

OF DIES, DESIGN CHANGES, AND SQUARE LETTERING IN THE OPENING PHASE OF THE SHORT CROSS COINAGE

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IN 1915, L.A. Lawrence divided the Short Cross coinage (1180–1247) into eight classes along with a number of sub-classes.¹ As part of this effort, he called the coins that stood at the head of the series class Ia, and singled out the shape of two letters in the legends as the distinguishing feature of the new sub-type. As he observed, the two letters in question were E and C, and they appeared in a square shape on these early coins.² Though the original insight regarding square letters belonged to Evans,³ it was Lawrence who made this feature a diagnostic one. By so doing, he gave the Short Cross series a concrete beginning.

Before Lawrence, the classification system in use was the Evans scheme in which the coins with square letters were simply incorporated into class I. Though Evans credited these letters as being a possible link with the preceding coinage, his account remained imprecise, and his elaborations failed to elucidate the early chronology.⁴ Clearly, an awareness of Roman letters had now taken root, as demonstrated by Grueber's inventory of the Colchester Hoard, which sought to reproduce the letters in this form.⁵ But it was left to Lawrence to originate class Ia, the coins known ever after as the ones that initiated the Short Cross series.

Lawrence was responsible for other advances as well. For instance, he noted the absence of uniformity in the shapes of E and C in class Ia. As he put it: 'The C and E are sometimes square and sometimes round.'⁶ In other words, the square and round forms of the two letters on individual coins appeared in a generally unpatterned way. A natural inference, which led to an overly rigid definition, was that any coin that displayed even a single square letter warranted being classified as a Ia. More appropriately, it is the earliest coins in the series – the grouping, with a natural affinity, that actually came first – that should, by definition, be denominated Ia. Whether or not a square letter is a common feature of all of them is a proposition that we will wish to re-examine closely.

A yet further observation of Lawrence (once again borrowing from Evans) centred on the shape of the letter M. In Lawrence's own words: 'M is found in two forms, either M or m, perhaps more commonly the latter.'⁷ As we shall discover, the earliest sub-classes of Ia use the round m, whereas the later sub-classes exhibit the square form. In other words, unlike the E and C, which appear quite arbitrarily in their two forms, the two forms of the letter M are sequential.

Acknowledgements. I am grateful to Martin Allen and Lord Stewartby, both of whom read and commented on drafts of this paper. Others who have helped in my study of the coins themselves are (alphabetically) William Conte, Barrie Cook, Alan Dawson, Glenn Gittoes, Yvonne Harvey, Nicholas Mayhew, Jeffrey North, David Palmer, Mark Senior, Michael Sharp, Peter Woodhead, and Christopher Wren.

¹ L.A. Lawrence, 'The Short Cross Coinage, 1180–1247', *BNJ* 11 (1915), 59–100.

² *Ibid.*, p. 63.

³ John Evans, 'The Short Cross Question', *NC* 1865, 276.

⁴ In the mid-1870s, Evans became locked in a dispute with

Mr Kenyon over the point of transition between classes I and II. Apart from some pointed remarks about the moneyers AIMER and FIL AIMER (see notes 48 and 50 below), little of useful substance was added regarding the earliest coins, though the article itself is of some interest. See John Evans, 'Further Remarks on the Short Cross Question', *NC* 1875, 152–56.

⁵ H.A. Grueber, 'A Find of Silver Coins at Colchester', *NC* 1903, 110–76. In summarizing Evans's class I, Grueber did not seek to advance the definition. Thus he limited himself to the following: 'on the earlier pieces the Roman E for e. and □ for c are sometimes met with'. *Ibid.*, p. 114.

⁶ Lawrence, 'The Short Cross Coinage', p. 77.

⁷ Lawrence, p. 77.

Continuing his description, Lawrence noted 'the outer circle with dots at intervals' that appeared on some coins, though on this subject he was less explicit (and therefore satisfying) than Evans. In characterizing the coins that exhibited this particular feature, Evans suggested that they 'appear to be the earliest.'⁸ It is a conclusion that we can affirm now as entirely correct.

In his final observation, Lawrence noted that the letter 'X varies from a plain cross to the form with serifs.' This last point was undoubtedly his least helpful, since he confused the chronology by adding that 'the X still varies' in class Ib.⁹ It was not until many years later that Brand and Elmore Jones gave us class Ia*, bestowing the coins with seriffed Xs with a separate identity, and placing them in between Ia and Ib.¹⁰ In the current study, I will undertake to situate these coins fully within the sequence of class Ia.

Despite the problems as enumerated, the insights bequeathed by Evans and Lawrence form the basis of the paper that follows. We will be concerned, necessarily, with square letters and seriffed Xs. Nevertheless, the number of specimens we have to work with is much greater than in Lawrence's day, permitting the construction of a new chronology and sequence of sub-types, as well as a new conception of the series' opening phase. What I will seek to propose is an enlargement of our definition, which takes into account a number of stylistic features, and then joins them to the pattern of mint openings. As we shall discover, it was only when the six original mints were expanded to ten in the autumn of 1180 that the coinage became regularized and an evolution of types, making up the whole of Ia, became frozen into the less mobile class known as Ib.

The current study of class Ia was begun as a collaborative project with Martin Allen who deserves equal credit in two important areas: in evolving the sequence of sub-classifications (in particular, classes Ia1-Ia3), and in the die study that accompanies the section below on the individual mints. Mr Allen has also contributed an essay to these pages (see pp. 53-58) in which he seeks to reconstruct a chronology of the events of 1180.

I. Some background and some basic information

Before proceeding to a treatment of the new Ia sequence, we should recall that the Short Cross coinage did not appear as part of the package of innovations that accompanied a new reign; Henry II had been king since 1154. Dissatisfaction with the quality of the existing Cross and Crosslets coinage (the 'Tealbys') was combined with a desire on the part of the king to reorganize the coinage so as to enhance both his income and his control.

Starting afresh obviously meant a number of things. It meant not merely introducing a new design for the coinage, but reviewing mints and moneys not to mention procedures. The object of the exercise was to streamline the production of the king's money, which meant rationalizing the number of mints and adding to the controls over production and exchange.¹¹ As a consequence, a total of five mints were authorized to receive dies, and the new coinage commenced activity in mid-1180. The original Short Cross mints were London, Exeter, Northampton, Winchester, and York, but Wilton was added almost immediately as the result of a severe fire at Winchester.¹² In a sense, we are therefore justified in speaking of six original mints since Wilton was not closed when Winchester reopened, and since six mints (rather than five) produced coins that displayed the earliest style of obverses.

⁸ Evans, 'The Short Cross Question', p. 263.

⁹ Lawrence, p. 77.

¹⁰ John D. Brand and F. Elmore Jones, 'The Emergency Mint of Wilton in 1180', *BNJ* 35 (1966), 119.

¹¹ Several numismatic studies have now dealt with this subject, beginning with D.F. Allen's masterful treatise on the Tealby coinage (1951), and including John Brand's M.A.

thesis (1981), now published, and Nicholas Mayhew's recent contribution to *A New History of the Royal Mint*. Martin Allen is continuing to pursue this important subject.

¹² See Brand and Elmore Jones, pp. 116-17. I do not accept the revised chronology now proposed by Martin Allen (pp. 53-55). See note 41 below for an elaboration of my views.

Viewed from the other end, all six mints produced coins at the terminus of the Ia sequence, which runs through a progression of five styles. In other words, class Ia will be divided here into five sub-types, which I propose to designate Ia1–Ia5. The first three phases embrace the whole of Lawrence's class Ia; the fourth is drawn from the Brand-Elmore Jones Ia*; and the fifth is from what Brand called 'early Ib'. By contrast, none of the four new mints of class Ib (Carlisle, Lincoln, Oxford, and Worcester) produced coins in any of these five Ia styles, an observation that yields the main theme of this paper. As we shall see, the division between Ia and Ib is a function of the difference between six mints and ten, and between a style that was fluid and one that was fixed. As I will argue, square Es constitute only one part of that story.

Moving from mints to a survey of moneyers, a total of 39 men produced coins in class Ia. The number seems a large one in two senses. Firstly, it represents a clear majority of the names we encounter for the entire decade; some 68–70 moneyers have been identified for the whole of class I (see note 62). That means that most of the men responsible for producing Henry II's new coinage were present from that coinage's very beginnings. Secondly, the figure of 39 moneyers needs to be measured against the notion of 'rarity' for the sub-class itself. The coins of Ia are rare because of the extreme brevity of their period of production, and because the largest Short Cross hoards (Eccles and Colchester) were deposited more than a half century after the series commenced. By contrast, the output of the coinage gives every indication of having been substantial at the time.

II. The sequence of types

Any description of a sequence of types within the context of an 'unchanging' design is both an invention and an expedient of modern scholars. Thus in trying to identify a beginning, specialists must seek to reconstruct mostly from back to front: the style that is earliest becomes apparent only when it is compared with something that came later.¹³ For the pioneering die makers of the era, the exercise was entirely different. Not only did they bear the burden of a past legacy, but they began with little more than a basic conception for the new coinage and then had to evolve a consensus on details. In such a context, it is small wonder that their progress was anything but direct. Put differently, the range of possibilities led to inevitable experimentation, which yielded the various emendations that form the basis of our sequence of five sub-types.

1. Type Ia1

Befitting their status at the very head of the new series the earliest coins exhibit the greatest variety of all. They also seem the most 'primitive' as a group. Indeed, the coins of Ia1 display such a host of inconsistent features that our lumping them into a sub-class might reasonably be questioned. As it happens, however, the dies in this group all display the dot-dash outer circle, which Lawrence, building on Evans, noted as occurring 'often' in class Ia.

As regards this feature, we can assume that it was conceived not for aesthetic purposes, but rather to prevent clipping of the coins themselves. Yet unless a coin was perfectly centred in its striking, the dot-dash circle would be no more than partially visible, its purpose, as a consequence, potentially neutralized. Moreover, the portion of the circle present might have been far from the coin's edge, producing a possible reminder of the poorly struck previous

¹³ Efforts to make connections forward, i.e., from Tealby to Short Cross, have been disappointing. For one tentative effort, see Jeffrey P. Mass, 'A Link between Tealby and Short Cross?', *NCirc*, November 1993, 316.

coinage. At variance then with what for us is a fascinating visual feature of these coins, the dot-dash outer circle evidently fell into disfavour and was dropped. Nevertheless, the feature itself is the common denominator for class Ia1, appearing on both obverse and reverse dies (nos 1–4, etc.).¹⁴

Unfortunately, its detection on actual specimens is sometimes difficult, with no more than two or three dots frequently visible. Moreover, on numerous coins the feature is on only one of the two dies, with the other exhibiting a multi-dot outer circle. I mention this point now in order to introduce a potentially controversial issue: the validity of conceiving of such juxtapositions as expressions of the phenomenon known as 'muling.' In the case of a rapidly evolving sequence of sub-types, such as we have here, the frequency of 'muling', as so defined, would be unsurprising. Obviously, a sub-class of such brief duration would yield the maximum range of possibilities in the combining of dies.

Nevertheless, the appropriateness of applying a concept more normally used between major classes may reasonably be questioned. I have elected to use it as much out of necessity as out of conviction. In practice, since dies were not regularly issued in simple pairs, how else are we to convey a sense of schematic progress? The combining of classification designations is the most effective way.

a. Ia1 Obverses

Commanding our attention first are the portrait and the crown, which reveal a sequence of rapidly changing styles. The earliest, known from London, Northampton, and Winchester, exhibit a crown in the shape of a cross pattée, rather than as a configuration of pellets, the standard thereafter.¹⁵ In existence only momentarily, the pattée design indicates graphically the trial and error mentality (nos 21, 56, 110). But does it also tell us something about the pattern of mint openings – possibly three at the outset, rather than the proposed six? The answer to this question lies with other stylistic features, which, as we discover, were equally part of this opening phase.

As it happens, the coins with the cross pattée crown have a rounded collar at the base of the bust along with two folds of drapery on the right side facing. These features are on all the cross pattée dies, but they are also, slightly adjusted, on the first pellet dies at Exeter and Wilton. Thus on the Exeter we see a double drapery but the bottom of the collar no longer separate from the coin's inner circle, whereas on the Wilton we encounter a separate collar though now with a single drapery (nos 1, 32). In short, the crown, the drapery, and the collar were all part of the earliest experimentation with the design for the obverse, which involved dies clearly sent to more than just three mints.¹⁶ It is a point that can be demonstrated in a different way by looking at a specific moneyer and sequence of dies.

The moneyer IOHAN of London is one of the few known to have issued coins bearing the cross pattée crown. But he also issued a pellet ('pommée' crown) coin that exhibits the double drapery and the separate collar, thereby linking it to the very earliest Short Cross issues (no. 111; see also no. 9). In other words, three features, not just one, are diagnostic for the opening dies in class Ia1. Moreover, the collar almost immediately started to merge with the inner

¹⁴ The reference here is to coins in the Plates, designated by their number. Also, throughout this paper I will designate square Es, square Cs round Ms, and seriffed Xs by underlining them.

¹⁵ There are now four such obverses on coins of the following moneyers: IOHAN of London, WALTER of Northampton, OSBERN of Winchester, and RODBERD of Winchester. I have had access to only three of the total

here: Mr Gittos has informed me of the fourth (the OSBERN), which I have been unable to see. I have also been unable to obtain the readings of the legends for this coin.

¹⁶ That is, to five of the six Ia1 mints. Only York is at present missing though it seems possible that coins of the earliest style may yet turn up. At the time of writing, only three Ia1 obverses are known from York, all slightly later.

circle, whilst the double drapery became single (nos 74, 94, 118) and then disappeared entirely (nos 3–4, 15, 25, 31, etc.). All of these changes occurred during the brief lifespan of class Ia1.

As for the portrait itself, the most that can be said is that it has its own odd look on these earliest dies. The head is small with very thin side curls of an inconsistent, sometimes indeterminate, number, though the total to the right is always greater than that to the left.¹⁷ On a few dies the king's sceptre is short and at a low angle, resulting in a start of the legend earlier than what soon became the standard (nos 20, 32, 105).

