charles II

- **First coinage**
  - merk 1666 (1), 1669 (2), 1671 (4)
  - half merk 1666 (1)

### IRELAND

#### James VI

- **First coinage 1603-04**
  - shilling second bust uncertain
  - sixpence first bust martlet
  - shilling third bust rose

### Spanish Netherlands

#### Albert and Isabella (1598-1621)

- Brabant patagon nd (Antwerp)

### United Netherlands

#### Gelders

- rijksdaalder
  - Gelders 1622 (1), 1624 (1), 1650 (1)
- Utrecht 1620 (1)
- West Friesland 1622 (1)
- Zeeland 1619 (1), 1647 (1)

#### Half rijksdaalder

- West Friesland 16-1 (1)
- Zeeland 1659 (1), 1647 (1)

#### Silver ducat

- Holland 1664 (1)
- Zeeland 1661 (2)
- Zwolle 1659 (1), 1661 (1)


AUSTRIA

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<tbody>
<tr>
<td>HRE Rudolph II</td>
<td>half taler</td>
<td>1586 (Kremnitz)</td>
<td>1</td>
</tr>
<tr>
<td>Mathias as King of Hungary</td>
<td>taler</td>
<td>1611 (Kremnitz)</td>
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<td>Mathias as HRE</td>
<td>half taler</td>
<td>1613 (Vienna)</td>
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<tr>
<td>HRE Ferdinand II</td>
<td>taler</td>
<td>1636 (Nagybanya)</td>
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<tr>
<td>HRE Ferdinand III</td>
<td>taler</td>
<td>1654 (Kremnitz)</td>
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<tr>
<td>Archduke Ferdinand I (1521–1564)</td>
<td>taler</td>
<td>nd (Hall)</td>
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IMPERIAL CITIES

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<td>taler</td>
<td>1640</td>
<td>1</td>
</tr>
<tr>
<td>Cologne</td>
<td>half taler</td>
<td>1621</td>
<td>1</td>
</tr>
<tr>
<td>Hamburg</td>
<td>half taler</td>
<td>1621 (1), nd (1)</td>
<td>2</td>
</tr>
<tr>
<td>Nuremberg</td>
<td>taler</td>
<td>1624 (2)</td>
<td>2</td>
</tr>
<tr>
<td>Ulm</td>
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GERMAN STATES

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<th>Date/Location</th>
<th>Quantity</th>
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<td>Brunswick-Lüneburg, Friedrich</td>
<td>taler</td>
<td>1638</td>
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<tr>
<td>Brunswick-Lüneburg-Dannenberg, Julius Ernst</td>
<td>taler</td>
<td>1624</td>
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<tr>
<td>Brunswick-Wolfenbüttel, Heinrich Julius</td>
<td>taler</td>
<td>1610</td>
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<tr>
<td>Hohnstein (Clettenberg line), Volkmann</td>
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TWO SEVENTEENTH-CENTURY DIE-SINKING ERRORS
By H.E. MANVILLE and P.P. GASPAR

CATALOGUES of late hammered and early milled British coinage are studded with engraving errors, ranging from misplaced stops and inverted letters or numerals to misspellings and transposed design elements, and examples from previously-unremarked dies continue to appear with some frequency. Each edition of The English Silver Coinage lists new varieties, for example, and undoubtedly the widespread availability of this catalogue has stimulated the look-out for and discovery of varieties "Not in E.S.C."

A bi-denominational misspelling

In the gold series, more care evidently was taken to "get it right" and few egregious engraving mistakes have been published, although a half-unite or double-crown exists dated 1651, with a tripling of the M - giving the reading COMMONWEALTH (plate 15, 1). This coin, formerly in the Vaughan-Morgan and Lockett collections, demonstrates that gold was not entirely immune from error.

Discovery of two Commonwealth sixpences with the same '3M' error and from the same obverse die as the half-unite raises the possibility that the die was originally intended for the silver denomination and only pressed into use on the gold through accident or as a hurried replacement for an unsuitable half-unite die. Die comparisons between other seventeenth-century half-unites and sixpences, and perhaps between unites and shillings, might reveal additional interdenominational exchanges.

