# THE COINAGE OF HENRY VII (cont.) 

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## Chapter Vili. The Gold Money

## 1. The Angels and Angelets

Type $I$. The first angels, like the first groats, are identical in style with those of the preceding reigns, having St. Michael with feathered wings and tunic and one foot on the ridged back of a substantial dragon with gaping jaws and coiled tail. There are the same two divisions of compound and single marks, but the latter are of great rarity and have unusual legends and stops and therefore are unlikely to be confused with the less rare earlier angels.

Only three of the four compound marks on the groats are found on the type I angels, and they were very differently used. There are no halved lis and rose angels but on the other hand the halved sun and rose is one of the two chief marks found on both obverses and reverses. The lis on rose is also found on obverses and reverses, but the lis on sun and rose is known only on two altered obverses showing Richard III's sun and rose mark with superimposed lis (Pl. IX, 1).

We have examined twenty-one angels, representing practically all the known specimens and the summary of the marks on these is as follows:
Obverses

1. Halved sun and rose (3 dies)
2. Lis on rose (3 dies)
3. Lis on sun and rose (2 dies)

Reverses

1. Halved sun and rose 8
2. Lis on rose 2
3. Lis on rose 6
4. Halved sun and rose 1
5. Halved sun and rose 2
6. Lis on rose 1
7. No mintmark 1

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The lis on rose reverses are distinguished by having no stops.
With regard to the individual dies, the two altered obverses clearly show the name henric punched over RICARD, and therefore there seems little doubt that the lis was struck over the original halved sun and rose mark. It has, however, been found impossible to identify these two dies as used in Richard III's reign, and in fact there are unusual difficulties in the way. In the first place the sun under the lis on the one die which has a sufficiently clear mark appears to be of the four-rayed type. This, although known on the few rare late groats of Richard III already mentioned, is so far unknown on any of his angels. In the second place both dies show the legend ending FRANC $\times{ }_{\times}^{\circ}+\times$ as found on the majority of true Henry VII dies of type I but known on only one sun and rose die of Richard III, different from these two. Nevertheless it seems certain that they must have been made for Richard III.

These two altered dies are found used on four coins as shown in the summary above. One of the reverses has the lis on rose mark, two have the halved sun and rose, while
the fourth has no mint-mark (PI. IX, 2) and trefoil stops and this coin is therefore probably a mule with the 'no-mint-mark' angels of type II. These dies therefore present another puzzle in having been used not only throughout the currency of the first coinage, but also at the beginning of the second.

The five reverse dies with the lis on rose are certainly new dies. Apart from the form of mark, the lack of stops and the initial ' $h$ ', the design of the ship is quite different, there being three planks on the ship's side with a large shield covering the first two, whereas Richard's dies have four planks with a small shield sometimes covering only $1 \frac{1}{2}$ planks. The legend, however, reads $\mathrm{CRvCE}(\mathrm{M})$ as on Richard's coins.

Of the six reverse dies bearing the halved sun and rose mark, two are usually described as having ' $h$ ' struck over R beside the mast, and certainly there appears to be some disturbance of the letter in these two cases, but here again, though similar, these dies are by no means identical with those of Richard III but are in fact the same as the other four having no signs of an altered letter. In addition to having a four-rayed sun the legend reads CRVSE(M) instead of CRVCE(M) and, though they resemble Richard's dies in having saltire stops, four planks, and a small shield, the latter covers only the first plank, whereas on Richard's dies it extends lower than this on all dies we have seen.

Here is a list of the First Coinage angels we have noted:

| 1. Obv. S. and R. die $1 /$ Rev. S. and R. die 1 | (BM 1). |
| :---: | :---: |
| 2. (Same pair of dies) | (BM 3). |
| 3. (Same pair of dies) | (RCL 3187). |
| 4. Obv. S. and R. die 1/Rev. S. and R. die 4 | (EJW). |
| 5. ,, /, Rev. Lis on Rose 1 | (EJW ex Ryan 109). |
| 6. (Same pair of dies) | (Schn.). |
| 7. Obv. S. and R. die $2 /$ Rev. S. and R. die I | (BM 2). |
| 8. ,", Rev. S. and R. die 2 | (Wertheimer 105). |
| 9. ,", /Rev. S. and R. die 3 | (EJW ex LAL 94). |
| 10. Obr. S. and R. die 3/Rev. S. and R. die 5 | (RCL 4328). |
| 11. Obv. Lis on S. and R. I/Rev. S. and R. die 4 | (RCL 1670). |
| 12. ,, , /Rev. Lis on Rose 3 | (RCL 1669). |
| 13. ,, ,, Rev. No mint-mark | (BM 9). |
| 14. Obr: Lis on S. and R. $2 /$ Rev. S. and R. die 6 | (Rashleigh 18). |
| 15. Obr. Lis on Rose die 1/Rey. S. and R. die 7 | (BM 4). |
| 16. Obv. Lis on Rose die 2 Rev: Lis on Rose 1 | (BM 5). |
| 17. ," ,. Rev. Lis on Rose 2 | (BM 6). |
| 18. (Same pair of dies) | (BM 7). |
| 19. Obv, Lis on Rose die $2 / \mathrm{Rev}$. Lis on Rose 4 | (RCL 1671). |
| 20. ,, /Rex. Lis on Rose 5 | (RCL 1672). |
| 21. Obv. Lis on Rose die 3/Rev. Lis on Rose 2 | (BM 8). |

The three single marks of the silver coins, lis, cross fitchy, and rose, are represented on the angels by two coins only, bearing the mint-mark rose on the obverse (PI. IX, 3, 4). Unfortunately, the bullion records of the period are missing, so it cannot be determined whether or not there was a gold shortage at this time. The two coins concerned, which are from different obverse and reverse dies, are in the National collection, and they present several unusual features.

First, they have the Irish title in the form DNS.I年B, and the figure of St. Michael is lowered to permit the B to appear above the halo. Second, on the reverse double saltires appear in place of the mint-mark, though the stops are pellets, unknown on any other
angel, though recalling the lis groats. Third, the rose beside the cross is a very poor round-petalled affair, very unlike the shapely flower appearing on earlier coins of type I, while the ropes to the masthead are 3 and 1 , whereas on all other angels they are 2 and 1 only. Finally, the legend ending REDMTOR is curious, but may be duplicated elsewhere though we have so far failed to trace it.