There is a particular coin that must be cited in any discussion of the very earliest dies. This is a coin of RODBERD of Winchester that looks like no other in this sequence. Though it is best examined in the context of an analysis of lettering and punctuation, the fact of its unique appearance is the best proof of the absence of fixity at the start. This coin, which Lawrence himself once owned, displays the crown (as well as the sceptre-head) in the style of the cross pattée (no. 56). Since Lawrence did not mention it, one must assume that he obtained it after having published his initial remarks on class Ia.¹⁸

On the subject of lettering and punctuation, the letters we must be concerned with (obverse and reverse) exceed the standard E, C, and M; N, X, O, S, and W will also require comment. Nevertheless, since the legend on the obverse became fixed immediately and then never changed (HENRICVS R/EX), we might begin with its key letters, which are E, C, N, and X. The distinctive features are as follows on the dies of class Ia1:

1. At least one of the two Es is squared, with the C either squared or unsquared. In a survey of 31 Ia1 obverse dies, the first E was squared 23 times, the second E was squared 29 times, and the C was squared ten times. On no obverse were the Es round with the C squared, and on seven dies all three letters were squared. On five (or six) dies only one letter (an E) was squared. Though there is no discernible pattern earlier or later in the sub-class, the most likely letter to be squared was clearly the E in the word REX.¹⁹

2. In our sample of 31 dies, some 23 have the two words in the legend separated by a pellet stop; on one (the above-cited RODBERD) there is a colon stop; and on seven there is no stop whatever. The absence of a stop appears on only a few dies from later in the Ia sequence, though the feature reappears with some frequency in class Ib, and then becomes the norm (albeit not invariable) in class Ic.

3. In our sample of 31 dies, the E is to the right side of the sceptre in 22 cases, thus appearing as RE/X. By and large, the earliest obverses were designed this way, though the pattern was not rigidly adhered to. As we shall see, a few obverses in class Ia2 have it RE/X, though the trajectory was in quite the other direction, with the feature then disappearing for the remainder of class I. On only a single die reading RE/X (in both Ia1 and Ia2) was the E in the round form rather than the square (no. 117).

The other two letters of importance on Ia1 obverses are the N and the X. With but a single known exception (no. 75), the second upright of the N lacks a serif at its base. That is, the N contains three serifs, rather than four, a feature that continues through class Ia2, but then disappears.²⁰ I will have much more to say on the subject of the three-serifred N.

With the exception of a single obverse, the letter X is made up of two unadorned arms. That is, the X lacks serifs entirely except on a single recently-published coin. On that specimen, of

¹⁷ As Evans observed as long ago as 1865, the coins were thereby given the appearance of 'being three-quarter faced'. See 'The Short Cross Question', p. 263. Yet this is not our impression from an examination of the portraits themselves; see my description below for class Ia2.

¹⁸ This coin was part of Lot 1002 in the Lawrence Sale of November 1951.

¹⁹ I have not thought it necessary to provide lists of coins

showing these and all other patterns. Similarly, I have not felt it essential to cite all or even illustrative photographs for every point made in this paper (see, for instance, the next paragraph). The inventory of dies for the separate mints will contain most of this information anyway.

²⁰ The original insight here belongs to Martin Allen, as introduced in a short paper he delivered to the BNS in March 1983.

WILLELM of London, the X is reminiscent of the Tealby X with four fully formed serifs (no. 129).²¹ Finally, on the coin of RODBERD, cited above, the letter X is not present at all; the reading is thus HENRICVS:RE/.

b. Ia1 Reverses

As already noted, the distinguishing feature of class Ia1 is the dot-dash outer circle on the obverse and reverse. There are no other particular design features that characterize the reverses of these coins. As a consequence, we need only look at the lettering.

The absence of uniformity in the shape of the E and C on obverse dies is duplicated on the reverses. But whereas obverses necessarily contain both of these letters, the same is not true for all reverses. The range is from 0 to 4 appearances of the letter E and from 0 to 2 appearances of the letter C. As the number of such letters increases, it becomes less and less likely that all will be squared. At the same time, there is little discernible pattern in the shapes of these letters earlier in the sub-class as opposed to later. Perhaps the RODBERD, for once, is typical, with the legend reading RODBERD ON.W//EE, in which two of the three letters in question are square, even as the C has been replaced by an E. Such substitutions (in both directions) occurred occasionally (nos 4, 75, 117), and this was a phenomenon that continued past class Ia.

More interesting is our seeming quandary when the reverse legend contains no Es or Cs, or contains such a letter and it is round! Lawrence simply ignored a situation he must have encountered, though the convention, in recent years, has been to classify the round-lettered coins as 'mules' – thus Ia/Ib. In fact, however, we are able to be much more precise than that, since there are other clues that allow us to identify a Ia reverse. First, the letter M (where it appears) is round on every known die in classes Ia1 and Ia2, allowing us, for example, to attribute a reverse such as the following to (in this case) Ia2: RAVL.ON.NORAM (no. 17). And second, the letter N, without exception, displays three serifs, not four.

It is here, on these early reverses, that the implications of the three-seriffed N now become fully clear. For unlike the E and C, the N, since it appears in the word ON, is present on every die and therefore on every full coin. In addition, it appears in the signatures for London, Northampton, and Winchester, which were the three most prolific of the Ia mints. As a result, we are able to classify coins with otherwise problematic legends, e.g., those that contain no Es or Cs (thus IOHAN.ON.LVND or RANDVL.ON.LVN, both of class Ia1 [nos 111, 120]), or those that contain Es that are *round* (thus OSBER.ON.WILT and REINALD.ON.LVN, in this case, both of class Ia2 [nos 29, 127]). Especially in Ia2, where we lack the dot-dash outer circle, the significance of the universal N transcends the presence or absence of the letters E and C.

Only a few comments will be required concerning the forms of several other letters that appear on Ia1 (or Ia2) reverses:

1. The S, reminiscent of Tealby, is occasionally pushed over on its side (no. 111).
2. The O is squeezed partially flat on a few dies and is also very small (nos 111, 117).
3. The W, on a single die, has been replaced by the older letter *wen*, which looks superficially like a P. On this coin, the mint signature for York thus comes to read EVRP. To my knowledge, it is the final appearance of the *wen*, which was already embattled under Tealby (no. 62).²²

Before leaving class Ia1, it will be instructive to come back to the letters E and C, though

²¹ See Mass, *NCirc* (1993). The coin itself has the following readings: H//RICVS.RE/X (obv.); WILLEL//ON.LVNDE (rev.).

²² See D.F. Allen, *A Catalogue of English Coins in the*

British Museum, xxxvi–xl. This coin, from the Corne Hoard, was originally owned by Brand. The *wen* on its reverse was brought to my attention by Mr Gittoes.

not to the square forms of those letters, but rather to their round configurations. In fact, these are more interesting than square letters, for a reason that is actually quite striking: the die engravers of that age were less (rather than more) experienced with the round forms of those letters. Under Tealby, the round E and C were standard for a while in class C, and the round E, but not the C, was used occasionally in classes E and F. Otherwise the square E and C were in universal usage.²³

In class Ia1, the round forms of these letters display a considerable variation: 1. letters with the closing curved, vertical bar (no. 105); 2. letters closed by small serifs rather than by the top-to-bottom bar (no. 117); 3. Es and Cs that were identical owing to the absence (or the presence) of the Es (or Cs) horizontal middle bar (nos 4, 75, 117); and 4. letters of varying degrees of roundness including a few that were nearly full circles (no. 121).

The subjects of die sharing among moneyers, and of variations in the spelling of their names, will be treated below in the section on mints and moneyers.

2. *Type Ia2*

As we already know, the disappearance of the dot-dash outer circle marks the transition from Ia1 to Ia2. Yet the point bears repeating that we are not to assume mutually exclusive phases, the proof for which lies in the overlapping of design features and in the frequency of 'muling'. As it happens, there are in excess of a dozen combinations, which, following our criteria, would have to be called Ia1/Ia2 'mules'. Though this is not the place to speculate on the lifespan of dies, there is no question that obverses survived reverses, as indicated by the direction of these 'mules': there is but a single recorded example of a Ia2/Ia1 (no. 35). At any rate, in discussing Ia2, we need always to be aware of what we already know about Ia1.

Much that appeared to be in rapid flux in Ia1 seemed to be 'settling down' as the coinage reached the 'middle' of Ia2. Though the number of obverses is virtually the same in the two sub-classes, there is a sense about Ia2 that it epitomizes a kind of standard for the whole type. Yet as we shall see, the pace of change, if indeed it had slowed, represented no more than a temporary hiatus.

a. Ia2 Obverses

Looking first at the design contained within the inner circle, the portraits of Ia2 are unmistakably less primitive than those we encountered in Ia1. The crown of pearls was now standard as was the collar growing out from the inner circle; no extra drapery appears. The curls on both sides continue to vary in both number and fineness, though this feature, it should be said, is a characteristic of class Ia as a whole. On almost all dies the smallish visage of a sober-looking king stares out from behind tiny eyes and is focused straight ahead. Though we almost feel we are making eye contact, the portraits themselves cannot be recognized as that of one man. Nevertheless, only a few of these portraits might be confused with those of Ia1 (nos 77, 107).

Seemingly early in Ia2, the location of the legend moved by one letter to the right. That is, the RE/X of only three known Ia2 dies (nos 96, 116, 122) becomes the R/EX of 29 others. The base of the sceptre is more consistently near the base of the portrait, with the result that its angle tended to be sharper with the king's name starting closer to the top of the coin. However, the variations we saw earlier with regard to square and round letters continue unabated. Thus five of the total of 32 dies have all three obverse letters squared, whereas at least 22 others have two letters in that form. The C, as in Ia1, is never square by itself, and

²³ Allen, pp. xxxviii–xxxix, clxxxv.

indeed the C overall is the least likely to be square (13 dies). The most likely square letter is the E of REX, and indeed I know of no dies in which that was not the case.

As noted earlier, the letter N on Ia2 obverses always has three serifs rather than four.

On the subject of punctuation, there is but a single die lacking the stop (no. 122), whereas another has two stops, following each of the two words (no. 116). However, the explanation in the second case is the inadvertent omission of a letter in the legend (thus *HERICVS.RE/X.*). Interestingly, there are no recorded misspellings of the king's name in class Ia1.

b. Ia2 Reverses

As we noted earlier, all six mints were active from the very start of the new coinage, at least as defined by the presence of Ia1 features. An anomaly seems to emerge, however, in class Ia2: until recently, no dies, obverse or reverse, existed for the mint of Exeter, a condition that actually continued until near the end of class Ia4. Now, finally, we have a single reverse (no. 5),²⁴ though much of the mystery surrounding Exeter continues (see below). At any rate, a total of at least 24 moneyers produced coins during the Ia2 phase. This compares with 19 moneyers who used reverse dies attributable to class Ia1.

The legends themselves are notable for features we have now come to expect. Whilst all the Ns have three serifs,²⁵ the pattern of square and round letters lacks any consistency whatever. Though square Es and Cs were decidedly favoured, there are frequent examples where the round forms were used, e.g., for a reverse die of CLEMENT. On this interesting die the reading is *CLEMENT.ON.WIN*, in which the second of the two Es was round (no. 44). Of course in this instance we have a bounty of key letters, with an M that is round along with a square E and C. Yet the absence of consistency is the more interesting point.

Counter-balancing that condition is the shape and style of other letters. For example, the letter M is always round, just as it was in class Ia1.²⁶ The X is never seriffed, the O becomes less flattened, the S is more upright, and the round E and C are less variable. Though the spelling of the moneyers' names might still vary, the number of persons affected was now diminishing. And thus except for the arbitrary Es and Cs, the lettering seemed to be becoming more predictable.²⁷

3. Type Ia3

As already noted, any impression of a condition of stasis proved only momentary, and we encounter changes in Ia3 involving four letters. As we shall see, class Ia3 is the final sub-class that displays square letters, which would make it the final phase of Ia under the Lawrence formulation. But such a termination of the class would run contrary to what the coins tell us. The evolution of early style had not yet run its course.

²⁴ This coin, now in the BM, is from the recent Canwell Hoard. It was brought to my attention initially by Chris Wren.

²⁵ A single reverse die of CLEMENT of Winchester has a final N with four serifs; its reverse legend also begins, unusually, at 1:30 (no. 45). A late-starting legend also appears on a coin of Ia5 of WILLELM of London.

²⁶ The universality of this feature has facilitated the identification of a hitherto indecipherable coin. On a worn Ia2 of the York mint (from the Lawrence Sale, Lot 391), only a final upright in the moneyer's name can be seen (no. 66). Thus

the coin is either of WILLELM or of HVNFREI, who happen to be the only eligible candidates. Since the M, if it were WILLELM, would almost certainly be round, I have felt confident in giving the coin to HVNFREI.

²⁷ A coin of HENRI of London (no. 96) has had its reverse legend partially retooled in the region of the word ON. According to Brand, the retooling was done by the engraver, shortening the name HENRICVS, done in error, to HENRI; see John Brand, 'Short Cross Coins in the Birmingham City Museum', privately printed (1966), p. i.

a. Ia3 Obverses

To summarize the diagnostic features of class Ia3, the N, for the first time, gains a fourth serif; the C is always round; the round E and C take on a newly configured closing bar; and the M, at least sometimes, becomes square. Clearly, the features embracing change all have to do with the lettering, leaving us to say very little about the character of the portrait. On the three recorded obverses of class Ia3, the portrait is directly facing, the curls are numerous and wiry, the crown of pearls is pronounced, and the image is of good workmanship (nos 24, 54, 101). The style is basically a continuation of that exhibited in class Ia2.

By contrast, the lettering represents innovation of the most dramatic kind. The N at the top of each obverse is now suddenly outfitted with four serifs, and on one of the three known dies has its cross bar with the right side higher. As we shall see, this 'reverse-barred N' is a feature of some importance in class Ia4, the new name that we will be giving to the old Ia*.

As for the letter C, these are now round on the three recorded obverses, a feature we will find duplicated on the much larger number of reverses. In short, the square C, like the three-serifed N, is a feature exclusively of Ia1 and Ia2.

When we turn to the letter E, one die has both of these square. However, the other two have only one E square, which happens to be a different one for each. In short, on the three surviving obverses we find all three possibilities – proof, if more were needed, that inconsistency remained.

The round form of the C (and also of the E) attracts our attention immediately. For not only was 'roundness' increasing in usage, but it was also appearing in a wholly new design. On two of our three obverses the vertical closing bar had acquired a new shape, now in the form of half-melons or half-moons, with the one atop the other. It is a feature that anticipates a more mature phase when the 'double-half-moon' E and C become a fixture of class Ia4.

Significantly, the three known obverses appear on coins of three different mints – London, Northampton, and Winchester. Though we must await newly discovered dies, the known dies were at least widely distributed. But, in fact, as we shall see, class Ia3 is best known for its reverses, an imbalance that will raise for us serious questions. For the moment, it is enough to place on the record that only one of the obverses is combined with an unambiguous Ia3 reverse; one of the others is part of a 'mule' (Ia3/Ia2), and perhaps the other is also (thus Ia3/Ia4?).²⁸

b. Ia3 Reverses

The survival of at least 17 Ia3 reverse dies suggests that we are now truly in a new phase. The Ns, of course, all have four serifs, and the Cs are all round. Moreover, the universality of the new 'double-half-moon' form for round letters allows us to attest to its usage for virtually every E that is *not* square. In other words, if one E is square and the other is round, the round letter will appear in the new 'double-half-moon' form (nos 65, 79, 98). Moreover, the new form is as important as the old square form with which, as it happens, it shares an equally long lifetime – a total in each case of three sub-classes (Ia3–Ia5 and Ia1–Ia3). Once again, therefore, there is more to class Ia than simply square letters.