The two Commonwealth sixpences are dated, and presumably were struck in, 1652 (pl. 15, 2 and 3). Enlargements of the COMMONWEALTH area clearly exhibit the triple M's (pl. 15, 4 and 5). One coin is rather poorly struck and shows some doubling on the right limb of the third M; the other has been clipped, spent a portion of its career flattened into an S-shaped 'crooked sixpence', and after straightening exhibits severe wear along the fold lines. However, the existence of these two coins, as well as the half-unite, unquestionably show that the triple-M results from a die-sinking error and not from double-striking.

Interestingly, not only is the half-unite an overdate (1651 with the 1 over a 0) but both sixpences also are overdates. The clipped specimen shows 1652 over 1 over 49 (pl. 15, 6), its stametable 1652 over 49 - possibly also over a 1 (pl. 15, 7).

Combined with the gold overdate, these coins demonstrate that in the late hammered series dies could be repeatedly re-worked and possibly continued in service for at least four years. It remains to be determined whether coins were in fact struck from the sixpence reverse die before they were overdated.

This is not meant to imply that in the seventeenth and eighteenth centuries dies always were withdrawn or re-punched at close of business at the end of the year on 24 March or, since 1752, 31 December. Even into the nineteenth century old dies might occasionally be continued in use without overdating.

On the other hand, striking of coins occasionally might begin before the year commenced, or already-prepared dies might be used prior to their authorized

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2 Sold Sotheby 17-18 June 1935, lot 150; and Glendining 26-27 April 1960, lot 4245, plate XXV. It may be, however, that with fewer surviving specimens, the gold coinage has not undergone as thorough scrutiny as the silver. For whatever reason, the contrast is striking. In an unpublished trial list, 'Royal mint Overdates Since 1649', compiled by G.P. Dyer, P.P. Gaspar, and J.A. Haxby in 1976, there were 21 overdates in the gold series (none during the Commonwealth period) and 171 in the silver series (23 during the Commonwealth period).

3 No silver coins were struck dated 1647.

4 There is documentary evidence for the annealing and redating of dies in the Royal Mint in the 1860s. Thus for this later period the use of a die before it was redated is possible. The necessity for annealing a hardened steel die before a new digit can be punched over the date makes overdating laborious and risks shattering the die. No confirmed example is known, however, from the early days of the U.S. Mint in Philadelphia: an 1806 25-cent piece with 6 over 5 (Browning 1) is known from a die from which pre-overdating specimens survive (Browning 4). The authors are grateful to Eric P. Newman for calling their attention to this important American overdate.

5 For example, while no coins definitely dated 1847 are known, pyx records indicate that several hundred thousand each were coined in the first three months of 1847 of the groats, sixpences, shillings and halfcrowns. These were all presumably from dies dated 1846. No 1849 sixpences are known either, so the 200,000 struck in January and February of 1849 must have been dated 1848, since that date occurs. But no sixpences were struck in 1848! Thus the 1848 over 7 sixpence has the distinction of carrying a date that is not the year in which it was struck, and punched over a date for which no coins are known. In the nineteenth century dies were sunk in a screw press from punches carrying inscriptions complete except for the last one or two date digits. Freshly-sunk dies with incomplete date occasionally were stored for long periods before the final digits were hand punched with individual digit punches, a method similar to that employed for the entire inscription in earlier periods.
date of issue. A well-known example is the William III groat dated 1702, although the king had died on 8 March—seventeen days before the year 1702 began in England.

It is important to inspect possible error coins carefully, of course, because occasionally a double-striking may look deceptively like an engraving error—particularly on hammered coins. Plate 15, 8 illustrates a rotated double-stroke shilling of 1654 which, if judged by the '3M' portion alone, looks exactly like a die-sinking error. However, when the whole legend is compared, double-strike areas on obverse and reverse match opposite each other: F in OF under E in ENGLAND on obverse, S of date under 6 on reverse; doubling of the second N in ENGLAND on obverse and of the stop between GOD and WITH on reverse, and the key doubling of the V in VS on reverse—directly opposite the three Ms. These anomalies place it firmly in the mis-struck category.