As to the half-angels of type I, we have noted five specimens from two obverse and two reverse dies as follows:

| 1. Ohr. Die 1. | Rev. Die 1. | (Ryan 127). |  |
| :--- | :--- | :--- | :--- |
| 2. | $"$ | Rev. Die 2. | (BM 1) (PI. IX, 20). |
| 3. | $"$, | (BM 2). |  |
| 4. Obv. Die 2. | $"$ | (BM 3). |  |
| 5. | , | $"$, | (RCL 1673). |

Only one of the ten mint-marks on these coins is reasonably clear, namely, the obverse of no. 4 , which is classified by the BM as lis over sun and rose, but though the halved sun and rose is undoubted it is by no means certain that a lis has been superimposed. What is quite clear is that both obverse dies have been altered from ricard to Henric. Though in each case the first four letters show little signs of alteration except for having been more deeply struck than usual, it is impossible to disguise the substitution of 1 for R or C for D , and these are very noticeable. On the analogy of the two similar groat dies the obverse mint-mark should be lis over sun and rose, but certainty is not possible with the existing specimens.

As to the two reverses, there is no obvious sign of alteration from R to ' $h$ ', but this is easy to conceal with a deep punch, and the mint-marks are of similar indefinite forms to those of the obverses. We are, therefore, provisionally assuming that these also were altered dies of Richard III. The half-angels of the latter reign are exceptionally rare and most unfortunately there is no known specimen of the mint-mark halved sun and rose, so it is possible that the four dies, though made for Richard, were never used by him but remained to be altered for Henry's use after 1485. The only known obverse die with the name EDWARD is very different from these two.

Type $I I$ (no mint-mark, cinquefoil). The angels of type II are singularly without varieties. Both have trefoil stops on both sides and both have reverses without mintmark, the cinquefoil appearing only on the obverse. On the obverses the no-mint-marks follow the rare rose dies in showing part of the Irish title-DNS only in this case, while on the cinquefoil dies the legend stops at the copula ?.

Fortunately the two types of reverse are easily distinguished by the size of the ' $h$ ' and rose by the mast, small in the case of the no-mint-marks and of normal size on the cinquefoils. The no-mint-mark reverses are known with two forms of legend, the normal and a shortened form of that used for the nobles, i.e. IhC.AVTEM. \&c. Where the normal form is used there is a further distinction between the marks, the no-mint-mark angels having the spelling CRVSE and the cinquefoil coins CRVC'.

Accepting these distinctions we can say that a coin having no mint-mark on the obverse and a large ' $h$ ' and rose on the reverse with the spelling CRVC' (EJW) is a no-mint-mark/cinquefoil mule (Pl.IX, 6) while a second (HAP 26) with the cinquefoil mark on the obverse and a small ' $h$ ' and rose on the reverse with the legend Ihc.avtem, unknown on true cinquefoil reverses, is a cinquefoil/no-mint-mark mule (Pl. IX, 7). These two coins are, we think, the only known mules between the two marks.

The no-mint-mark angels are not exceptionally rare. We have noted fourteen from five obverse dies including the mule above mentioned, but of the cinquefoils we have found only eight from two dies, including the mule. In this case, however, there are additionally known no less than six cinquefoil/escallop mules. These present some very curious features. First, they are from two obverse dies (nos. 2 and 3 on the list below), one not being known used on a surviving true coin; second, the reverses used with them are not the earliest of the escallop dies but middle and late types, and lastly, the two cinquefoil dies when used had already noticeably rusted.

It is very unfortunate that the accounts for the period should be missing, but there certainly seems to have been a very small output of gold during the currency of the cinquefoil mark, probably two years, as compared with the silver, and perhaps too many obverse dies were made, but it is strange that use should not have been made of them immediately on the change of mark. The reverses of these mules will be mentioned again in the next chapter.

There are no known angelets of type II.
Here is a list of the angels of this type examined:


Type III (Escallops). There are no angels of the cinquefoil mark which might be classified under this type, but changes in design equivalent to what occurred in the groats are evident on the earliest escallop angels. As with those of previous marks the escallop angels are much scarcer than the groats and there are therefore gaps in the series which make the picture a good deal less complete. Further, there is no equivalent on the angels of the many different fleurs on the groats, while the stops used are invariably rosettes. Fortunately, the lettering follows fairly closely the same course as that of the groats and, in the case of the later coins, of the Canterbury halves, so that with the aid of what has been determined in regard to these coins we are able to place all the known specimens in satisfactory sequence.

The first obverse die must be the only one known with the new plain lettering B (Pl. IX, 8) of which two coins with different reverses are to be found in the British Museum collection (see Walters's sale catalogue 1913 no. 481). There is also a third
angel from this die (EJW). This might well be Alexander de Brugsal's first essay for the angels, as the figures of St. Michael and the dragon have been extensively remodelled. St. Michael is no longer covered in feathers with one foot on the dragon's back, but wears a breastplate of armour with a few feathers sprouting from the sides and bottom. He stands with both feet on the dragon, which is a rather poor-looking specimen with a curly tail and a head like a cockerel, while the spearhead now ends in a cross with hammer ends, instead of a cross-crosslet. We have called this design no. 2 and the three angels showing it form Group 1 of the escallops.

The two reverse dies found used with this first obverse also have lettering B and similarly show a considerable modification of design, in this case an improvement from the old crude ship dating back to the days of Edward III. This reverse design remained substantially unaltered for all subsequent issues of the reign. These two dies have the normal legend but one other reverse die with lettering B is known, having the ihc.avtem legend. This is found with a late obverse die having lettering El.

There are several different obverse dies known with the next type of lettering, Cl , continuing the open E and Roman m of lettering B , but employing a rather ornate style in outline and seriffing (Pl. IX, 9). These form Group II. On these the obverse design has been further modified and now shows St. Michael with more elaborate plate armour covering also the stomach, with feathers showing only at the sides. The wings, too, are now much lower than before, appearing under the arms instead of sprouting from the shoulders. The dragon is slightly improved, certainly as regards the head and mouth, but it remains a much less fearsome beast than the original, so that much of the force of the allegory is lost. A rosette now appears either side of the nimbus and the spearhead goes back to the crosslet form. We have called this Design no. 3. The reverses of Group II with lettering C1, like those of Group I, are found with both forms of legend, the normal and thC.avtem.