On the other hand, the classification system becomes more difficult beginning with class Ia3. Once we begin losing square letters (and round Ms), we have problems, in particular, with the reverses. These are now harder to distinguish from one another, and they also raise other questions as well.

²⁸ The coins are as follows: Ia3/Ia2, HENRI.PI.ON.LVN; (or Ia3/Ia3), WALTIERO.VZOR (with no stops). Ia3/Ia2, HENRI.PI.ON.LVN.; Ia3, OSBER.ON.WINC; and Ia3/Ia4

We need to examine the key letters on class Ia3 reverses, beginning, if we might, with the letter M. Appearing on a total of ten dies, it is round on six (nos 27, 28, 49, 78, 131) and square on four (nos 50, 73, 79, 86), though, unfortunately, the point of the break is not fully clear. For example, only two of the six dies with round Ms are 'muled' with earlier obverses (with Ia2; nos 78, 131, 132), whereas the other four are 'muled' with obverses of Ia4 and Ia5 (nos 27, 28, 49).²⁹ In other words, round Ms seem to continue beyond the appearance of square Ms. As for the Ms that are square, they, by definition, are on reverses that contain a square E – it is the square form of the E that distinguishes the dies as being of class Ia3. However, the 'mules' on which the square Ms appear all involve die combinations that look to the future. That is, they are on coins with obverses of Ia4 and Ia5.

We have already treated the Cs – they are all of the 'double-half-moon' variety. This in fact distinguishes them from the E, some of which obviously remain squared. By the same token, however, the Es that are still square are now paralleled by those that are round. A point of numerical parity between the two has thus been reached only now (14 to 13). Or, to make the same point differently, only three reverses among the total have more than a single square E (nos 65, 67, 73).

On the subject of the imbalance between obverses and reverses, we are left with a quandary that is not easily resolved. Certainly reverses wore out first, which meant that more would have been required. But these reverses should have been combined with still usable obverses – either from Ia2 or from Ia3. Yet a greater number of the die combinations are 'mules' with obverses that are later, raising the possibility that somehow we have misinterpreted things.

4. Type Ia4

This new designation for what has previously been called Ia* is an attempt to convey the theme of continuity represented by the coins themselves. The coins in this phase are part of the larger complex of class Ia, and are in no sense 'transitional' much less belonging to class Ib. Moreover, since they are followed by what I will be representing as class Ia5, the persuasiveness of their current labelling as Ia* is yet further reduced. As we shall see, the Ia4 phase of the sequence is characterized by a mix of continuities and innovations.

a. Ia4 Obverses

The diagnostic feature of Ia4 obverses is the presence of an X with four full serifs. A feature that was universal in the Tealby series, it is not in evidence in Short Cross until now (see note 21 for the single exception). Of course it is a contrivance of scholars to think of Es, Cs, and Ms now becoming 'normal' just at the moment that the X becomes 'abnormal'. Obviously, the engraver was simply continuing to experiment with the lettering, in hopes of achieving a broad consensus on style. Nevertheless, the point must be affirmed that there is no known die in this phase that exhibits *both* an E that is square and an X that is seriffed.

Fine-tuning was very much the order of the day. For instance, the way the X was seriffed varied considerably, as we can see from a random sampling of the coins themselves. Sometimes the seriffing was dramatic, almost to the point of being ornamental; whilst on other occasions it was modest and barely noticeable (nos 47, 81, 88, 91–93, 109). At any rate, the seriffed X, whatever its appearance, was now – momentarily – the standard form for that letter, and it provides us with our defining feature for class Ia4.

Earlier scholarship to the contrary, a second feature is much less in evidence; it is the

²⁹ To repeat a point made earlier (note 19), the full data here can be found in the inventories for the separate mints.

reverse-barred N that was briefly introduced above. In fact, it appears on but a tiny minority of the known dies – a total of four obverses and five reverses. In combination it appears only three times – on coins of two moneyers of London and one of Northampton (nos 24, 89, 124). Clearly then it could also appear on a die by itself, though, interestingly, it never appears in the company of Ns that were ‘normal’ (nos 12, 81, 123). On only a single die does it appear in the company of a square E, and the reverse-barred N is associated with only the two mints mentioned.³⁰

A third feature, though not a defining one, was the ‘double-half-moon’ E and C, which was inherited from class Ia3, and which appears on the overwhelming majority of class Ia4 dies. Restricting ourselves for the moment to obverses (of which our sample total is 38), it is only for the mint of London that there is any variation. Thus we find this type of E and C seemingly on 17 of the 18 Ia4 provincial mint obverses,³¹ but find it lacking on eight of 21 obverses used by London moneyers. The most variable moneyer in this regard is FIL AIMER (see below), whose seriffed X dies contain multiples of both styles of E and C (nos 87–88, 91–93). Still, the presence of the feature must be allowed to join the seriffed X and reverse-barred N as constituting a supplemental identifier for class Ia4. Initiated in Ia3, it became a regular feature of class Ia4, and survived into Ia5 on a handful of obverses (nos 141–42).

There are no portrait-related features of any note on these dies, merely a sense that idiosyncratic images are now declining in number. Though the curls are as variable as ever, we are encountering for the first time the division that would later become standard – two to the left, along with five to the right. Though at least some of the portraits seem reminiscent of as far back as class Ia2 (nos 7, 97, 109), there are others whose visual impact seems only to anticipate the style of the future.

The standard stop between HENRICVS and REX is missing on a single obverse die of London (of FIL AIMER, no. 89), an aberration that is repeated on an obverse of the same moneyer in Ia5.

b. Ia4 Reverses

A total of 21 moneyers, representing five mints, issued coins bearing obverses of class Ia4; the mint that is missing is Exeter (see below). However, there is a problem in periodizing some of the associated reverses, in particular those lacking a reverse-barred N or ‘double-half-moon’ letter: such dies are indistinguishable from those of Ia5. For that matter, Ia4 obverses were capable of being combined with a wide array of reverses, including those of Ia2 (one example, no. 97) and Ia3 (ten examples; see the inventories).

There are two particular reverse dies of special note. The first, of moneyer RANDVL of London, uses a barred form of the letter A, a style not seen on any other die in the whole of Short Cross class I (no. 125). It appears again, very rarely, on odd dies of classes III and IV, and finally becomes standard in class V.

The second, of moneyer ROGER of Exeter, has a Ia5 obverse but an X with pronounced serifs on the reverse (no. 8). The question is whether the reverse ought to be considered properly a Ia4 die. If it is, it would help to shrink the period of ‘inactivity’ for the mint of

³⁰ For the sake of convenience, the coins with reverse-barred Ns are listed here together: 1) RANDVL.OV.LVZ (no. 124); 2) FIL AIMER.OV.LVZ (no. 89); 3) WALTIEROVZOR (no. 24); 4) ALEIN.ON.LVN (no. 81, obv. only); 5) [JL.OV.LVZ (no. 123, rev. only); 6) FILIP.OV.VORH (no. 12, rev. only). The obverse used by RANDVL was also combined by him with reverse dies displaying Ns that were normal (no. 125). Moreover, HENRI shared RANDVL’s obverse but all of

his known reverse dies contain Ns that are regular (nos 97–99).

³¹ The only exception is a problematic coin of HVNFREI of York. From the Wainfleet Hoard, it has all the characteristics of a standard obverse of class Ib, save for the presence of an X that is seriffed (no. 68). I have tentatively listed this coin as a Ia4, but it may well be of class Ib. If it is, that would explain the absence of ‘double-half-moon’ letters.

Exeter, which is unknown in Ia3 and otherwise unknown in Ia4. The subject of anomalous seriffed Xs in class Ib will be discussed later.

On only two recorded dies are any of the stops missing (one before ON, and one after ON). Also, we encounter a variation of spelling on only a single pair of London dies – of a moneyer ALEIN, instead of ALAIN. In fact, the obverses of these particular coins are even more noteworthy: both of Ia4 and thus part of the same time frame, they nevertheless display entirely different looks – from the portraits, to the shape of the X, to the form of the N (nos 81–82). In other words they are typical of the idiosyncracies of style that we have now come to expect in class Ia.

5. Type Ia5

Intended to supersede the old 'early Ib', the dominant feature of Ia5 is a portrait with an irregular number of curls, and a visage, more generally, that is often reminiscent of Ia2–Ia4. Equally to the point, the identity of the mints and moneyers in this sub-class is an exact match with those from earlier in the sequence. Of the total of 39 moneyers who issued in Ia1–Ia4, as many as 35 have been identified in class Ia5.³² Phrased differently, there were no new moneyers in class Ia5, disqualifying, in particular, the new mints of Carlisle, Lincoln, Oxford, and Worcester. The break between classes Ia and Ib, then, is not reducible simply to a matter of style, the point that is implicit in the original Lawrence formulation (square or round letters). Rather, it is to be associated with the expansion from six mints to ten, and with the predilection, finally, to freeze the style in a new consensus design.

a. Ia5 Obverses

An 'irregular' number of curls is a phenomenon that can be judged of course only in hindsight. As concerns class Ia, it is any other than the 2/5 division that we associate with class Ib, though several caveats are in order. First, since the standard for Ib was adopted only at the time, earlier combinations of 2/5 should not be ruled out from the mix of possibilities (no. 68). Second, the number of curls to the left is a more accurate barometer of where the die should be fit; when larger than two, the die, without exception, is given to the Ia complex. On the right side, by contrast, dies with a total of four or six curls can occasionally be found accompanying portraits that are indistinguishable from class Ib (see note 54). And third, dies that lack any curls whatsoever (left side or both sides) lie outside our formula and belong, in fact, to class Ib (nos 156–57).

The actual numerical combinations range from two to as many as six curls on the left side, to three to nine or ten (or 'multiple' or simply indeterminate) on the right side (nos 8, 28, 39, 49–50, 134–46). Some of the portraits strike us instantly as being of class Ia, whereas others seem to anticipate the standard image of class Ib. As noted, a few dies exhibit the 'double-half-moon' E and C, but this feature, which confirms the sequence, was now unmistakably on its way out. At any rate, we might, for the sake of illustration, show some of the variation across the six mints: a curls 2/3 ROBERT of Wilton; a curls 3/5 OSBER of Winchester; a curls 3/5 ASKETIL of Exeter; a curls 4/5 FIL AIMER of London; a curls 5/5 ALAIN of York; and a

³² Two of the four that are missing ceased production before class Ia5; they are HENRI of Winchester and HENRI PI of London (see below). The remaining two are JORDAN of Exeter and WILLELM of York. Two others (PIERES M of London and HVGO of York) were recorded by Lawrence in 1918, though we are unable to corroborate them today. Reporting on the Rome Hoard of some years earlier,

Lawrence listed a PIERES M with curls '4/5' that he explicitly described as of 'early' style; and a coin of HVGO (reading HVGE.ON.EVERW), similarly with curls '4/5'. (HVGE is the earliest spelling for the moneyer; see no. 65 in the Plates.) Lord Grantley and L.A. Lawrence, 'On a Find of French Deniers and English Pennies of the Twelfth Century', *BNJ* 14 (1918), 45–46.

curls 5/6 WILLELM of Northampton (nos 39, 136–40). Obviously, none of the other four class I mints (all of Ib) produced coins with comparable variations of curls.

b. Ia5 Reverses

There is almost no way to distinguish Ia5 reverses from the reverses of coins of class Ib. On only a single die have I found an unmistakable 'double-half-moon' E (no. 146), though the occasional reverse die link is to be noted. Thus on two coins of RANDVL, the obverses are, respectively, of classes Ia4 and Ia5, with the reverses from the identical die (nos 125, 134). It is a demonstration of another kind of the continuity of die usage between Ia4 and Ia5.

A final proof for the new classification system is the occasional 'muling' of the 'bookends' – of obverses of Ia1 with reverses that may be as late as Ia5. Such 'mules' survive for Exeter, London, and Northampton, with the example of Exeter clearly the most interesting. In this case a single obverse was used to produce coins over three of the five Ia phases, including – the main point – the earliest and the latest (nos 4–7). By contrast, the Ia1 obverse at London seems to have remained unused at the time it was cut. It was finally placed into service near the end of the Ia sequence (nos 113, 118–19).³³

On the larger issue of continuity and the rapidity of change, none of our 39 Ia moneyers is known to have used die combinations (obverse *and* reverse) in all five of the Ia phases. But the inference to be drawn is not that they went through periods of inactivity, but rather that they produced 'mules' as a matter of course. With the particulars of the design in a state of flux early in the series, the volume of combinations that were 'muled' became virtually the norm. As a result, we have two ways of approaching the resulting conundrum. We can either deny the essential validity of the concept of 'muling' in treating class Ia. Or, to repeat, we can accept it as the only technique by which to describe the coins schematically. If ours is the goal of establishing a chronology over a several month period, the notion of phases in and out of sync, i.e., 'muling', becomes inevitable.

6. *Of square, round, and seriffed letters in later classes*

In catalogues as recent as the Woodhead of 1990, we encounter classifications of several coins as being 'mules' of Ib/Ia. The sole criterion for such assessments was the presence or non-presence of a square E or seriffed X. However, the shape of any letter is informative only if we know when the die in question was cut. By extension, if a square E appears on a coin that seems otherwise of class Ib, it is best to think of it as an example of Ib, which happens, for whatever reason, to have the odd square letter. Such is the case clearly for the so-called 'mules' from the Woodhead Sale, which, according to this construction, are not 'mules' at all. And such is the case also for the inventory of examples that I enumerate below.

The letters we are concerned with here are M, C, E, and X, arranged in order of increasing difficulty of interpretation. A round M is known to me on only a single die that is outside the Ia complex. It is a late Ib penny of PIERES M of London and is clearly an anomalous throwback (no. 151). Similarly, a square C has been identified on but a single post-Ia die, this on a coin of ALAIN of Carlisle in which the C is unmistakably square (no. 152). Since Carlisle was not yet opened when square Cs were in vogue (Ia1–Ia2), we have another clear example of an anomalous usage.³⁴

³³ The moneyers and the mints here are OSBER of Exeter, HVGO of Northampton, and PIERES M of London; see the inventories below.

³⁴ For a discussion of this coin, see Martin Allen, 'The

Carlisle and Durham Mints in the Short Cross Period', *BNJ* 49 (1979), 42, citing a paper delivered by Mr Woodhead to the BNS in 1977. Another specimen has now turned up in the Wainfleet Hoard.