Danme! I always did have trouble spelling the king’s name.

A second unrecorded die-sinking error occurred toward the end of the Scottish milled series. Numerous errors are recorded on Scottish silver coins for Charles II, but none has been published for the succeeding reigns through Queen Anne—whereas in the English milled series more die-sinking errors are recorded for William III than for any other reign.

The Latin spelling of William, GVLIELMVS, was particularly prone to error. English coins from the silver penny through the shilling may omit the first or second L, others the I; one omits the I while doubling the E; still others substitute an A-punch for the V. (pl. 15, 9–11).

Recently a forty-shilling piece of William and Mary dated 1693 has surfaced, with the king’s name missing the second L and thus spelled GVLIELMVS (pl. 15, 12). Whether the lack of other die-sinking errors on Scottish coins of James VII to Anne reflects more literate craftsmen in Edinburgh, smaller issues and therefore fewer opportunities to make mistakes on the dies, or more careful inspection of dies—especially after the scandals of a decade earlier—is an open question.

Scottish dies with punching or engraving errors were not destroyed under Charles II, as evidenced by coins with misspellings, reversed digits, rotated legends, transposed shields of arms, inverted or sideways values, and although greater care may have been taken when coinage was resumed under James VII, it is possible that the cost of replacing error dies outweighed the obligation to produce accurate coinages. It would not be at all surprising, therefore, if additional unlisted die-sinking errors were to be discovered on Scottish as well as English coins and it will be interesting to see what the next few decades bring forth.

In conclusion, it is our view that the study of die varieties such as the two reported here is useful. The distinctive signature imparted to a die by a variation such as a misspelling serves to identify individual dies. Die varieties can thus reveal mint practices that might not otherwise be recognized, such as the use of the same die for more than one denomination.

KEY TO PLATE

1. Commonwealth 1651 half-unite or double-crown reading COMMONWEALTH in error (illustration taken from Lockett sale catalogue).
2/3. Two Commonwealth 1652 sixpences reading COMMONWEALTH in error (1:1).
4/5. ‘Commonwealth’ portion of the two sixpences.
6/7. Date area of the two sixpences.
8. Commonwealth 1654 shilling, reading COMMONWEALTH from double-striking (1:1).
9. Name area of a William & Mary 1689 Maundy penny showing GVLIELMVS spelling error.
10. Name area of a William III 1697 shilling showing GVLIELMVS spelling error.
11. Name area of a William III 1696 second bust sixpence showing GVLIELMVS spelling error.
12. William & Mary 1693 forty-shillings with error spelling GVLIELMVS (enlarged 2x).

* See Letter from the King, dated 31 August 1682, removing four officers 'from their respective places and offices in our mint' and requiring Commissioners appointed under the Great Seal 'to consider what shall be the finest methods for ordering and securing the (regulation of our mint) for the future', in R.W. Cochran-Patrick, Records of the Coinage of Scotland, vol. 2 (1876), p. 171.
MANVILLE AND GASPAR: DIE-SINKING ERRORS
DURING his deputy-mastership of the Royal Mint, Robert Johnson devoted himself with remarkable assiduity to raising the standards, both artistic and technical, of medal production in Britain.¹ A key part of his strategy was the promotion of the Royal Mint as a manufacturer of medals. The correspondence contained in a Mint file now in the Public Record Office² allows us a vivid insight into Johnson's methods and graphically illustrates the extent of his persuasive powers — which were, however, in this case deployed to no avail.

Already in 1924 Johnson had attempted to interest the railway companies in commissioning a medal to commemorate the forthcoming railway centenary. The following year the chance of involvement in a medal celebrating the event came from a different quarter. In a letter to Johnson dated 11 April 1925, Leonard Ropner, mayor of Stockton-on-Tees, outlined his plan to present a railway centenary medal to the children of the town and asked whether the Royal Mint was 'prepared to undertake the manufacture of medallions from the baser metals'. He understood, he wrote, that such medals cost around two pence each, and estimated that he would need around 10–11,000.