We have found no equivalent on the angels of either the C 2 or D lettering of the groats that is, the two styles with closed E and Roman m and, in the case of D, with the ornate $L$ and $v$. All the remaining dies forming Group III have, in fact, the smaller El lettering of the Canterbury half-groats with closed E and Lombardic M (PI. IX, 10) though we have found one reverse die with the normal El of the groats.

The obverses of this group are as Group II but without the rosettes by the nimbus and to place them in order we must refer to the half-groats mentioned, which show exactly the same letter forms as well as the same broken letters as are found on these dies. First then there are those obverses showing R2a, the curious R with in-turned leg. These have no broken letters and are equivalent to the Canterbury halves type B3. We have found no reverses with this R ; the corresponding reverses in fact have $\mathrm{R} 2 b$ and the T broken at bottom right which are found with $\mathrm{R} 2 a$ on the Canterbury halves of reverse type A2. They are distinguished by having double rosette stops instead of the single stops which appear on all other obverse and reverse dies. Next and last come both obverse and reverse dies with broken $\mathrm{R} 2 b$ having the normal leg but the upright broken at the bottom. The obverses also have the ' $h$ ' broken at the top (Canterbury B4), while the reverses have the T with bottom serifs broken off (Canterbury Ba3). The escallop/pansy mules we have noted all have this last type of obverse. All the Group III reverses have the normal legend. Several angels with El lettering on the obverse are known with the ihc.avtem legend on the reverse but these are mules with Group II.

Now a final word about the cinquefoil/escallop mule reverses. Two of these have the inc.avtem legend and lettering CI, while the other four are from the same Group III die with $\mathrm{R} 2 b$, broken T and double rosette stops. The early use of unworn cinquefoil dies might have been held up for the Brugsal trials, but it is impossible to explain the use of rusty obverse dies of the previous mark towards the end of the escallop period or say after a lapse of two years when there must have been normal obverses immediately available. No escallop/cinquefoil angel mule is known.

Here is a classified list of the known escallop angels:
I. Design 2, lettering B, spearhead cross with hammer ends:
Obv. francl ( 1 die) Rev. la Per.CRVCEM (BM 28/9, EJW).
II. Design 3, lettering CI, spearhead cross-crosslet:

III. Design 3, lettering El of half-groats:

| Obv. (a) | FRANC, FANC-R2 $a$. <br> (2 dies) | $\begin{array}{r} \text { Rev. } \mathrm{I} a \\ \mathrm{II} b \\ \mathrm{II} a \\ \mathrm{III} b \\ \mathrm{IH} \cdot \end{array}$ | Ihc.avtem (BM 30). <br> thc.AVTEM (BM 32, RCL 1677). <br> R2b, dble. rosettes (BM 23, WJP, EJW, Ashm.). <br> Broken R2b, single rosettes (RCL 1678, WJP). <br> Normal EI (EJW). |
| :---: | :---: | :---: | :---: |
| Obv. (b) | FRANCl, ERAN-broken $\mathrm{R} 2 b$ (2 dies) | $\begin{gathered} \text { Rev. III } b \\ \text { Pansy } \end{gathered}$ | (BM. 22, EJW). <br> (WJP, BM 33, EJW ex Ryan 117, RCL 1679). |

No half-angels of the escallop mark are known.
Type III (pansy, anchor). The division of this mark into two sub-types IIIb and IIIc in the groats can also be made in the angels. The lettering is the first criterion, the angels of type IIIb having the smaller variety of the lettering El as found on the Canterbury half-groats and the late escallops, and Type IIIc having the normal E2 (PI. IX, 11). A further distinction taking the place of the bust on the obverses is the form of ending given to the spear-shaft, which in type IIIB is the crosslet and in IIIC is the cross with hammer-headed ends. The stops are not a good guide. Though all the IIIb groats have rosette stops only, in the angels a few dies both obverse and reverse are known with saltire stops. We have also noted one obverse with no stops. In the case of the IIIc angels the majority of dies have saltire stops, but we have noted two reverses with rosettes (the IIIb/IIIc mule (BM) and RCL 4041) and one obverse with no stops once more.

The mark on the pansy angels occurs in three forms, the no. 1 of the groats in type IIIв, a new form consisting of the five petals only, not touching in the centre, on the majority of type IIIc, and lastly the pansy type 2 with the long curving bottom petals on a few late angels (PI. IX, 12) and the mules with the following marks. One of these late dies, distinguished by having a saltire on either side of the mark, has a small irregular form of lettering not traceable on the contemporary groats or halves. As for broken letters, the IIlb pansies follow the arrangement used on the obverses of the Canterbury halves of type C, that is with broken $\mathrm{N}, \mathrm{E}$, and F , but on the IIIC angels only the broken N is retained.

The leopard's head crowned was not apparently used on the angels; at any rate no specimen with this mark is known and the late pansy mules are usually with the lis-issuant-from-rose mark, both ways. In addition a unique anchor/pansy mule is known (RCL 1683) (Pl. IX, 13). The lis-issuant-from-rose angels are rare and reproduce exactly the details of the late pansy coins, with the hammer-ended spear-shaft, saltire stops, and the broken N . No mules have survived with the following anchor mark.

The anchor angels are reasonably common. The mark occurs either upright or reversed as on the groats and the lettering on the numerous specimens we have examined appears to be the normal E2 with no broken letters. There are, however, three forms of ending to the spear-shaft, the two forms already described on the escallops and pansies, and a third form, found on two dies in slightly different versions, consisting of pellets on the three arms of the cross. One of these dies is found on the solitary anchor/pansy mule, whereas the three known mules with greyhound's head no. 1 reverses all have the crosslet ending.

The rare pansy angelets show only the two types of mark found on the groats, i.e. the early and late types. Among the nine true pansy coins examined seven have the early type mark on both sides and rosette stops, one has the early type on the obverse and a late type reverse with double saltire stops and only one has the late type mark on both sides. This has no stops on the obverse. We have traced no true anchor angelets. The five specimens known to us with anchor obverse all have reverses with the late pansy mark and double saltire stops.