Square Es appear on post-Ia coins from a total of seven mints – London, Exeter, Winchester, York, Lincoln, Worcester, and Canterbury. Not only were the latter three not mints of class Ia, but the last, as is well known, was not a mint until class II. At any rate, here is a full inventory of the square letter specimens known to me:³⁵

Ib, RAVL.ON.LVNDE (no. 147)
 Ib, OSBER.ON.EXECE
 Ib, RICARD.ON.EXEC
 Ib, OSBER.ON.WINCE (no. 148)
 Ib, HVGO.ON.EVERWI (no. 149)
 III, REINALD.ON.CA (no. 150)
 III, EVERARD.ON.EVE
 Ib, LEFWINE.ON.NICO
 Ib, OSBER.ON.WIRIC
 IVa, ULARD.ON.CANTE
 IVa, AIMER.ON.LVNDE

The letter X appears on reverses of only Exeter and Oxford, and is known in the seriffed form on coins of Ib for five moneyers (two of Exeter, three of Oxford). Such a coin, of ROGER of Exeter, appeared in the Woodhead Sale and was described in the catalogue as a Ib/Ia*. More accurately, it is a Ib with a seriffed X on the reverse, the same as a coin of OSBER, just discovered, with that feature (nos 153–54). Similarly, ASKETIL, RICARD, and RODBERT of Oxford used reverses with seriffed Xs at a mint that did not produce coins until class Ib (no. 155). In my estimation, the dies in question (one for each moneyer) must have been engraved near or after the conclusion of class Ia.³⁶

If seriffed Xs could appear anachronistically on Ib reverses, the same might occasionally happen on Ib (or later) obverses. Thus an obverse used exclusively by DAVI of London exhibits a seriffed X, with the point being that DAVI became a moneyer starting in class Ib. For that matter, a seriffed X appears on two obverse dies of the mint of Canterbury, with the coins themselves attributable to classes IVb and Vbiii!

7. A summary of Ia classification features

The list presented here is provided for quick access, with the following code of letters added as a guide: (d) diagnostic; (u) usual; (o) occasional; (e) exceptional.

Ia1: dot-dash outer circle (d), cross pattée crown (e), single or double right side drapery (o); semi-circular collar (o); square E (u); square C (o); round M (d); three-seriffed N (d); inconsistent number of curls (d); primitive portrait (u).

Ia2: square E (u); square C (o); round M (d); three-seriffed N (d); inconsistent number of curls (d).

Ia3: square E (u); round C (d); round M (u); four-seriffed N (d); reverse-barred N (e); 'double-half-moon' round E and C (d); inconsistent number of curls (d).

Ia4: seriffed X (d); 'double-half-moon' round E and C (u); square M (d); four-seriffed N (d); reverse-barred N (o); inconsistent number of curls (d).

Ia5: inconsistent number of curls (d); 'double-half-moon' E and C (e).

³⁵ I trust that the point can be made by illustrating only four of these.

³⁶ Mr Gittoes has added the moneyer RODBERT to the list of seriffed X reverses of Oxford.

III. The mints and moneyers of class Ia

1. Exeter³⁷

As already noted, Exeter was a mint mostly of the first and last phases of the Ia sequence. There are no known obverses in classes Ia2–Ia4, and only single reverses in Ia2 and Ia4. There were four moneyers who were active in class Ia, ASKETIL, IORDAN, OSBER, and ROGER.

ASKETIL (spelt ASKETIN) is known from a single pair of dies in Ia1 (no. 1), and then again from a single pair of dies in Ia5 (no. 137).

IORDAN is known from a single reverse in Ia1, but, unusually, from three different associated obverses (nos 2–4). Moreover, he seems to have had exclusive use of two of these obverses. IORDAN is not encountered again until class Ib, making him a rare absentee in class Ia5.

OSBER is known in class Ia1 from one of the three obverses used by IORDAN. But whereas IORDAN used that obverse to produce coins in class Ia1, OSBER, as mentioned, produced 'mules' of Ia1/Ia2 and Ia1/Ia5(?) exclusively (nos 5–7). OSBER was also active in Ia5 proper.

ROGER was recorded by Dolley for a coin of class Ia, but the coin, from the Aston Hoard, was apparently not photographed. Its present whereabouts are unknown.³⁸ ROGER is not heard of again until the Ia5/Ia4 seriffed X coin discussed above (no. 8). He was active on a regular basis in class Ia5.

The dies of Exeter can be presented schematically, limiting ourselves here to classes Ia1–Ia4.³⁹ The number that appears at the end of each entry is the total of coins known to me of those dies. I have not distinguished between fractional and full coins.

<i>Class</i>	<i>Obverse Die</i>	<i>Reverse Die</i>	
Ia1	(1) HENRICVSRE/X	(1) ASKETIN.ON.EXECE	[2]
Ia1	(2) HENRICVSRE/X	(2) IORDAN.ON.EXEH	[2]
Ia1	(3) HENRICVS.R/EX	(2)	[2]
Ia1	(4) HENRIEVS.R/EX	(2)	[11]
Ia1/Ia2	(4)	(3) OSBER.ON.EXEC.	[1]
Ia1/Ia5?	(4)	(4) OSBER.ON.EXECE	[1]
Ia1/Ia5?	(4)	(5) OSBER.ON.EXECES	[1]
Ia5/Ia4	(5) HENRICVS.R/EX	(6) ROGER.ON.EXECE	[1]

We have no way to explain the seeming 'gap' in the middle of the sequence. Similarly, it appears odd that IORDAN, with his single reverse, had access to three obverses, only one of which he shared with another moneyer. The sharing of an obverse (no. 4) between IORDAN and OSBER is in fact quite a typical practice in class Ia. As we shall see, each of our six mints had moneyers who similarly shared obverses. Yet there were always others who may not have done so.

The mint of Exeter had two other moneyers who, on the basis of current knowledge, were active exclusively in class Ib. They are RAVL and RICARD, the latter of whom, as we noted, used a reverse that exhibited an 'accidental' square E.

³⁷ Research on this mint was begun by Lord Stewartby, who contributed an article to the 1970 Brettell Sale catalogue: 'The Exeter Mint and its Moneyers'.

³⁸ See Michael Dolley, 'A Note on the Chronology of Some Published and Unpublished "Short Cross" Finds from the British Isles', *BNJ* 29 (1958–59), 302, for the following reading: 'Ia, ROGER.ON.E--ST.' Since a mint

signature with an S seems highly unlikely, it is difficult to know what to do with Dolley's attribution. A second Ia in the same inventory (this one of York, moneyer ISAC, p. 306) was similarly not photographed and has also gone missing.

³⁹ Except for the mint of Wilton (with only two obverses in Ia5), I have limited the listing of dies to classes Ia1–Ia4.

2. Northampton

The mint of Northampton produced coins in all five phases of class Ia, with a total of six moneyers who were active. Four of this number issued coins in Ia1, with the other two beginning in Ia2. The full complement of six moneyers was active in class Ia5. The pattern of die-sharing is more complex than for Exeter, with five of the six moneyers engaging in the practice. Thus HVGO and WALTER were linked, as were RAVL and WALTER, and REINALD and WILLELM. Only FILIP is not included here, an omission made the more striking by the number of obverses he used in Ia1–Ia2 – a total of five. The mint signatures for Northampton are as follows: NOR, NORA, NORAM, NORAMTV, NORH, and NORHT.

Looking at the six moneyers individually, the name FILIP, which became standard, had two earlier spellings – FELIPE and FILIPE (nos 9–11). One of FILIP's die combinations is of particular interest, exhibiting an obverse of Ia2, but with a reverse whose Ns are reverse-barred. Lacking any Es (hence FILIP.ON.NORH), the coin could possibly be confused as a 'mule' of Ia/Ib. Instead, I have elected to call it a Ia2/Ia3?, owing to the configuration of the two Ns on the reverse (no. 12). On the other hand, on two other die combinations with the same spelling (FILIP.ON.NORH), the Ns, which are regular, yield no clues. I have tentatively listed these as Ia2/Ia5?, though the reverses (lacking Es) might date from earlier (nos 13–14). No coins of FILIP have a seriffed X, though he was very active in class Ia5 (no. 143).

HVGO presents us with the same problem of interpreting his reverses. Known from only a single obverse in Ia1–Ia4 (shared with WALTER), he used three reverses, none of which contains an E that might assist us (nos 15–16). Active in Ia5, HVGO continued to produce coins in class Ib.

RAVL is known from only a single die combination (Ia2, linked with WALTER; nos 17, 23) before he began issuing again in Ia5. He became much more prominent in class Ib.

WALTER seems to have been the most prolific moneyer of Northampton in class Ia, producing coins in four of the total of five phases (nos 21–24), and sharing obverses with HVGO and RAVL. User of an early 'cross pattée' obverse in class Ia1 (no. 21), he is also known for the 'square E and reverse-barred N' obverse of class Ia3 (no. 24). He is unrecorded only in class Ia4.

REINALD and WILLELM are conventionally treated together. As demonstrated by Elmore Jones, the moneyers, who are die-linked, were of Northampton, not of Norwich, since there are reverses of WILLELM that read NORA and NORH.⁴⁰ However, were it not for this interest regarding their mint affiliation, they would otherwise seem to us quite typical. Thus, WILLELM is known in Ia1 but not in Ia2, whereas REINALD is known in just the opposite (nos 18, 25–26). The two men are die-linked momentarily in Ia4 (nos 19, 27), but then they separate and continue alone in Ia5 (nos 28, 140). Both remained active in class Ib, and REINALD was a presence in class Ic.

SIMUN(D) is the only moneyer of Northampton who apparently issued only in the period after class Ia was terminated.

The dies of Northampton are as follows (Ia1–Ia4):

<i>Class</i>	<i>Obverse Die</i>	<i>Reverse Die</i>	
Ia1	(1) HENRICVS.RE/X	(1) FILIPE.ON.NORAMTV	[2]
Ia1	(2) HENRICVS.RE/X	(2) FELIPEON.NORH	[1]
Ia2	(3) HENRICVS.R/EX	(3) FILIPE.ON.NORA	[4]

⁴⁰ F. Elmore Jones, 'Norwich or Northampton – A "Short Cross" Problem', *BNJ* 33 (1964), 70.

<i>Class</i>	<i>Obverse Die</i>	<i>Reverse Die</i>	
Ia2/Ia3?	(4) HENRICVS.R/EX	(4) FILIP.ON.NORH	[1]
Ia2/Ia5?	(4)	(5) FILIP.ON.NORH	[1]
Ia2/Ia5?	(5) HENRICVS.R/EX	(6) FILIP.ON.NORH	[2]
Ia1/Ia5?	(6) HENRICVS.R/EX	(7) HVGO.ON.NORH	[1]
Ia1/Ia5?	(6)	(8) HVGO.ON.NORHT	[3]
Ia1/Ia5?	(6)	(9) HVGO.ON.NORHT	[1]
Ia2	(7) HENRICVS.R/EX	(10) RAVL.ON.NORAM	[2]
Ia2	(8) HENRICVS.R/EX	(11) REINALD.ON.NOR.	[1]
Ia4	(9) HENRICVS.R/EX	(12) REINALD.ON.NOR	[1]
Ia4	(10) HEN[]/EX	(12)	[1]
Ia1	(11) HENRICVS.RE/X	(13) WALTER.ON.NORAM	[2]
Ia1/?	(6)	(14) WALTER[]	[1]
Ia2	(12) HENRICVS.R/EX	(15) WALTER.ON.NOR	[7]
Ia2/?	(7)	(16) WA[]ORH	[1]
Ia3/Ia3?	(13) HENRICVS.R/EX	(17) WALTIERON.NOR	[1]
Ia1	(14) HENRICVSRE/X	(18) WILLELM.ON.NORA	[1]
Ia1	(15) HENRICVS.R/EX	(18)	[2]
Ia4/Ia3	(9)	(19) WILLELM.ON.NOR	[2]
Ia5/Ia3	(16) HENRICVS.R/EX	(20) WILLELM.ON.NOR	[1]

3. Wilton

As argued by Brand and Elmore Jones (but now questioned by Allen), the mint of Wilton was opened on an emergency basis in the wake of a serious fire at Winchester.⁴¹ The moneyer ROBERT of Winchester became ROBERT of Wilton, a fact that is ascertainable by his use of reverse dies that were re-tooled from those issued to Winchester; thus WIL appears struck over WIN (nos 32–34, 36). A second moneyer, OSBER, was similarly reassigned, although he was not obliged to use retooled dies.

As I have indicated elsewhere, an emergency measure at the outset became converted into an indefinite arrangement thereafter; the two moneyers remained active into class Ib, and OSBER was still a moneyer of Wilton late in that class.⁴² Moreover, the whereabouts of the two men are difficult to trace, since both seem to have been issuing coins at the two mints simultaneously. At any rate, we have coins of Wilton in four of the five Ia stages, with Ia3 the only one missing (OSBER is known in Ia3 at Winchester). The two moneyers are die-linked in class Ia2 (nos 29, 35), and then again, variously, in class Ib. Moreover, ROBERT is also die-linked with HENRI (nos 31 & 52, 34 & 53), and with HENRI and GOCELM as well as himself on coins produced at Winchester (nos 32, 46, 51, 58).

The dies of Wilton are as follows (Ia1–Ia5), with a * denoting a retooled reverse, and a # denoting a shared die with Winchester.

⁴¹ Though a few of the Brand and Elmore Jones conclusions have proved incorrect (see Jeffrey P. Mass, 'Two New Moneyers in Short Cross Ia*', *NCirc*, November 1991, 296), their central contention remains persuasive. Apart from the fire, there is no convincing way to explain the assignment of two established moneyers of Winchester to the nearby town of Wilton. In my own tentative reconstruction, ROBERT, upon his assignment, was

immediately given a Ia1 reverse die of Wilton, which he combined with a Ia1 obverse shared with HENRI of Winchester, and with a Ia2 obverse borrowed from OSBER, now at Wilton. He then turned to the first of his retooled reverses (Ia2), which, though originally assigned to him at Winchester, he now used at Wilton.

⁴² See Mass, 'Two New Moneyers'.