In his reply of 23 April, Johnson wrote that the Mint would be pleased to undertake the work, but warned the mayor that, as 'our first requirement is that what we turn out shall be really good of its kind', they would need to employ a competent artist and a skilled die-engraver; the cost would, therefore, be four pence rather than two pence. To illustrate his point, he enclosed with his letter two examples of medals 'sold by the trade at about 2d.' and two specimens 'of the kind of thing that we can turn out here for 4d'. He added, in typical Johnson style: 'I do not know what you feel about it, but my own feeling very strongly is that it would be almost a case for the artistic sense for the remainder of their lives'.

The sheet of paper on which Johnson made his calculations is also preserved in the PRO file. Allowing £20 for the artist, £10 for electrotypes, £20 for reduction punches, £6 for three pairs of dies, £55 for the metal (tin), and £21 for striking around 10,000 medals (at one halfpenny each), the cost price would be £132, or 3.168 pence per medal.

The medals despatched for Ropner's inspection related to the British Empire Exhibition of 1924. It is not possible to identify the 'trade' medals, about which Johnson was so contemptuous. It is, however, clear from the subsequent correspondence that one of the Royal Mint medals was William McMillan's 'keepsake' medal showing a ship unloading (pl. 16, 1); the other was in all probability the other 'keepsake' medal struck by the Royal Mint for the Exhibition, which was the work of Percy Metcalfe.³

But Ropner was not shaken. In his letter of 24 April he agreed that the medals in packet A were poor, but added that he did not 'consider the drawing anything outstanding' in McMillan's medal and that he thought the other Royal Mint medal 'much too flat'. His opinion that, 'in view of the simple design which I think in this case would be best, I do not think it would be necessary to have an Artist. My view is rather that a designer would meet the case', cannot have made pleasant reading for Johnson. He had, he wrote, received 'quite good suggestions from one or two firms at round about the figure I named', the best to date being for a medal 1½ inches in diameter, which compared well with the Royal Mint's 'rather small' medals. He was, he added, prepared to pay more for something exceptionally good, but four pence was altogether too high.

Evidently Johnson had already mentioned the scheme to at least one of his favoured artists, for, having read Ropner's comments, he wrote to Langford Jones expressing his fear that the thing would not come off. To the mayor, however, he presented an undaunted front, and in a letter of 27 April suggested another of his protégés, Percy Metcalfe, as a suitable artist for the railway medal. Metcalfe, he wrote, already possessed a portrait of George Stephenson which he could copy for the obverse, and he enclosed an example of the artist's recent work, the medal produced to celebrate the forthcoming visit of the Prince of Wales to South Africa (pl. 16, 2).⁴ As an extra inducement, he lowered his price to 3½ pence per medal.

² PRO MINT 20/979.
³ For these medals, see the 55th Annual Report of the Deputy Master and Comptroller of the Royal Mint, 1924 (London, 1925) pp. 6, 24. McMillan's medal is reproduced in plate A, 11 and 12; Metcalfe also modelled a larger medal with a ship and crane design for Amalgamated Anthracite Collieries Ltd.; p. 7; pl. A, 1 and 2). Metcalfe's medal is reproduced in plate A, 9 and 10.
The mayor replied that a decision would not be made until all the tenders were in, but that the relatively high cost of the Royal Mint 'will make it difficult for me to place the work with you'. At this point Johnson relinquished the struggle, writing to Ropner on 29 April: '(1) quite realise that the cost of our Mint productions here may be a difficulty with you. I very much hope that you will be able to get something to satisfy you at your price elsewhere, though I fear that it will be hardly possible'. On the same day he informed Langford Jones that the railway centenary medal was off.

But, although it was now extremely unlikely that the Royal Mint was to be involved in the production of the medal, Johnson did not let his interest in the scheme drop. At the end of his letter to the mayor, he expressed his desire to see an example of the final product. And, when Ropner replied that he had still not received all three tenders requested from private firms, Johnson made a final plea for quality. 'May I . . . take this opportunity', he wrote on 2 May, '(of repeating that I think you ought to try and make an effort to go as far as 3d. or rather more if possible. If you do, Birmingham ought to be able to turn out quite a decent one for this figure. But it is really not treating any manufacturer fairly to ask them to quote a price below that at which it is possible to produce good work, and I have received many complaints from the outside trade that the reason why their productions have been so frightfully inferior of recent years is because their customers will not pay a proper price'.