Type IV (greyhound's head). The greyhound's head angels have been placed in this separate type for convenience' sake. There is, of course, no equivalent on these coins of the crowns which separate the groats, but the two forms of mark are found, nos. 1 and 2. The lettering used is somewhat different from that on the groats, G.H. 1 having either lettering E or the small letters to be found on the York ecclesiastical half-groats, and G.H. 2 lettering F. There are no G.H. 2 angels with lettering G, which is confined to the crosslets.

We have traced five obverse dies with the G.H. 1 mark and seven with G.H. 2. Only one of the G.H. I obverses (die no. 3) has the small lettering mentioned (Pl. IX, 14), but, on the other hand, most of the reverses have this form. Another of the obverses (no, 4) has henri, but this is not really a rare variety as we have noted no less than seven angels from the die, three with G.H. 2 reverses. Dies 1 and 2 arc known only on G.H. 1/anchor mules.

Of the seven G.H. 2 obverses only two have the normal saltire stops, the other five having rosettes. On the other hand, we have noted only three reverses with rosette stops, so that while there are two G.H. 2 angels with saltires both sides, two with saltires/ rosettes, and seven with rosettes/saltires, we have traced only two with rosettes both sides. Incidentally, die 1 with saltire stops has henric.del, in contrast to all the other dies of both G.H. marks which have di.

Here is a detailed list of the greyhound's head angels we have noted:

## Mules

Obv. Anchor.
G.H. 1

Dies 1/2, lettering E. Rev. Anchor (BM 2, EJW ex Ryan 120).
Die 3, small letters.
Rev. G.H. 1, small letters (BM 1, EJW ex Ryan 121, RCL 1685).

Rev. Small letters (BM 5/6, WJP).

Rev. 1. Small letters (BM 7, EJW).
2. Lettering E (BM 8, EJW). 3. G.H. 2 saltires (RCL 4043, EJW, WJP).

Die 5, lettering E.
Rev. 1. Lettering E (BM 9).
2. G.H. 2 rosettes (BM 10).

## G.H. 2

Die 1, saltires (DEI).
Die 2, saltires.
Dies $3 / 7$, rosettes.

Rev. 1. G.H. 1, lettering E (BM 3, RCL 1686, EJW). 2. G.H. 2, no stops (BM 14).

Rev. 1. Saltires (BM 4, Schn.).
2. Rosettes (EJW, Ashm.).

Rev. 1. Saltires (BM 11/3, RCL 3189, 4042, EJW, LAL).
2. Rosettes (Brussels-Die 4, EJW ex Dargan collection-Die 6).
3. Crosslet-Die 7 (Ashm.) (PI. IX, 15).

The half-angels of type IV are of two types, both of great rarity. The first, of which there are two coins from two different obverse dies but the same reverse die, has no mint-mark on the obverse but G.H. 1 on the reverse (BM, EJW ex Ryan 130); the second, of which there are also two coins but from the same pair of dies, has the rose as mint-mark on both sides, recalling the rose reverse dies as used with G.H. 2 groats (BM, RCL 1688).

Type $V$ (cross-crosslet, pheon). The angels of these two marks have been classed together under this last type as they are closely linked in style and, as will be seen, are also linked by a series bearing both marks.

The crosslet angels are not only more numerous than the greyhound's heads, they are also much more complex, and they have provided probably the most difficult series of the reign to classify. In the lettering and the use of the various abbreviations of ANGiLIE they seem to follow the contemporary groats, but unfortunately there are other varieties, probably privy marks, such as the form of the spear-end, the use of stops by the halo and the abbreviation mark after henric, which upset what at first would appear the obvious sequence. It must be said that we are not in complete agreement as to the correct order of these dies, nor as to the importance or significance of some of these varieties, but the following is a detailed list of the angels we have traced set out in one of several possible ways in which they can be arranged:

## 1. Spear-end hanmer-headed, single saltires, nothing by halo:

(a) Ohv. Small ' $h$ ' in henric, double saltires after rex, Let. G2.

Rev. Single saltires, double after PER and Nos, Let. G2, G3, G4.
Die 1, angli. Rev. 1. Lettering G2 (BM 5).
2. ,, G4 (BM 8).

Die 2, AGLI. Rev. 1. ,, G2 (BM 4).
2. ", G3 (BM 6).
(b) Obv. Normal 'h' in henric, all single saltires, Let. G4a. Rev. As before, lettering G2, G3, G4.
Die 3, Agli. Rev. 1. Lettering G2 (BM 1).
2. ,, G4 (BM 2).

Die 4, AGLI. Rev. 1. „, G3 (EJW).
2. " G4 (BM 3).

Die 5, AGlie. Rev. 1. ,, G2 (BM 7).
Die 6, ANGLIE. Rev. ", G4 (WJP).
II. Spear-end cross-crosslet:
(a) Lettering G3a (F2), nothing by halo:

Die 7, ANGLIE, double saltires after henric.di, rest singles.
Rev. 1. Single saltires die 1 (BM 9/10).
2. Single rosettes die 1 (BM 17, EJW).
3. " " die 2 (LAL).
4. ", " die 3 (LAL).

Die 8, ANGLIE, all double saltires.
Rev. 1. Double saltires die 1 (Glend. sale 10/57).
2. Single rosettes die 4 (LAL).
(b) Lettering G3b (F3), stops by halo:

1. Three rosettes by halo:

Die 9, aglie. Rev. 1. Single rosettes die 1 (BM 18, EJW).
2. ", ", die 3 (BM 19).
3. Single saltires die 1 (EJW). (PI, IX, 18).
2. One saltire by halo:

Die 10, aglie. Rev. 1. Single saltires die 2 (BM 11).
2. Single rosettes die 1 (WJP).

Die 11, AGLIE. Rev. 1. Double saltires die 2 (BM 12, HAP).
2. ", ", die 3 (BM 13, Ashm.).