<i>Class</i>	<i>Obverse Die</i>	<i>Reverse Die</i>	
Ia2	(1) HENRICVS.R/EX	(1) OSBER.ON.WILT	[1]
Ia4	(2) HENRICVS.R/EX	(2) OSBER.ON.WILT	[2]
Ia5	(3) HENRICVS.R/EX	(3) OSBER.ON.WILT	[5]
Ia1	(4) HENRICVS.RE/X#	(4) RODBERT.ON.WILT	[3]
Ia1/Ia2	(5) HENRICVS.RE/X#	(5) RODBERT.ON.WIN:*	[4]
Ia2	(6) HENRICVS.R/EX	(5)	[4]
Ia2	(7) HENRICVS.R/EX#	(5)	[2]
Ia2/Ia1	(1)	(4)	[1]
Ia4	(9) HENRICVS.R/EX	(7) RODBERT.ON.WIL	[1]
Ia4	(10) HENRICVS.R/EX	(8) RODBERT.ON.WIL	[1]
Ia5	(11) HENRICVS.R/EX	(9) RODBERT.ON.WILT	[3]

4. Winchester

Of a total of seven moneyers at Winchester in class I, six issued coins in the Ia sequence.⁴³ Moreover, five of the six were present in Ia1, though the configurations of die usage exhibited different patterns. Thus HENRI and GOCELM shared the obverse that RODBERT then carried with him to Wilton (nos 46, 51, 58). For his part, RODBERT was the same RODBERT who produced the early cross pattée coin discussed above (nos 56–60). Obviously he was on hand from the very beginning, as was OSBER (known as OSBERN) who produced his own pattée coin, employing a different obverse. This parallel experience, brief as it may have been, may have commended the selection of these two moneyers for Wilton. CLEMENT is not die-linked in class Ia1, and ADAM is unrepresented in that class.

ADAM is indeed unknown in class Ia1 despite a coin mis-attributed to him in a recent *SCBI* volume. The coin in question is of IORDAN of Exeter (dies 4:2), not ADAM of Winchester.⁴⁴ For his part, ADAM appears in class Ia2 (no. 40), and is also known in Ia4 (no. 41) and in Ia5.

CLEMENT is an anomaly among class I moneyers – he is as scarce in class Ib as he is in Ia. He was around from very early, as demonstrated by the two obverses he used in Ia1. Inexplicably, however, whereas one of those dies has left us a fair number of coins (no. 43), the other has bequeathed but one survivor (no. 42). Moreover, the same pattern prevailed in class Ia2, with one die leaving a modest sample of specimens (no. 44), but the other so far only a singleton (no. 45). At that juncture, in Ia2, CLEMENT disappears from view, only to turn up again in class Ia5.

GOCELM, a prolific moneyer in class I as a whole, is known from only a single die in Ia1 – the one he was obliged to share with his two colleagues (no. 46). He is not known in Ia2, and his period of real activity began only in Ia4 (nos 47–50).

HENRI is one of a total of only two moneyers at all mints who opened and closed shop almost immediately. In possession of a single reverse, he nevertheless produced coins from three obverses (nos 51–53), all shared with other moneyers.⁴⁵ He ceased to be a moneyer in class Ia2.

⁴³ See my remarks below about REINIER, the seventh moneyer. A comprehensive study of the mint of Winchester is being prepared by Mrs Harvey, under the general editorship of Prof. Martin Biddle. Mr Gittoes has assisted Mrs Harvey with the Short Cross section.

⁴⁴ A photograph of this coin, which is in the Southampton

Museum, appears *SCBI* 42, *Southeastern Museums. Ancient British, Anglo-Saxon and Later Coins to 1279* (1992), no. 2233.

⁴⁵ This unusual die-linking, with accompanying photographs, was originally published by Brand and Elmore Jones in 'The Emergency Mint of Wilton'.

OSBER, who was active briefly in Ia1, is best known to us for a particular die combination in Ia3; it is the defining specimen of that sub-class (no. 54). However, both earlier and later he was active at Wilton, where he issued in Ia2 and in Ia4; he also produced coins at Winchester in Ia4 (no. 55). Continuing in this vein, he was active at both mints in Ia5, a feat he also achieved in class Ib.

REINIER is the only moneyer of Winchester who seems to have issued exclusively in class Ib, though an obverse of his, with curls 2/4, is known to exist.

RODBERT, the peripatetic traveller between Winchester and Wilton, was able to enjoy highly visible careers at both. He is known in Ia1, Ia2, and Ia5 at each mint, and in Ia4 exclusively at Wilton (nos 31–39, 56–60). He, like OSBER, was prolific at both mints in class Ib.

The dies of Winchester are as follows (Ia1–Ia4), with a # denoting a shared die with Wilton:

<i>Class</i>	<i>Obverse Die</i>	<i>Reverse Die</i>	
Ia1	(1) (deleted)	(1) (deleted)	[1]
Ia2	(2) HENRICVS.R/EX	(2) ADAM.ON.WINCE	[2]
Ia4	(3) HENRICVS.R/EX	(3) ADAM.ON.WINCE	[1]
Ia4	(4) HENRICVS.R/EX	(4) ADAM.ON.WINC	[2]
Ia1	(5) HENRICVS[]	(5) C[]T.ON.WINC	[1]
Ia1	(6) HENRICVS.RE/X	(6) CLEMENT.ON.WIN	[8]
Ia2	(7) HENRICVS.R/EX	(7) CLEMENT.ON.WIN	[8]
Ia2	(8) HENRICVS.R/EX	(8) CLEMENT.ON.WIN	[1]
Ia1	(9) HENRICVS.RE/X#	(9) GOCELM.ON.WINC.	[2]
Ia4	(10) HENRICVS.R/EX	(10) GOCELM.ON.WIN	[3]
Ia4	(10)	(11) GOCELM.ON.WIN	[3]
Ia4	(11) HENRICVS.R/EX	(11)	[2]
Ia5/Ia3	(12) HENRICVS.R/EX	(12) GOCELM.ON.WIN	[3]
Ia5/Ia3	(13) HENRICVS.R/EX	(13) GOCELM.ON.WINC	[4]
Ia1/Ia2	(9)	(14) HENRI.ON.WINC.	[3]
Ia1/Ia2	(14) HENRICVS.RE/X#	(14)	[1]
Ia2	(15) HENRICVS.R/EX#	(14)	[1]
Ia1	(16)	(15) OSBERN	[1]
Ia3	(17) HENRICVS.R/EX	(16) OSBER.ON.WINC	[4]
Ia4/Ia3	(18) HENRICVSR/EX	(17) OSBER.ON.WINCC	[1]
Ia4	(18)	(18) OSBER.O[]	[1]
Ia1	(19) HENRICVS:RE/	(19) RODBERDON.W//EE	[1]
Ia1	(20) HENRICVS.R/EX	(20) RODBET.ON.WINC	[1]
Ia1/Ia2	(9)	(21) RODBET.ON.WIN	[2]
Ia2	(21) HENRICVS.R/EX	(21)	[1]
Ia2	(22) HENRICVS.R/EX	(22) RODBERT.ON.WIN	[2]

5. York

York had a total of eight moneyers in class I, all of whom were active in the Ia sequence. However, only four produced coins in Ia1, and two of these (ISAAC and TVRKIL) achieved this feat by sharing an obverse (nos 69–71). In fact, the number of known dies for the mint is considerably smaller than we might have expected for a complement of eight moneyers. By contrast, Winchester and Northampton, with six moneyers apiece, used more dies and consequently produced more coins. In fact, we are left to consider the possibility that with eight moneyers at York there was not enough work for them individually. Thus the four who

were given access to dies in class Ia1 may have been outperformed, in practice, by two newcomers in Ia2. By Ia4, the remaining two moneyers were now active, along with at least three of their colleagues. By the time we get to class Ia5, as many as seven of the full complement were producing coins, with all eight finally active only in the post-Ia phase of the coinage itself.

Save for the momentary die sharing in class Ia1, we find no other examples for the remainder of the sequence.

ALAIN is known from only a single pair of dies in class Ia2 (no. 61), and is not encountered again until Ia5 (no. 139).

EFRARD issued coins using dies from four of the five phases – Ia1 (no. 62), Ia4/Ia3 (no. 63),⁴⁶ and Ia5. He became especially prolific in class Ib.

GERARD was a seeming newcomer in class Ia4 (no. 64), who remained active in class Ia5 and in Ib.

HVGO (spelt HVGE) is an anomaly, known from only a single combination of dies (Ia4/Ia3; no. 65). Prolific in class Ib, he is an obvious candidate to be discovered (or 'rediscovered'; see note 32) in class Ia5.

HVNFREI is the only moneyer known for more than a single die combination in any of the separate sub-classes from Ia1 to Ia4. In fact he issued coins twice in this fashion – in Ia2 and then again in Ia4 (nos 66–68). He was also active in class Ia5.

ISAAC (spelt also ISAC) is known in Ia1 from two reverses (the two spellings; nos 69–70), but then disappears until class Ia5, where he is die-linked (as he was in Ia1) with TVRKIL.

TVRKIL, very prominent in class Ib, is known from only a single pair of dies before Ia5. As mentioned, he shared an obverse of Ia1 with ISAAC (nos 69–71).

WILLELM provides proof of our inconsistent knowledge of the dies of Ia. Unknown in the class until a Ia4/Ia3 coin turned up a few years ago (no. 73),⁴⁷ WILLELM's career has been further 'transformed' by another discovery – of a Ia1 bearing his name (with no reverse stops!) in the Wainfleet Hoard (no. 72). Perhaps we should anticipate finding a Ia5 of this moneyer.

The dies of York are as follows (Ia1–Ia4):

<i>Class</i>	<i>Obverse Die</i>	<i>Reverse Die</i>	
Ia2	(1) HENRICVS.R/EX	(1) ALAIN.ON.EVER	[2]
Ia1	(2) HENRICVS.RE/X	(2) EFRARD.ON.EVRP	[1]
Ia4/Ia3	(3) HEN[]/EX	(3) EFR[]EVER	[2?]
Ia4	(4) HENRICVS.R/EX	(4) GERARD.ON.EVER	[4]
Ia4/Ia3	(5) HENRICVS.R/EX	(5) HVGE.ON.EVERWI	[3]
Ia2	(6) HENRI//S.R/EX	(6) //NFREI ON.EVE/	[1]
Ia2	(7) /ENR/CVS.////	(7) /////I.ON.EVER	[1]
Ia4/Ia3	(8) HENRICVS.R/EX	(8) HVNFREI.ON.EVER	[2]
Ia4	(9) HENRICVS.R/EX	(9) HVNFREI.ON.EVER	[1]
Ia1	(10) HENRICVSRE/X	(10) ISAAC.ON.EVERVI	[1]
Ia1	(10)	(11) ISAC.ON.EVERWI	[1]
Ia1	(10)	(12) TVRKIL.ON.EVER	[2]
Ia1	(11) HENRICVS.RE/X	(13) WILLELMONEVER	[1]
Ia4/Ia3	(12) HENRICVS/R/EX	(14) WILLELM.ON.EVER	[2]

⁴⁶ The Moor Monkton Hoard coin (no. 63) has just been joined by a second cut half, which, because the angle of the cut is different, may or may not be of the same dies. I have

added it to the inventory, followed by a question mark that relates to the dies.

⁴⁷ Mass, 'Two New Moneyers'.

6. London

In Short Cross class I there were as many as 20 moneyers at London of whom at least 13 were active in the Ia sequence. Among the 13, some nine shared dies on at least one occasion (Ia1–Ia4), though only one shared an obverse with as many as two moneyers (WILLELM with AIMER and IEFREI). A total of four moneyers evidently worked alone – including the prolific FIL AIMER whose coins seemingly began later than those of his son, known as AIMER.⁴⁸ One moneyer, HENRI PI, came and went almost instantaneously, joining HENRI of Winchester as the only moneyers who issued exclusively in class Ia; we do not find either moneyer in class Ib.

With its large complement of makers of the king's money, London used the greatest number of dies by far, and also had the largest discrepancy between obverses and reverses. Unlike elsewhere, no moneyers are known from only single die combinations, and only two are known from as few as two sets of dies. It is at London, moreover, that the use of initials to distinguish between namesakes becomes prominent, with the list engulfing a total of eight of the 13. Starting with AIMER and FIL AIMER, there were also ALAIN and ALAIN V, HENRI and HENRI PI, and PIERES and PIERES M. These pairings actually permit some deductive reasoning, having to do with lacunae in our data. For example, we know we must be lacking at least one set of dies when PIERES M seems to predate moneyer PIERES. Indeed, our overall impression is one of incompleteness in our knowledge of the London mint, particularly in the matter of die usage and numbers.

AIMER (also spelt EIMER) was that considerable rarity – a moneyer who was active (or nearly so) from beginning to end. With the exception of obverses in class Ia3, he used dies from all five phases of the Ia sequence (nos 74–80). Yet based on our current knowledge, he shared an obverse only on one occasion – with WILLELM in class Ia2 (nos 78, 131).

ALAIN (also spelt ALEIN) had a career that paralleled that of his namesake ALAIN V (also spelt ALEIN V), with whom he shared dies possibly in two Ia phases. The two men used the same obverse in Ia1 (nos 83–84), and then seem to have done the same in class Ia4 (nos 81, 85).⁴⁹ They are also die-linked in class Ib.

FIL AIMER was the dominant moneyer in both Ia4 and Ia5, issuing more coins from more dies than anyone else (nos 86–93, 138, 144).⁵⁰ Nevertheless, though he used at least 11 obverses in class Ia4, he did not, as already mentioned, share any of them. One of his obverses contained an aberrant spelling, with the S omitted from the king's name (no. 90).

HENRI and RANDVL (also known as RANDVLF) are the natural analogue to ALAIN and ALAIN V. That is, they shared obverses in the same two phases – in Ia1 and again in Ia4 (nos 95, 120–21; 97–99, 124–25). The die that they used in the second instance was combined with a total of at least seven reverses – proof, perhaps, of the resiliency of obverses. Of course we have also encountered examples of the opposite, e.g., IORDAN of Exeter (nos 2–4).

⁴⁸ The problems of explaining AIMER and FIL AIMER begin with the anomaly of the son's producing coins in class Ia1, seemingly before the arrival in England of his father; FIL AIMER's earliest coins are of Ia4/Ia3. In fact, the debate over these two moneyers has remained heated since the nineteenth century: whereas Vaux and Kenyon argued that the two moneyers were only one, Evans (and all successors) argued for separate identities; Evans, 'Further Remarks on the Short Cross Question', pp. 153–54. Yet there is no discounting the oddity of a surname (AIMER) in place of a Christian name on the coins themselves: if AIMER is the son of FIL AIMER (an assumption doubted by some today), we do not know the given name of this key moneyer (though AIMERY could also be a given name!). Moreover, other interpretations remain possible, in which the two men are not separable simply by the designations on the coins. Thus, e.g., the AIMER of the earliest

coins (the father) is superseded by the AIMER who is the son. Lord Stewartby has been evolving such an hypothesis.

⁴⁹ A full coin of ALEIN shares an obverse with a cut half on which the positioning of the mint signature seems to allow for an extra letter in the moneyer's name – thus perhaps ALAIN V. In the inventory see obv. 7 and rev. 15.