This passage is particularly revealing of Johnson's attitude towards medallic art. We have seen him refusing to cut costs (including the artist's fee) at the Royal Mint. Here he argues strongly that private manufacturers also should not be compelled to reduce their costs. In the end his principal concern is revealed not to be the procurement of business for the Royal Mint but the maintenance of standards. There is, however, another aspect of this case which goes some way to justifying the private manufacturers' animosity towards Johnson. His final price of 3½ pence for a medal costing 3.168 pence would have yielded a minuscule profit margin that no commercial firm could have considered, and the fact that Johnson was prepared to offer it lays him open to the charge of unfair competition. As we have seen, however, Johnson's standards were such that, even when he allowed for next to no profit, his product could be judged by the customer to be too expensive. It would seem quite possible that in many cases there was no direct competition between the Royal Mint and private manufacturers, as the price the commissioning body or individual was prepared to pay determined the choice from the outset.

On 16 May the mayor informed Johnson that the contract had gone to the Birmingham manufacturer, W.J. Dingley, and on 9 June he sent the deputy-master an example of the medal (pl. 16, 3). In an earlier letter to Johnson, Ropner has suggested Stephenson's 'No. 1 engine' for one side of the medal and the borough arms, a view of Stockton town hall, or a portrait of George Stephenson for the other. The final design includes the portrait, whilst on the other side Stephenson's locomotive is contrasted with a locomotive of the 1925 Pacific class, which emerges from underneath a bridge; on either side are shields bearing the arms of Stockton and Darlington.

Johnson communicated his verdict in a letter of 12 June: 'So far as the design goes, especially that showing the Stephenson and modern engine, if I may say so it is really not half bad. The only real criticism I have to make of the medal is that it is so very roughly executed and finished, but that of course is exactly where the money question comes in'. He ended (and I may be wrong here in detecting a slight note of satisfaction): 'I do hope, however, that you have been able to get Messrs. Dingley to make the necessary alteration in the spelling of "Stockton" not "Stockton-on-Tees".'

The decision not to call upon the services of a skilled artist has had an unfortunate effect on the portrait, but on the whole, especially given the speed with which the commission was executed, the medal is, as Johnson wrote, 'not half bad'. Ropner replied on 18 June that the mis-spelling, which had been a mistake on the part of the die-cutter, had been corrected (pl. 16, 4). The mayor wrote: . . . 'Personally I think the medal is good value for the money. 2½d. each'.

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5 It may have been when quoting 3½ pence that Johnson revised the figures in his calculations, raising the cost of electrotypes, punch and dies from £26 to £40 and that of striking from £21 to £36, and lowering the cost of the medal to £18. This would give a cost of £114, or 2.736 pence per medal.


7 The medal remains in the Royal Mint collection. I am grateful to Mr Graham Dyer for this information and for supplying the photographs.

8 Johnson had suggested 'something illustrative of the development of railways in this country' (letter of 23 April). The juxtaposition of Locomotion No. 1 and a modern Pacific locomotive would have been suggested by the prominence they were to play in the centenary celebrations (see R. Atwood, 'The Medals of Gilbert Bayes', NC 152 (1992) 148-9; pl. 22, 14). Bayes's centenary medal for the London & North Eastern Railway and the medal commissioned by Mr W.E. Pease, mayor of Darlington, also have the two locomotives; Bayes's medal also bears the two civic coats of arms.

9 The example illustrated is of tin and is in the collections of the National Railway Museum, York. The Museum also has a silver example, stamped with Dingley's mark and hall-marked, which is not pierced. I am grateful to Mrs Helen Ashby for this information and for supplying the photographs. Ropner had informed Johnson that he might also require a limited number in gold, silver and bronze, for prizes for sports events held during the celebrations and on sale (letter of 24 April). Johnson had suggested they should all be struck in bronze (letter of 27 April).
PLATE 16

ATTWOOD: RAILWAY CENTENARY MEDAL