Die 12, AGLiE. Rev. ," " die 4 (WJP).
3. Two saltires by halo:

Die 13, AgLie. Rev. Double saltires die 5 (Taffs).
Die 14; AGLIE, two pellets over mint-mark.
Rev. Two pellets at right of mint-mark (WJP).
4. Three saltires by halo:

Die 15, AGLIE, two pellets over mint-mark (both sides). (Ashm.).
Die 16, ANGL. Rev. Double saltires die 5 (RCL 1690, BM 14).
5. Four saltires by halo:

Die 17, angl. Rev. Two pellets over mint-mark, same die as with No. 15 (BM 16).
Die 18, AGL. Rev. 1. Double saltires die 5 (BM 15, EJW).
2. Two pellets over mint-mark, same die as with no. 15 (Fitz).
(Dies 9, 14, 15, 17, 18 have henric?.)
It will be seen that the angels have first been divided into two groups according to the type of spear-end employed (Pl. IX, 16,17) but that while the angels of Group II all have lettering $3 a$ or $3 b$ on the obverses and 3 on the reverses, those of Group I have either G2 or G4a on the obverse, though with G2, G3, or G4 on the reverse. If we use as a criterion the order of the groat dies, it would appear that the Group I $a$ angels were followed by those of Group II and these in their turn by Group Ib, but whereas the reverses of the last named are all plain crosslet dies, many of what appear to be the later dies of Group II, especially the reverses, have the marks with additional pellets, which in the groats represent the transitional coins between the crosslets and the pheons. In fact, the reverses are also found used with the compound crosslet and pheon obverses shortly to be described. The use of reverses with lettering G2, 3, and 4 with both sections of Group I is also quite incompatible with the groat order.

The abbreviations of ANGLIE are of little help with the angels of Group I, but, as will
be seen, it has been possible to arrange the dies of Group II in such a way that the abbreviations, the stops by the halo, and the reverse dies form a strictly rational sequence, though in no case does there appear to be any correspondence with the contemporary groats. There remains only the abbreviation mark after henric, where it seems almost certain that though the form ? eventually superseded the original form ', the former was first used intermittently.

The transitional dies between crosslet and pheon marks are fortunately not so complicated as those on the groats. In the above table the occurrence of supplementary crosslet and pellet forms will be seen, namely two obverse dies with pellets above the mark and two reverse dies, one with pellets above and one with the pellets to the right of the mark. The compound dies, three obverse and five reverse, all have the crosslet at the beginning and pheon at the end of the legends and continue the privy mark of saltires in various positions by the marks and halo. Here is a detailed list of the specimens we have examined, including the mules with ordinary pheon obverses, which include reverse die 5 not found on a true coin:
III. Transitional Coins between Crosslet and Pheon, all AGLIE:
(a) Obv. Crosslet and pheon.

Die 1 , one saltire by halo.
(b) Crosslet and pheon both sides:

Die 1, one saltire by halo.
Die 2 , one saltire by halo, one by pheon, one by crosslet.
Die 3, ,",
(c) Mules with pheon obverses:

Obv. 1, one saltire by halo. 2 , two saltires by halo.
$\begin{array}{lll}3, & " & " \\ 4, \\ 5, \text { three } & " & ",\end{array}$

Rev. various marks:
Rev. 1. Two pellets over crosslet mint-mark, new die (BM 20).
2. (RCL 1691).
3. $\downarrow$ (RCL 4044) (PI. IX, 19).

Rev. die 3, RED ${ }^{\prime} \times \downarrow$ (BM 22).
Rev. 1, die 3 (BM 23, Ashm., RCL 4330). 2, die 1, RED' $\downarrow$ (BM 2I).
Rev. 1, die 2, Red $x^{\downarrow} \downarrow$ (Schn. ex LAL). 2, die 4, RED ${ }_{\star}^{\star} \downarrow^{\times}$Ashm., LAL).

Rev. die 3 (BM 24).
die 4 (Ashm.).
, (EJW ex LAL).
die 5, RED ${ }^{\prime \times} \downarrow^{\times}$(BM 25).
," ," (RCL 1692).

The angels of the pheon mark are the commonest of all surviving specimens of the reign, and were undoubtedly struck in large numbers as the bullion figures testify. They are practically without varieties except for one reverse die without mint-mark, but they may be placed in possible order of production by reference to the abbreviations of the word ANGLIE and the saltires by the mark, as with the crosslet angels. The combinations we have noted are:

AGLIE with 1,2 , and 3 saltires.
AGL with (1), 2, and 3 saltires.
ANGL with $1,2,3$, and 4 saltires.
The angels with AGLIE have been placed first as this is the abbreviation found on those with the double mark and the mules with pheon obverses and double-mark reverses, but the order of the other two forms is conjectural. We have not traced an angel with AGL and one saltire, while the form AGLIE with one and three saltires has been found only on the mules mentioned.

The angelets with the crosslet and pheon marks have none of the complexities which distinguished the angels of the former mark. We have noted eight with crosslet reverse and these all have a rose-marked obverse from the die used for the two known angelets with rose on both sides already mentioned. Two dies were used for the reverses, one having the mark surrounded by four saltires (PI. IX, 21), recalling the rosette surrounded by four saltires found on one sovereign reverse of the dragon mark, which may be contemporary. The four pheon angelets noted all have the mark on both sides and are entirely normal in every way.

## 2. The Sovereigns and Ryals

The order of 28 October 1489, published by Mr. H. Symonds (BNJ vol. x), authorized the striking of a gold piece to be called the sovereign, to be double the weight of the ryal and to pass for $20 s$. Two such pieces were to be struck from every pound of gold minted, say two to every fifty-eight angels.
I. Examples of five types of the sovereigns of Henry VII have survived to this day and the first of these is the coin bearing, on the reverse, the cross fitchy mark which we have shown in Part I to have been current about the time of the order. Four specimens of this are known all from the same pair of dies (Pl. X, 1).

The obverse design chosen was that of the king in majesty, that is, robed and crowned, seated facing upon the throne and holding sceptre and orb. This is not an original type as it is found earlier on coins of many countries, but it was the obvious choice. However, this first essay is not an entirely happy one. For one thing the figure of the king is too large for the flan and also the head is too large for the body. The throne is plain with a wide seat and low back, but it is somewhat obscured by the diapered background of lis which covers the field.

The reverse of a double Tudor rose within an ornamental border with the arms of France and England quarterly in a central shield is original and effective in this first version. The 'noble' legend is used, and appears as:

IhC. AVTEM. TRANSCIENS. PER . MEDIVM.ILLORVM. IBATNE.
The curious addition of two letters to fill up a vacant space at the end is apparently a transfer of the two final letters of the obverse legend, as may be seen on the sovereign of type II.