⁵⁰ Among the questions that continue to plague us about FIL AIMER are the following: 1) Why did most of his Ia4 dies not make use of 'double-half-moon' letters? 2) In view of FIL AIMER's termination in May 1181, what were the circumstances that caused him to be so prolific in Ia4 and Ia5 (autumn 1180), but seemingly much less active over a longer period thereafter (winter–spring 1180–81)? Evidently, we are missing pieces of the puzzle here. See Allen's documentary references to the relevant chronology here; and also note 48 above.

HENRI PI was a moneyer briefly in the middle of the sequence, and issued coins (with two reverses) in a combination that is otherwise unknown – Ia3/Ia2 (nos 100–01). Though it was much more normal for ‘mules’ to exhibit reverses that were later than their associated obverses, the opposite pattern also occasionally prevailed. HENRI PI’s career as moneyer ended in class Ia4 (nos 102–04).⁵¹

IEFREI and WILLELM had similar patterns of coin production in class Ia. Both were more or less active throughout the sequence, and shared a die momentarily in Ia4 (no. 133). Yet IEFREI is better known from two prolific combinations that he did not share (nos 108–09), suggesting that the notion of ‘workshops’ may be overdrawn. Dies that were loaned out, rather than dies that were jointly possessed, helps us to understand a pattern that was distinctly chequered.

IOHAN was clearly one of the pioneering moneyers of the series, making use of three obverses in Ia1 (nos 110–11, 113), including one of the ones that displayed a cross pattée crown (no. 110). On the other hand, he also shared a Ia1 obverse with moneyer PIERES M, which both men then combined with much later reverses (nos 113, 118–19). As noted above, we have the sense here of an unused obverse being put to work, resulting in coins that could genuinely be called ‘mules’.

PIERES is an anomaly based on current information. Enormously prolific in class Ib, he is not much in evidence in class Ia (in Ia2 and Ia5 only [nos 115–16, 146]). One of his obverses, however, is noteworthy, since it contains one of the very few spelling errors for the sub-class (HERICVS; no. 116).

PIERES M, by contrast, is much better known – only to disappoint us by being the only moneyer of London who we are unable to corroborate in Ia5 (see note 32). The obverse for which he is best recognized (of Ia1) is the one he shared with IOHAN, noted above, a die, however, that seems to have been assigned to him: if IOHAN used it once (no. 113), PIERES M combined it with four reverses (nos 118–19). Yet all of the coins that resulted were ‘mules’, and he is only known otherwise from a further ‘mule’ (of Ia1/Ia2; no. 117). In short, PIERES M seems to have been limited to Ia1 obverses, which he then combined with later reverses.

REINALD was a loner from beginning to end. Known from only two pairs of dies in Ia1–Ia4, REINALD’s reverses are of interest because of what is missing from them. Neither has a square E in the moneyer’s name. However, the first has an N with only three serifs (and is therefore of Ia2; no. 127), whereas the second has a ‘double-half-moon’ E (and is thus, probably, of Ia2/Ia3; no. 128). Moreover, a coin of this moneyer in Ia5 exhibits a rarely seen ‘double-half-moon’ usage in that late phase (no. 142).

The dies of London are as follows (Ia1–Ia4):

<i>Class</i>	<i>Obverse Die</i>	<i>Reverse Die</i>	
Ia1	(1) HENRICVS.RE/X	(1) AIMER.ON.LVNDE	[2]
Ia1	(2) HENRIEVS.R/EX	(1)	[1]
Ia1/Ia2	(2)	(2) AIMER.ON.LVND	[1]
Ia2	(3) HENRICVS.R/EX	(3) EIMER.ON.LVN.	[1]
Ia2	(3)	(4) []ON.LVND	[1]
Ia2/Ia3	(3)	(5) AIMER.ON.LVND	[1]
Ia4/Ia3	(4) HENRICVS.R/EX	(6) AIMER.ON.LVNDE	[2]
Ia4	(4)	(7) AIMER.ON.LVND	[1]
Ia4	(5) HENR//VS.R/EX	(8) AI/ER.ON.LVND	[1]
Ia1/Ia2?	(6) HENRICVS.R/EX	(9) ALAIN.ON.LVND	[1]

⁵¹ I am assuming that the obverse in no. 104 in the Plates is of class Ia4, though it could possibly be of class Ia5. In that

case the coin would be a Ia5/Ia4 ‘mule’. See also the end note on p. 52 below.

<i>Class</i>	<i>Obverse Die</i>	<i>Reverse Die</i>	
Ia4	(7) HE RICVS.R/EX	(10) ALEIN.ON.LVND	[1]
Ia4	(8) HENRICVS.R/EX	(11) ALAIN.ON.LVND	[2]
Ia1/Ia2	(6)	(12) ALEIN.V.ON.LVN	[2]
Ia1/Ia2	(6)	(13) A//INV.ON.LVND	[1]
Ia1/Ia3?	(6)	(14) ALAIN.V[]	[2]
Ia4	(7)	(15) [ALAINV].ON.LVND	[1]
Ia4/Ia3	(9) HENRICVS.R/EX	(16) FILAIMER.ON.LVN	[1]
Ia4/Ia3	(10) HENRICVS.R/EX	(16)	[5]
Ia4/Ia3	(11) []NRICVS.R[]	(17) []AIMER.ON[]	[1]
Ia4	(9)	(18) FILAIMER.ON.LVN	[3]
Ia4	(9)	(19) FIL.AIMER.ON.LVN	[3]
Ia4	(10)	(20) FIL.AIMER.ON.LVN	[1]
Ia4	(12) HENRICVSR/EX	(21) FILAIMER.ON.LVN	[1]
Ia4	(13) HENRICV.R/EX	(21)	[1]
Ia4	(14) HENRICVS.R/EX	(22) FIL.AIMER.ON.LVN	[1]
Ia4	(15) HENRICVS.R/EX	(23) FILAIMER.ON.LVN	[1]
Ia4	(16) HENRICVS.R/EX	(24) FILAIMER.ON.LVN	[1]
Ia4	(17) HENRICVS.R/EX	(25) FIL.AIMER.ON.LVN	[1]
Ia4	(18) HENRICVS.R/EX	(26) FIL.AIMER.ON.LVN	[1]
Ia4	(18)	(27) FILAIMER.ON.LVN	[1]
Ia4	(19) HENRICVS.R/EX	(28) FIL.A//ER.ON.LVN	[1]
Ia1/Ia2	(20) HENRICVS.R/EX	(29) HENRI.ON.LVND	[2]
Ia1/Ia2(?)	(21) HENRICVSR/EX	(30) HENRI.ON.LVND	[1]
Ia1/Ia2	(21)	(31) HENRI.ON.LVND	[1]
Ia2	(22) HENRICVS.R/EX	(32) HENRIC N/SLVNDE	[1]
Ia4/Ia2	(23) HENRICVS.R/EX	(33) HENRI.ON.LVND	[1]
Ia4/Ia3	(23)	(34) HENRI.ON.LVNDE	[1]
Ia4	(23)	(35) HENRI.ON.LVND	[2]
Ia4	(23)	(36) HENRI.ON.LVND	[1]
Ia4	(23)	(37) HENRI.ON.LVND	[1]
Ia3/Ia2	(24) HENRICVS.R/EX	(38) HENRI.PI.ON.LVN	[1]
Ia3/Ia2	(24)	(39) HENRI.PI.ON.LVN	[1]
Ia4	(25) HENRICVSR/EX	(40) HENRI.PI.ON.LVN	[1]
Ia4	(25)	(41) HENRI.PI.ON.LVN	[2]
Ia4	(26) []ICVS.R/[]	(41)	[1]
Ia1/Ia2	(27) HENRICVS.R/EX	(42) IEFREI.ON.LVND	[2]
Ia1/Ia2	(27)	(43) IEFREI.ON.LVND	[1]
Ia1/Ia2	(27)	(44) [?]N.LVNDE	[1]
Ia2	(28) HENRICVS.R/EX	(45) IEFREI.ON.LVND	[1]
Ia2/Ia3?	(28)	(46) IEFREI.ON.LVN	[1]
Ia4	(29) HENRICVS.R/EX	(47) IEFREI.ON.LVND	[3]
Ia4	(30) HENRICVS.R/EX	(48) IEFREI.ON.LVND	[4]
Ia4	(30)	(49) IEFREI.ON.LVND	[1]
Ia4	(31) HENRICVS.R/EX	(50) IEFREI.ON.LVND	[1]
Ia1	(32) HENRICVS.R/EX	(51) IOHAN.ON.LVNDE	[2]
Ia1	(33) HENRICVSRE/X	(52) IOHAN.ON.LVND	[1]
Ia1/Ia2	(33)	(53) IOHAN.ON.LVND	[1]
Ia1/Ia4?	(34) HENRICVS.R/EX	(54) IOHAN.O[]	[1]
Ia2/Ia5?	(35) HENRICVS.R/EX	(55) IOHAN.ON.LVND	[3]
Ia2/Ia5?	(35)	(56) IOHAN.ON.LVND	[1]

<i>Class</i>	<i>Obverse Die</i>	<i>Reverse Die</i>	
Ia2	(36) HENRICVS.R/EX	(57) PIERES.ON.LVND	[1]
Ia2	(37) HENRICVS.RE/X	(58) PIERES.ON.LVND	[1]
Ia1/Ia2	(38) HENRICVS.RC/X	(59) PIERESM.ON.LVN	[1]
Ia1/Ia4?	(34)	(60) PIERESM.ON.LVN	[1]
Ia1/Ia4?	(34)	(61) []RESM.ON.[]	[1]
Ia1/Ia5?	(34)	(62) PIERES.M.ON.LVN	[3]
Ia1/Ia5?	(34)	(63) PIERES.M.ON.LVN	[2]
Ia1	(21)	(64) RANDVL.ON.LVN	[1]
Ia1/Ia2	(21)	(65) RANDVL.ON.LVN	[1]
Ia2	(39) []NRICVS.R/[]	(65)	[2]
Ia2	(40) HENRICVS.RE/X	(66) RANDVLF.ON.LVN	[1]
Ia2/Ia4	(41) HENR[]EX	(67) []L.ONLVN	[1]
Ia4	(23)	(68) RANDVL.ON.LVN	[2]
Ia4	(23)	(69) RANDVL.ON.LVN	[1]
Ia4	(23)	(70) RANDVL.ON.LVN	[1]
Ia4	(42) HENRICVS.R/EX	(71) RANDVL.ON.LVND	[1]
Ia2	(43) HENRICVS.R/EX	(72) REINALD.ON.LVN	[1]
Ia2/IaA3?	(44) HENRICVS.R/EX	(73) REINALD.ON.LVN	[1]
Ia1	(45) H//RICVS.RE/X	(74) WILLE//.ON.LVNDE	[1]
Ia2	(46) HENRICVS.R/EX	(75) WILLELM.ONLVN	[5]
Ia2	(46)	(76) []LELM.ON[]	[1]
Ia2	(47) HENRICVS.R/EX	(77) WILLELM.ONLVN	[1]
Ia2/Ia3	(3)	(78) WILLELM.ON.LVN	[2]
Ia2/Ia3	(48) HENRICVS.R/EX	(78)	[2]
Ia4	(31)	(79) WILLELM.ON.LVN	[5]

The class I moneyers of London who did not issue in any phase of the Ia sequence are ALWARD, DAVI, GEFREI, GILEBERT, GODARD, OSBER, and RAVL. Though Lawrence believed that RANDVL and RAVL were the same person, he offered no evidence for his surmise. Similarly, he offered no proof for IEFREI and GEFREI being the same man, though here we have a division based on sub-classes: the name IEFREI appears exclusively in classes Ia–Ib, whereas GEFREI only in class Ic.⁵²

7. Ia1–Ia4 coins of indeterminate mints

Not surprisingly, there are a number of damaged coins and cut halves and quarters that cannot be attributed to specific mints or moneyers. The brief list that follows is only a sampling from my own collection, and the numbers, obviously larger, are certain to grow. In fact, considerably more than half of the recently discovered Ias are fractional specimens – a tribute to the technology of the newest metal detectors. At the same time, the phenomenon raises anew the question first bruited by John Brand: at the start of a new series such as the Short Cross, is it not to be expected that there will be a disproportionate number of fractions to satisfy an immediate need for small change?

From the vantage point of class Ia, the ratio of halves and quarters to full coins is

⁵² The conundrum, which may be irresolvable, affects the total number of moneyers at the mint of London – 18, 19, or 20. If RAVL was a new contraction for RANDVL, the name RANDVL (not RAVL) was still used at Norwich/Northampton in

Short Cross class IV. In the second instance, GEFREI, with a G, became the preferred spelling seemingly from this juncture; there is a GIFFRI of Northampton in class IVa, and a GIFFRI of Norwich in class Vb.

increasing, as just mentioned. On the other hand, cuts are turning up in large numbers throughout most of the series, and it may only be in class VIII that they are still hard to find. This may suggest that hoards are not as representative as we once thought, or at least not as representative in this important category. For instance, in the Wainfleet Hoard, recently discovered in Lincolnshire, there were a total of only three cut halves out of 386 coins (see below). By contrast, stray finds are running heavily in favour of fractions.

- a. Ia2 []INAL[] – square E on obverse; presumably REINALD of either London or Northampton
- b. Ia2 []LELM.ON.[] – square E on obverse; presumably WILLELM of London, Northampton, or York.
- c. Ia4 []ON.LVN[] – seriffed X on obverse
- d. Ia4 []VND – seriffed X on obverse
- e. Ia4? []ON.LVND – ‘double-crescent’ E on obverse

8. An inventory of moneyers by sub-class

The following is a list of the 39 moneyers and the sub-classes in which they are known to have produced coins. A number of reverse dies fall, indeterminately, between Ia3 and Ia5, especially on fractional coins or on coins whose legends lack key letters.

a. Exeter

	Ia1	Ia2	Ia3	Ia4	Ia5
ASKETIN/ASKETIL	X				X
IORDAN	X				
OSBER	O	R			X
ROGER				R	X

b. Northampton

FILIP/FILIPE/FELIPE	X	X	R?		X
HVGO	O				X
RAVL		X			X
REINALD		X		X	X
WALTER/WALTIER	X	X	X		X
WILLELM	X		R	O	X

c. Wilton

OSBER		X		X	X
RODBERT	X	X		X	X

d. Winchester

ADAM/ADAN		X		X	X
CLEMENT	X	X			X
GOCELM	X		R	X	X
HENRI	O	X			
OSBER/OSBERN	X		X	X	X
RODBERD/RODBET/RODBERT	X	X			X

	Ia1	Ia2	Ia3	Ia4	Ia5
e. York					
ALAIN		X			X
EFRARD	X		R	O	X
GERARD				X	X
HVGE			R	O	X?
HUNFREI		X	R	X	X
ISAAC/ISAC	X				X
TVRKIL	X				X
WILLELM	X		R	O	
f. London					
AIMER/EIMER	X	X	R	X	X
ALAIN/ALEIN	O	R?		X	X
ALAIN V/ALEIN V	O	R	R?	X?	X
FIL AIMER			R	X	X
HENRI	O	X	R	X	X
HENRI PI		R	O	X	
IEFREI	O	X	R?	X	X
IOHAN	X	X		R?	X
PIERES		X			X
PIERES M	O	R		R?	X?
RANDVL/RANDVLF	X	X		X	X
REINALD		X	R?		X
WILLELM/WILLEM	X	X	R	X	X

IV. Hoards

Among the fairly numerous hoards (large and small) that contained Short Cross coins, a number clearly included specimens of class Ia. Both Eccles and Colchester were obviously among these, and the Colchester inventory employs square letters, perhaps with some inconsistency. Though it might be possible to reconstruct a list of Ias from such data (as well as from the coins and tickets in the BM and elsewhere), that would be a more appropriate exercise for another paper. Moreover, the same point could be made regarding more recent hoards, a number of which have been published with accessible inventories. We note that some of these hoards contained a few examples of Ia, though others, quite obviously, did not.⁵³ But nowhere was there anything approaching a trove of these early coins, omitting from consideration those now designated Ia5 under the new scheme.