The stops are quatrefoils on the obverse and trefoils on the reverse, and the lettering on both sides is from normal punches used for the groats of the same mark, i.e. lettering A.
II. Of the second type of sovereign having the cinquefoil mark on both sides one somewhat worn specimen has survived, now in the British Museum (PI. X, 2). The designs are probably by the same hand as the cross fitchy sovereign. The figure of the king is now better proportioned, but the folds of the drapery and the rather wide Gothic throne are almost identical with those of the earlier design. The chief difference immediately apparent is the absence of the diapered background which enables the figure to be properly appreciated. Nevertheless the large field is now rather bare.

The lettering used is the normal one of the period though rather larger and more ornamental than that appearing on the contemporary groats and angels. However, it
includes the reversed S for ET , all barred A 's, but N 1 , which therefore fixes the issue of this sovereign to the middle period of the currency of the cinquefoil mark contemporary with the four-fleur groats and the unique 'sovereign' groat described in Part I (BNJ vol. xxx, 1962), which has the same type of crown and throne, and is probably by the same hand. The legend ends ibarne.

On the reverse the same double Tudor rose is employed without the ornamental border, but the shield is made much larger and is surmounted by an elaborate and wide jewelled crown. Shading lines have been added to the petals of the rose and crosshatching forms a background to the bearings on the shield. Altogether this second version is a remarkable piece of elaborate engraving, while the composition and balance of interest are superb.
III. It must be assumed, however, that the king was still not satisfied with the work of his native artists and engravers. In the autumn of 1494 Alexander of Brugsal in Bavaria was brought over to act as chief engraver for the design of new models for the coinage and the firstfruits of his work must undoubtedly be the third type of sovereign which has survived. This has the mint-mark dragon on both sides, a reference to the Welsh origin of the king, but a mark outside the normal series (PI. X, 3).

The obverse design is similar to that of type II but the proportions of the figure are now excellent. The king is seated on a most elaborate throne with a back of Gothic tracery and finials, and two side pillars showing definite Renaissance details. The right one is surmounted by a dragon from the same punch as the mint-mark and the left by a greyhound sejant, the two royal beasts of the Tudors. Fleurs-de-lis are scattered in the field. This is a really magnificent composition and in many ways superior to the two English versions.

The same cannot be said of the reverse or the lettering. The former is a return to the first type with a very florid double rose in an ornamental border and an insignificant shield of arms in the centre. In this case the over-elaboration of the rose and the diminution in the size of the shield has spoiled the balance of interest in the composition, and it is very unfortunate that this design was retained for all subsequent issues of the fine sovereign. The tall lettering also is a very unpleasing mixture of Gothic and Roman forms, the N being particularly poor. The stops on both sides are mullets, unknown on any other denomination (the 'star' stops on some rare groats are quite different) and emphasizing the foreign origin of the design.

This third issue of the sovereign may have been contemporary with the escallop and pansy marks and a regular issue was probably made over a period of some years, as the coins are relatively common. We have, in fact, noted sixteen specimens, all from the same pair of dies.
IV. The fourth issue of the sovereign has the mint-mark small lis on the obverse but the dragon as before on the reverse. This must also have been a fairly prolonged issue as we have noted the use of two obverse dies, though strangely enough of only one reverse die, different from that used for type III. The issue was probably contemporary with the greyhound's head and early crosslet marks.

The obverse design once again is very similar to that of the previous issue, but in some respects it is not as successful. The throne is taller, reaching the edge of the coin, and wider, while it is entirely Gothic in style, the side pillars with their emblems being
replaced by Gothic finials. The figure of the king seems more squat and not so well proportioned, partly due to the very wide seat, the bare spaces of which are made more obvious than necessary by the absence of any drapery over them, an error not made in the previous design. On the other hand the crown is of a more advanced and graceful style, foreshadowing the single-bar type of the later greyhound's head groats.

What is probably the first of the two known obverse dies is unique in having no inner circle between the design and the lettering, possibly because of the very wide throne used ( $\mathrm{Pl} . \mathrm{X}, 4$ ). The space beneath the figure is sprinkled with fleurs-de-lis. The second die has the inner circle as usual, broken, of course, by the back of the throne.

The reverse, though from a different die from that of the preceding type, is similar in style, being distinguished by the lettering and stops. The former now approximates much more closely to that used for other denominations at this time, being entirely Lombardic except for the m, but special punches were obviously used and the letters are taller and more elaborate than those found elsewhere. The stops are now saltires on both sides, double on the reverse, and the latter also bears a curious subsidiary mark alongside the dragon consisting of a rosette within four saltires. This mark is reminiscent of that on the reverses of the half-angels from die 2 of the mint-mark crosslet, obverse rose, and is possibly an indication of the date of this type.

Type IV is the most common type of Henry VII's sovereigns encountered, as, though we have noted only one specimen from die 1 (BM), there are nineteen known from die 2 (Pl. X, 5).
V. In the obverse of the final type, which was retained with slight modifications for all subsequent issues up to and including the reign of James I, nearly all traces of Gothic influence have been removed from the obverse design. The throne is now of simple form with decorative side pillars and patterned back. The figure of the king is well proportioned and bears a tall crown with orb and cross, while at the feet is the Tudor symbol of a portcullis with chains. The inner circle is decorated with small fleurs. The lettering and stops are as type IV and probably the same punches were used, as the curious A with one top serif missing is found on all the dies.

Only one obverse die is known of this type, still with the special lis mint-mark (Pl. X, 6), but it is found with two reverse dies, one with the crosslet and one with the pheon mark. These are otherwise identical and, though having the same general design as the reverses of types III and IV, no longer have the lis and lions on the petals. We have noted nine of the crosslet and six of the pheon sovereigns, but in addition three double sovereigns are known from the dies, two with crosslet and one with pheon reverse.

Ryals. The ordinary indenture signed at the beginning of the new reign, i.e. on 2 November 1485 with Giles Daubeny and Bartholomew Reed, provided for the striking of ryals to weigh 120 grains and pass for $10 s$. with their halves and quarters, but the only known issue of a coin corresponding to this was that which must have appeared at the same time as the first sovereign following the order of October 1489 , as it bears the cross fitchy mark on the reverse ( $\mathrm{Pl} . \mathrm{X}, 7$ ).

This rare piece, of which seven specimens are at present known, copies the obverse design of the original ryal of Edward IV with the crowned figure of the king with sword and shield standing in a ship, but on the reverse has the large double rose with a small central shield bearing the lilies of France only. There are, of course, modifications in the
obverse design compared with the last ryals of Edward IV-the shape of the ship and shield, the figure of the king with tall double crown, and the two flags, one flying from the bow with the letter ' $h$ ' and one from the stern with what looks like a wyvern but is probably intended for a dragon. The lettering is the normal one of the contemporary groats and the stops are trefoils on both sides. No reasonable explanation has so far been offered for the presence of the French shield on the reverse.

Here is a summary of these coins with a note of some of the more important specimens. All except Lis I-1 have been illustrated many times, but attention is specially drawn to Lawrence's article 'On the Coinage of Henry VII' ( $N C, 4$ th ser., xviii, 1919).
Sovereigns and Double Sovereigns:
I. Obv. No mint-mark. Rev. Cross fitchy (RCL 1667, Ryan 104, Hunt., BM 3).
II. Obv. Cinquefoil. Rev. Cinquefoil (BM 4).
III. Obv. Dragon. Rev. Dragon 1 (4 mullets by mint-mark), (RCL 1676, Ryan 105, BM 5).
$\operatorname{IV}(a)$. $O b v$. Lis I-1 (No inner circle, 5 lis beneath king).
Rev. Dragon 2 (Rosette within 4 saltires by mm.) (BM 6).
(b). Obv. Lis I-2 (Double inner circle, nothing below king).

Rev. Dragon 2 (RCL 3186, Ryan 106, BM 7/8).
V(a). Obv. Lis II. Rev. Crosslet (RCL 1687, Ryan 107, BM 10).
(Double sovereigns from same dies-Ryan 103, BM 1).
(b). Obv, Lis II. Rev. Pheon (RCL 4039, BM 11).
(Double sovereign from same dies-BM 2).
Ryals:
Obv. No mint-mark. Rev. Cross fitchy (RCL 1668, Ryan 108, BM 12, Ashm., Fitz., Hunt., Paris).

## Chapter IX

## Dates of Types and Mint-marks and the Privy Marks of the Reign

## W. J. W. POTTER

So far there have been little more than hints as to the dates during which the various types and mint-marks were current, and it is now time to go more deeply into the question to see if it is possible to discover something more definite for the changes which occurred during the reign but particularly in the types and mint-marks.

We have alrcady seen that the types on the large silver represented five stages in the development of the portrait bust, culminating in the profile, and their dating is to a large extent dependent on what is decided for the mint-marks. The dating of the profiles is of special interest as it involves also the appearance of the first shilling in the English series.

As to the mint-marks I think there can be little doubt that these represent the mark which the mintmaster was enjoined by his indenture to place "on all moneys he shall make of gold and silver, so that another time if need be he may know which are his work among other like moneys and which are not'.

There was a regular series of mint-marks, changed at intervals which seem to have averaged about two years, probably for accounting purposes, and also special marks
used for experimental issues or purposes which are now obscure. The small money, both in gold and silver, often bore marks not in the regular series.

The evidence available to us to determine the vital dates is perhaps rather more substantial than in the earlier reigns, but we still have to rely a great deal on comparisons and probabilities for most of our conclusions. Firstly, among surviving documents, we have three indentures between the king and his mintmasters. The first on 4 November 1485 with Sir Giles Daubeney and Sir Bartholomew Reed; the second on 20 November 1492 with Sir Bartholomew Reed and Sir John Shaa; and the third and last on 20 November 1505 with Robert Fenrother and William Reed.

Three other valuable documents are known. First, the Commission of 28 October 1489 ordering the sovereign; second, the Act of 19 Henry VII, cap. 5 of January 1504; and third, the Proclamation of 5 July 1504, of which the Society of Antiquaries possesses a copy, and which was reproduced with Mr. Carlyon-Britton's article on 'The Last Coinage of Henry VII' ( $B N J$ 1926). Finally, we have the mint returns of bullion issued from the Tower, for each year of the king's reign except 1490-4, as published in the Numismatic Chronicle, 5th ser., vol. ix, 1929, by Miss E. Stokes.

Now as to the usefulness of these sources. There is a conflict of opinion as to whether a new indenture meant a change of type or mint-mark. It has been said that an indenture was only a business contract between the king and his mint officials setting forth the terms and conditions of minting. When an indenture involved a change of mintmasters, however, as it usually did, then it must have involved also a change of mark, and I think that this can be demonstrated in this reign.

As regards the bullion figures, these can assist in two ways. Firstly, the comparative abundance of surviving specimens can be related to the figures of bullion turned into coin, and secondly, dates given against various amounts can sometimes be very significant. Normally, the mint accounting year ran from Michaelmas to Michaelmas, but in several instances in any reign other dates will be found, which might be indicative of changes of mint-mark.

Now taking these sources of evidence in their order, the first indenture merely gives us the official date for the commencement of Henry VII's coinage. The terms and conditions are the same as for Richard III. We come, therefore, to the commission for the sovereign. Of the five known types of this beautiful coin, only two have regular mint-marks found on the groats. The earlier of these is the long cross fitchy, and it is therefore assumed that this was the sovereign authorized and issued in 1489 , especially as the few known halves or ryals, all from the same pair of dies, similarly authorized by the Commission of 1489 , also have the long cross fitchy on the reverse. This, therefore, gives us a date for the cross fitchy mark.

I have already suggested a very short period of currency for this mark and the lis, and it is quite possible that they were both used concurrently with the early rose or late lis over half-rose. The compound marks would then have occupied the four years from November 1485 to Michaelmas 1489 , giving two years each for the halved lis and rose, and the lis over half-rose or rose and sun. For the rose mark I would then suggest a further two years to Michaelmas 1491. I think this period of two years had by then become accepted as normal, though it was modified in certain circumstances. Such circumstances would have occurred with the indenture of 20 November 1492, and I think we may allot the fourteen months from Michaelmas 1491 to that date for the
'no-mint-mark' groats, with a change to the heraldic cinquefoil on the appointment of Reed and Shaa as mintmasters. This latter mark was a very likely one for Reed at any rate to choose, as it was the mark in force when he became mintmaster under Edward IV in 1483 , though he may then have changed it to the sun and rose. The normal two years' currency for the cinquefoil would bring it up to Michaelmas 1494.