All that is now changed, however, with a pair of recent hoards, as yet unpublished. What distinguishes these two hoards is their early date of deposit, respectively c. 1185 and c. 1195, and their high percentage of specimens of Ia. The hoards in question are the Moor Monkton, which resides in the British Museum, and the Wainfleet, which has now been dispersed, following the BM's selection of the coins it wished to retain. Of the two, the Wainfleet is certainly the more remarkable, with a total of 20 coins with at least one die in classes Ia1–Ia4,

⁵³ Among the published hoards with coins of Ia are Les Mans II (two coins), Crowle (one coin), and Rotenfels (one coin). The unpublished Bainton Hoard had one coin, and an

unpublished southern hoard had several. However, a number of other hoards clearly had no Ias (Ia1–Ia4), among them Gisors, Montpellier, Wrexham, and Ribe I and II.

and at least 13 (and as many as 19 or more) in class Ia5.⁵⁴ It will be useful to analyze each of these hoards separately.

The Moor Monkton, with 114 coins, is the only hoard exclusively of Short Cross class I.⁵⁵ That in itself is arresting enough, but an even more striking feature is its ratio of cuts to full coins – some 38 out of the total just cited and hence a ratio of precisely 1:2. The percentages are even more dramatic in class Ia (Ia1–Ia4), with but one full coin out of a complement of 11.⁵⁶ To the extent that these numbers represent an approximation of what was circulating in 1185, the prospects regarding the content of future finds become discouraging! On the other hand, the hoard may be more representative of the hoarder's financial situation, in which it was easier for him to stash away fractional money. At any rate, there is no reason to doubt the representativeness of the mints and moneyers, and it is with this subject that we are most concerned anyway.

All ten mints of class I are found in the hoard,⁵⁷ as well as specimens of four of the six mints in class Ia (Ia1–Ia4). Moreover, a total of eight moneyers are included among these Ias, with the distribution not far from what we might have anticipated. Thus London has seven coins, followed by Wilton with two, York with two, and Northampton with one. Winchester appears in class Ia5, and Exeter at the beginning of class Ib.

The Wainfleet Hoard is not only much larger but also very different.⁵⁸ As we have already seen, there are only three fractions among its 386 coins. Moreover, though it was deposited during the issuance of class IVa, there is the remarkably high total of coins from class Ia, which dated from approximately 15 years earlier. The high state of preservation for the hoard as a whole helps us to reconstruct what may have happened. Rather than being a random sampling as of c. 1195, the coins had been put aside over a fifteen year period. The high quotient from class Ia is suggestive of the hoarder's possible prosperity in 1180, to be contrasted with the experiences of other less successful years. Thus, for example, alongside the 33–39 coins from mid-1180, there are but three specimens from the whole of class II – whose period of duration may be uncertain, but whose greater proximity to the date of deposit is obvious.

At any rate, all six mints of Ia are represented in the hoard, along with some 22–24 moneyers. In other words, 22–24 moneyers of the total of 39 known for the class can be found among the hoard's 33–39 coins in Ia1–Ia5. Viewed differently, we find two of the four moneyers from Exeter, two of the six from Northampton, one of the two from Wilton, three or four of the six from Winchester, five of the eight from York, and nine or ten of the 13 from London. Moreover, among these coins, we discover three new additions to our inventories of names in the separate sub-classes, though there are no new names overall – there being, as we have hypothesized, no available candidates. Not surprisingly, the coins represent a mixture of known and unknown dies, the appearance of which tells us different things. The known dies reinforce our sense of familiarity with this subset of coins from the opening phase of the Short Cross series. But the unknown dies pull in the other direction.⁵⁹

⁵⁴ Classifications must remain tentative for at least six of the coins, owing to curls in a configuration of 2/4; it is possible that they were produced early in class Ib (see the inventory below). At the same time, several additional coins are of somewhat problematic classification, owing to wear in the region of the curls.

⁵⁵ This hoard will be published by M.M. Archibald and B.J. Cook, *English Medieval Coin Hoards I* (forthcoming). Photographs of the hoard are available from the British Museum. The Rome Hoard contained Tealbys and continental coins as well as 69 pence of Short Cross class I.

⁵⁶ However the one full specimen is a coin of the highest importance – the one displaying a Ia3 obverse that reads WALTIEROZZOR (no. 24).

⁵⁷ Only York, from the region of the find spot, seems disproportionately represented overall, with 24 coins in total. This compares with 43 at London, but with only 12 at Winchester (in third place).

⁵⁸ Discovered near Skegness in Lincolnshire by a farmer ploughing his own field, its contents were protected by an earthen jug that has also been recovered and is now in the BM. Wainfleet coins included in the plates are as follows (references are to numbers in the plates): 1, 10, 47, 72, 79, 88, 91–92, 114, 135–36, 141, 145, 148–50, 152, 156–57.

⁵⁹ I have found two new obverses in class Ia1 (in the plates, nos 10 and 72), and five new obverses in class Ia4 (nos 68, 91–92, plus two others of FIL AIMER). I have not attempted to identify new dies in class Ia5.

Here is an inventory of the Wainfleet coins from classes Ia1–Ia5. An asterisk denotes dies that are different from those of the preceding coin. The Wainfleet material has been incorporated into the die studies of the individual mints above.

Ia1	ASKETIN.ON.EXECE
Ia5	ROGER.ON.EXECC
Ia1	FELIPE.ON.NORH
Ia5	FILIP.ON.NORHT
Ia5?	FILIP.ON.NORHT (curls 2/4)
Ia2	WALTER.ON.NOR
Ia2	RODBERT.ON.WIL:
Ia5?	ADAM.ON.WINCE (curls 2/4)
Ia5/Ia3	GOCELM.ON.WINC
Ia4	GOCELM.ON.WIN
Ia5?	GOCELM.ON.WIN (curls 2/4)
Ia5	OSBER.ON.WINCE
Ia5	RODBERT.ON.WIN
Ia5	ALAIN.ON.EVERW
Ia4/Ia3	HVGE.ON.EVERWI
Ia4	HVNFREI.ON.EVER
Ia5	TVRKIL.ON.EVER
Ia5	TVRKIL.ON.EVER*
Ia5	TVRKIL.ON.EVER*
Ia1	WILLELMONEVER
Ia4/Ia3	WILLELM.ON.EVER
Ia4/Ia3	AIMER.ON.LVNDE
Ia5	ALAIN.ON.LVND
Ia5	ALAIN.V.ON.LVND
Ia4/Ia3	FIL AIMER.ON.LVN
Ia4	FIL AIMER.ON.LVN
Ia4	FIL.AIMER.ON.LVN*
Ia4	FIL AIMER.ON.LVN*
Ia4	FIL AIMER.ON.LVN*
Ia5?	FIL.AIMER.ON.LVN (curls 2/4)
Ia1/Ia2	HENRI.ON.LVND
Ia5	HENRION.LVND
Ia5	IEFREI.ON.LVND
Ia2/Ia5	IOHAN.ON.LVND
Ia5?	IOHAN.ON.LVND (curls 2/4)
Ia5?	PIERES.ON.LVND (curls 2/4)
Ia5	RANDVL.ON.LVN
Ia2	WILLELM.ON.LVN
Ia2	WILLELM.ONLVN*

V. Conclusions

The coins of class Ia were in issuance for a period of at least four to five months in the middle of 1180. At the time of writing, I have identified a total of 109 obverses in classes Ia1–Ia4,⁶⁰

⁶⁰ There are 104 dies in the inventories, plus five (see p. 43–44 above), more from unidentified cuts and fragments in my collection.

with a commensurately large number in class Ia5. As regards Ia5, FIL AIMER alone may be known for as many as 15–20 obverses, and there are as many as 34 other moneyers who issued in the subclass. If each is known on the average for a total of 1.5 obverses in Ia5, our total for the subclass would be in the range of 65–70. That would mean a grand total of approximately 175 known obverses for the opening phase of the new Short Cross series.

The total number of known reverse dies is more difficult to gauge because of the absence of definitive signposts on many of them. That is, we have no way to distinguish among a large number of the reverses of Ia4 and Ia5, and also between those two subclasses and dies of class Ib. For example, what I have designated a Ia4 reverse could, in some instances, have dated from later (or even, conceivably, from earlier – class Ia3). Lacking a ‘double-half-moon’ E or a reverse barred N, a number of the reverses of FIL AIMER, in particular, may in fact be Ia4/Ia5 ‘mules’. At any rate, the totals through Ia4 are something on the order of 140–150 known reverses, with (a mere guess) perhaps 90 more in class Ia5. Though hardly ‘rare’ from such a vantage point, they remain far rarer than the coins that succeeded them.

They also, if I may say so, generate more interest, allowing us to separate them into sequential sub-classes. By comparison, the coins of Ib, issued over a much longer period, can only be divided into early and late; whereas the coins of Ic have resisted all attempts so far to chronologize them.

In class Ia, to summarize, we encounter 39 moneyers, none of whom was new in class Ia5.⁶¹ Four new mints were opened at the point of transition to class Ib, and we find ourselves with 28 names we have never seen before. Of this total, 20 were at the new mints themselves, but five were at London,⁶² along with two at Exeter, and one each at Northampton and Winchester. It is the absence of new names in Ia5, combined with an obverse style reminiscent of class Ia, that obliges us to divide the coinage using a set of criteria more diverse than that suggested by Lawrence when he pioneered the subject 80 years ago.

In this new construction, square Es, square Cs, and round Ms need to be joined by the other features that we have introduced here, for example, the ‘double-half-moon’ E and the three-serifed N. Indeed, when we contemplate the full range of stylistic variations, we see that it is the very absence of a single look that becomes perhaps the defining feature of class Ia. When the series settled down, as it did in class Ib, the fixed nature of the coinage became almost a model to itself.

VI. A guide to the plates

The coins selected for inclusion in the plates represent a compromise between a minimalist and maximalist approach. That is, the total falls somewhat short of comprehensiveness, but is considerably more than might be required to illustrate only main points. Since this paper includes an inventory of known dies, it has seemed useful to present a generous selection representing all moneyers. On the other hand, there has seemed little need to include all the dies of, say, FIL AIMER, though I have found it necessary on occasion to go beyond class Ia itself. For example, a selection of the post-Ia coins with square letters has been illustrated.

On another point, I have not always sought out the finest known specimens for inclusion. Rather, I have relied on new examples and on available photographs. I am especially grateful to Martin Allen for the use of his photo file, and to William Conte who has photographed coins in my collection.

⁶¹ The only possible exception is REINIER of Winchester (see above p. 38).

⁶² There were four (perhaps five) new moneyers of London

in Ib, with one (perhaps two) additional moneyers in class Ic – hence our total of 18–20 for the mint during the whole of class I (see note 52).

The actual arrangement of the plates will follow a generally chronological scheme by mint and moneyer. Such a method has the advantage of showing the progress of individual moneyers, and also follows the format adopted for the inventories of the mints. However, it has the disadvantage of fragmenting the sub-classes, with the result that the coins of, say, Ia1 will not all be located on the same page. Unfortunately, there is no resolving this dilemma. The reader will have to make the best of a confusing system, with the awareness that the phenomenon of 'muling' would have made any effort to chronologize by type even more tortured. The post-Ia material will be placed at the end where it belongs.

Finally, acknowledgements, where possible, will be made to current owners. References to Brand or Elmore Jones will be used only where the current whereabouts of coins are unknown. Needless to say, numerous unacknowledged collections, both public and private, have been consulted.

Sources of coins and their accompanying plate numbers:

AM	Ashmolean Museum
BIM	Birmingham Museum
BM	British Museum
FM	Fitzwilliam Museum
NM	Northampton Museum
PM	Perth Museum
RH	Rotenfels Hoard
MRA	Collection of Martin Allen
JDB	Collection of John Brand
FEJ	Collection of F. Elmore Jones
RCL	Collection of R.C. Lockett
JJN	Collection of Jeffrey North
IS	Collection of Lord Stewartby
PW	Collection of Peter Woodhead
JPM	Collection of the Author

			<i>dies</i>	
1.	Ia1	ASKETIN.ON.EXECE	1/1	JPM
2.	Ia1	IORAN.ON.EXEH	2/2	JPM
3.	Ia1	IORAN.ON.EXEH	3/2	JPM
4.	Ia1	IORAN.ON.EXEH	4/2	JPM
5.	Ia1/Ia2	OSBER.ON.EXEC.	4/3	BM
6.	Ia1/Ia5?	OSBER.ON.EXECE	4/4	BM
7.	Ia1/Ia5?	OSBER.ON.EXECES	4/5	BM
8.	Ia5/Ia4	ROGER.ON.EXECE	5/6	BM
9.	Ia1	FILIP.E.ON.NORAMTV	1/1	BM
10.	Ia1	FELIP.E.ON.NORH	2/2	BM
11.	Ia2	FILIP.E.ON.NORA	3/3	GPG
12.	Ia2/Ia3?	FILIP.O.Z.NORH	4/4	JPM
13.	Ia2/Ia5?	FILIP.ON.NORH	4/5	BM
14.	Ia2/Ia5?	FILIP.ON.NORH	5/6	JPM
15.	Ia1/Ia5?	HVGO.ON.NORHT	6/8	JPM
16.	Ia1/Ia5?	HVGO.ON.NORHT	6/9	NM
17.	Ia2	RAVL.ON.NORAM	7/10	JPM
18.	Ia2	REINALD.ON.NOR.	8/11	FEJ
19.	Ia4	REINALD.ON.NOR	9/12	BM
20.	Ia4	[]ALD.ON.N[]	10/12	JPM
21.	Ia1	WALTER.ON.NORAM	11/13	JPM
22.	Ia2	WALTER.ON.NOR	12/15	BM
23.	Ia2/?	WA[]ORH	7/16	FM
24.	Ia3/Ia3?	WALTIERO.Z.ZOR	13/17	BM
25.	Ia1	WILLELM.ON.NORA	14/18	JPM
26.	Ia1	WILLELM.ON.NORA	15/18	BM

			<i>dies</i>	
27.	Ia4/Ia3	WILLELM.ON.NOR	9/19	BM
28.	Ia5/Ia3	WILLELM.ON.NOR	16/20	RCL
29.	Ia2	OSBER.ON.WILT	1/1	BM
30.	Ia4	OSBER.ON.WILT	2/2	JPM
31.	Ia1	RODBERT.ON.WILT	4/4	BM
32.	Ia1/Ia2	RODBERT.ON.WIN:	5/5	JPM
33.	Ia2	RODBERT.ON.WIN:	6/5	JPM
34.	Ia2	RODBERT.ON.WIN:	7/5	JPM
35.	Ia2/Ia1	RODBERT.ON.WILT	1/4	JPM
36.	Ia4	RODBERT.ON.WIN	8/6	JPM
37.	Ia4	RODBERT.ON.WIL	9/7	JJN
38.	Ia4	RODBERT.ON.WIL	10/8	BM
39.	Ia5	RODBERT.ON.WIL	11/9	JPM
40.	Ia2	ADAM.ON.WINCE	2/2	JPM
41.	Ia4	ADAM.ON.WINCE	3/3	JPM
42.	Ia1	C[]ON.WINC	5/5	IS
43.	Ia1	CLEMENT.ON.WIN	6/6	JPM
44.	Ia2	CLEMENT.ON.WIN	7/7	BM
45.	Ia2	CLEMENT.ON.WIN	8/8	MRA
46.	Ia1	GOCELM.ON.WINC.	9/9	JPM
47.	Ia4	GOCELM.ON.WIN	10/10	JPM
48.	Ia4	GOCELM.ON.WIN	11/11	JPM
49.	Ia5/Ia3	GOCELM.ON.WIN	12/12	GPG
50.	Ia5/Ia3	GOCELM.ON.WINC	13/13	JPM
51.	Ia1/Ia2	HENRI.ON.WINC.	9/14	JPM
52.	Ia1/Ia2	HENRI.ON.WINC.	14/14	GPG
53.	Ia2	HENRI.ON.WINC.	15/14	BM
54.	Ia3	OSBER.ON.WINC	17/16	JPM
55.	Ia4/Ia3	OSBER.ON.WINCC	18/17	PM
56.	Ia1	RODBERDON.W//EE	19/19	IS
57.	Ia1	RODBET.ON.WINC	20/20	BM
58.	Ia1/Ia2	RODBET.ON.WIN	9/21	JPM
59.	Ia2	RODBET.ON.WIN	21/21	BM
60.	Ia2	RODBERT.ON.WIN	22/22	JPM
61.	Ia2	ALAIN.ON.EVER	1/1	JJN
62.	Ia1	EFRARD.ON.EVRP	2/2	GPG
63.	Ia4/Ia3	EFR[]EVER	3/3	BM
64.	Ia4	GERARD.ON.EVER	4/4	JPM
65.	Ia4/Ia3	HVGE.ON.EVERWI	5/5	JPM
66.	Ia2	//////I.ON.EVER	7/7	JPM
67.	Ia4/Ia3	HVNFREL.ON.EVER	8/8	BM
68.	Ia4	HVNFREL.ON.EVER	9/9	BM
69.	Ia1	ISAAC.ON.EVERVI	10/10	JPM
70.	Ia1	ISAC.ON.EVERWI	10/11	BM
71.	Ia1	TVRKIL.ON.EVER	10/12	BM
72.	Ia1	WILLELMONEVER	11/13	BM
73.	Ia4/Ia3	WILLELM.ON.EVER	12/14	JPM
74.	Ia1	AIMER.ON.LVNDE	1/1	JPM
75.	Ia1	AIMER.ON.LVNDE	2/1	PW
76.	Ia1/Ia2	AIMER.ON.LVND	2/2	IS
77.	Ia2	EIMER.ON.LVN.	3/3	RH
78.	Ia2/Ia3	AIMER.ON.LVND	3/5	JPM
79.	Ia4/Ia3	AIMER.ON.LVNDE	4/6	BM
80.	Ia4	AI/ER.ON.LVND	5/8	GPG
81.	Ia4	ALEIN.ON.LVND	7/10	JPM
82.	Ia4	ALAIN.ON.LVND	8/11	JPM
83.	Ia1/Ia2	ALEIN.V.ON.LVN	6/12	JPM

			<i>dies</i>	
84.	1a1/1a2	A//INV.ON.LVND	6/13	MRA
85.	1a4	[ALAINV?]ON.LVND	7/15	JPM
86.	1a4/1a3	FIL AIMER.ON.LVN	9/16	BM
87.	1a4/1a3	FIL AIMER.ON.LVN	10/16	JPM
88.	1a4	FIL AIMER.ON.LVN	9/18	JPM
89.	1a4	FIL AIMER.OZ.LVZ	12/21	GPG
90.	1a4	FIL AIMER.OZ.LVZ	13/21	BM
91.	1a4	FIL AIMER.ON.LVN	15/23	JPM
92.	1a4	FIL AIMER.ON.LVN	17/25	JPM
93.	1a4	FIL AIMER.ON.LVN	18/26	JPM
94.	1a1/1a2	HENRI.ON.LVND	20/29	JPM
95.	1a1/1a2?	HENRI.ON.LVND	21/30	BM
96.	1a2	HENRICN/S LVNDE	22/32	BIM
97.	1a4/1a2	HENRI.ON.LVND	23/33	BM
98.	1a4/1a3	HENRI.ON.LVNDE	23/34	JPM
99.	1a4	HENRI.ON.LVND	23/35	JPM
100.	1a3/1a2	HENRI.PI.ON.LVN	24/38	BM
101.	1a3/1a2	HENRIPI.ON.LVN	24/39	JPM
102.	1a4	HENRI.PI.ON.LVN	25/40	BM
103.	1a4	HENRI.PI.ON.LVN	25/41	GPG
104.	1a4	HEN[]LVN	26/41	JPM
105.	1a1/1a2	IEFREI.ON.LVND	27/42	BM
106.	1a2	IEFREI.ON.LVND	28/45	GPG
107.	1a2/1a3?	IEFREI.ON.LVN	28/46	BM
108.	1a4	IEFREI.ON.LVND	29/47	BM
109.	1a4	IEFREI.ON.LVND	30/48	JPM
110.	1a1	IOHAN.ON.LVNDE	32/51	MRA
111.	1a1	IOHAN.ON.LVND	33/52	JPM
112.	1a1/1a2	IOHAN.ON.LVND	33/53	BM
113.	1a1/1a4?	IOHAN.O[]	34/54	JPM
114.	1a2/1a5?	IOHAN.ON.LVND	35/56	JPM
115.	1a2	PIERES.ON.LVND	36/57	JPM
116.	1a2	PIERES.ON.LVND	37/58	BM
117.	1a1/1a2	PIERESM.ON.LVN	38/59	JPM
118.	1a1/1a4?	PIERESM.ON.LVN	34/60	MRA
119.	1a1/1a5?	PIERES.M.ON.LVN	34/63	JPM
120.	1a1	RANDVL.ON.LVN	21/64	BM
121.	1a1/1a2	RANDVL.ON.LVN	21/65	JDB
122.	1a2	RANDVL.F.ON.LVN	40/66	BM
123.	1a2/1a4	[]L.OZ.LVZ	41/67	JPM
124.	1a4	RAZDV.L.OZ.LVZ	23/68	JPM
125.	1a4	RANDVL.ON.LVN	23/70	JPM
126.	1a4	RANDVL.ON.LVND	42/71	BM
127.	1a2	REINALD.ON.LVN	43/72	BM
128.	1a2/1a3?	REINALD.ON.LVN	44/73	JPM
129.	1a1	WILLE///ON.LVNDE	45/74	JPM
130.	1a2	WILLELM.ON.LVN	46/75	JPM
131.	1a2/1a3	WILLEM.ON.LVN	3/78	JPM
132.	1a2/1a3	WILLEM.ON.LVN	48/78	BM
133.	1a4	WILLELM.ON.LVN	31/79	JPM
134.	1a5	RANDVL.ON.LVN	/70	JPM
135.	1a5	TVRKIL.ON.EVER		JPM
136.	1a5	OSBER.ON.WINCE		JPM
137.	1a5	ASKETIL.ON.EXEC		JPM
138.	1a5	FIL AIMER.ON.LVN		JPM
139.	1a5	ALAIN.ON.EVERW		JPM
140.	1a5	WILLELM.ON.NOR		JPM
141.	1a5	ALAIN.ON.LVND		JPM
142.	1a5	REINALD.ON.LVN		JPM

			<i>dies</i>	
143.	Ia5	FILIP.ON.NORHT		JPM
144.	Ia5	FIL. AIMER.ON.LVN		JPM
145.	Ia5	IEFREI.ON.LVND		JPM
146.	Ia5	PIERES.ON.LVN.		GPG
147.	Ib	RAVL.ON.LVNDE		JPM
148.	Ib	OSBER.ON.WINCE		JPM
149.	Ib	HVGO.ON.EVERWI		JPM
150.	III	REINALD.ON.CA		JPM
151.	Ib	PIERES.M.ON.LVN		BM
152.	Ib	ALAIN.ON.CARD		BM
153.	Ib	ROGER.ON.EXECE		JPM
154.	Ib	OSBER.ON.EXECE		JPM
155.	Ib	RICARD.ON.OXEN		JPM
156.	Ib	HVGO.ON.NORHT		JPM
157.	Ib	PIERES.M.ON.LVN		JPM
158.	Ia4	TVRKIL.ON.EVER		

[Information on several new coins has come to hand since the completion of the text of this paper.

Ia4, TURKIL.ON.EVER (no. 158; this is a new moneyer for the subtype); Ia3/Ia2, HENRI.PI.ON.LVN (same as no. 100 in the Plates); HENRI.PI.O [] (same obv. as the preceding coin, but with a new reverse in which the 'I' of Henri Pi is absent). The first two coins reside in the Kunsthistorisches Museum in Vienna, and were brought to my attention by Nicholas Mayhew. The third coin is in the collection of the author.]



1 2 3 4 5 6 7



8 9 10 11 12 13 14



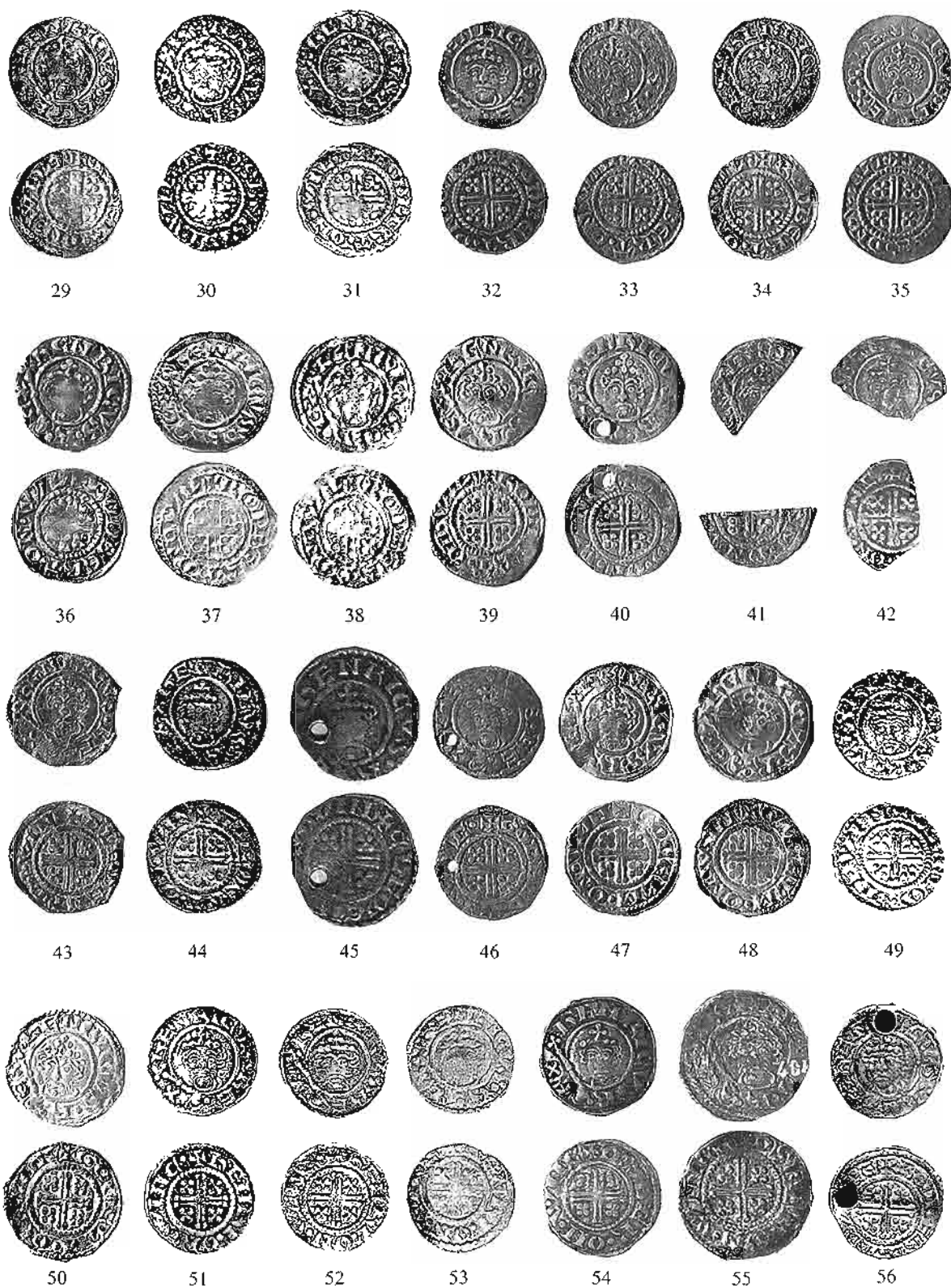
15 16 17 18 19 20 21



22 23 24 25 26 27 28

MASS: SHORT CROSS 1a (1)

PLATE 2



MASS: SHORT CROSS Ia (2)



MASS: SHORT CROSS Ia (3)

PLATE 4



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MASS: SHORT CROSS 1a (5)

PLATE 6



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MASS: SHORT CROSS Ia (6)