I am influenced in the foregoing view as to the 'no-mint-marks' and cinquefoil groats partly by the comparative abundance of surviving specimens, as unfortunately there is a blank in the bullion figures for the five years to 14 October 1494, and partly by the evidence of the Durham pennies as explained by Dr. Brooke in English Coins. Bishop Sherwood died in 1494 and his successor Fox took over the see in 1495. All the pennies of Sherwood have the old lettering and trefoil stops corresponding to the plain doublearched crown groats, while those of Fox have the new ornate lettering and rosette stops of the escallop mark.

A further point which has some bearing on this matter is that right at the end of the currency of the cinquefoil mark we find one or two very rare groats from experimental dies on which jewels were added to the arches of the crown. It was in 1494 that Alexander of Brugsal was invited over from the Continent to act as chief graver to Henry VII, and this change, which in the next escallop mark was consolidated by a new bust and crown, might well be attributed to him or to his influence. It cannot be a coincidence that a considerable modification was also made to the designs of the angels with the appearance of the escallop mark.

We now come to a more obscure period, viz. the nine years between 20 November 1494 and the Act of 19 Henry VII, cap. 5, which was passed by the Parliament of 25 January 1504. This was the Act which ordered that the coinage should in future be more carefully struck on a slightly larger flan to show a full circle or beaded edge around each coin, in order that clipping without detection should be impossible. As already mentioned, the surviving coins show that the mark current at this time was the greyhound's head no. 2 and also that this mark was nearing the end of its currency, as the more common earlier coins with the double-jewelled crown show the old type of finish.

All this is confirmed by the Proclamation of 5 July 1504 which gave effect to the provisions of the Act and explained to the public the terms on which the old and new coins would be valid. The confirmation is to be found in the illustrations of coins which appear in the right-hand margin of the copy printed for public display, a specimen of which is in possession of the Society of Antiquaries. These include two of the new style single-arch coins, one with the greyhound's head and the other with the crosslet mark, proving that these two marks had been current between January and July 1504, and we may assume the change to have taken place perhaps at 31 March 1504.

As we owe the publication of this proclamation to Mr. Carlyon-Britton I think I should say that his opinion was that these illustrations were added subsequently and are therefore of no use in determining the dates of currency of the two marks concerned. This opinion has been influenced by his theory that the greyhound's head mark was instituted specially to distinguish the new groats with full outer circle, so that the crosslet mark could not possibly have appeared before the proclamation. In support of his view he claimed that the illustrations are inappropriate to the subject matter because the later crosslet groat is shown with an incomplete outer circle, whereas the greyhound's head coin has a complete circle. If we examine these illustrations, however, we shall see that
they are, in fact, produced from woodblocks, such as would have had to be cut for the large number of copies necessary (they were to be distributed to all cities, towns, and large villages), and the incomplete outer circle on the crosslet groat is simply a failure of the impression to register fully on one side. I think it is amply evident, therefore, that the illustrations are contemporary with the proclamation and were intended to show the public the actual coins chiefly referred to in it.

Having now fixed the final date for the currency of the greyhound's head mark, we can return to the question of the nine years 20 November 1494 to 31 March 1504, into which we have to fit the six marks: escallop, pansy, leopard's head crowned, lis-issuant-from-rose, anchor, and greyhound's head. There is only one source of guidance to which we can look and that is the bullion figures. In the published records these appear as follows:

|  |  | Silver | Gold |  |
| :---: | :---: | :---: | :---: | :---: |
| 14.10.1494-29.9.1498 | (4 yrs.) | 19,447 | 3,275 | 1 b . |
| 29.9.1498-29.9.1500 | $(2,$, | 23,953 | 1,787 | , |
| 29.9.1500-29.9.1502 | (2,, ) | 20,971 | 2,424 | " |
| 29.9.1502-29.9.1503 | (1 yr.) | 7,773 | 1,272 | , |
| 29.9.1503-29.9.1504 | (1 ,, ) | 13,811 | 1,612 |  |

Here we have a period of ten years to cover six marks on the silver or five on the gold. As there was apparently no break in the production of the latter metal during the currency of the leopard's head crowned on the silver, I think we may take the L.H.C. and L.I.R. marks as one, giving exactly two years for each mark. If we divide up the bullion totals on this basis we have:

| 14.10.1494-29.9.1496-Escallop, say | 9,750 | 1,650 | lb. |
| :--- | ---: | ---: | :--- |
| 29.9.1496-29.9.1498 -Pansy | 9,750 | 1,625 | ", |
| 29.9.1498-29.9.1500 -L.H.C./L.I.R. | 24,000 | 1,800 | ", |
| 29.9.1500-29.9.1502 -Anchor | 21,000 | 2,400 | ", |
| 29.9.1502-29.9.1504 -Greyhound's Head | 21,500 | 2,900 | ", |

If the surviving specimens of these marks are to be taken as a criterion, however, there is something wrong with these figures. The commonest marks in both metals are the pansy and anchor, next we have the escallop and greyhound's head, and finally the L.H.C. and L.I.R. coins. Further, it has already been agreed that the G.H. mark ceased to be used by the end of March 1504. It would seem, therefore, that the division would be better made as follows:

| Escallop | 14.10.1494-29.9.1496 | (2 yrs.) | 19,500 | 1,650 | 1 b . |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pansy | 29.9.1496-29.9.1499 | (3 , ) | 21,500 | 2,525 |  |
| L.H.C./L.1.R. | 29.9.1499-29.9.1500 | (1 yr.) | 12,000 | 900 |  |
| Anchor | 29.9.1500-29.9.1502 | (2 yrs.) | 21,000 | 2,400 | " |
| G.H. 1/2 | 29.9.1502-31.3.1504 | ( $1 \frac{1}{2}$, , | 14,500 | 2,100 |  |

Although three years have been given to the pansy mark, at least a further year would be required if we accept Mr. Carlyon-Britton's theory as regards the tun and pansy halfgroats of Canterbury, discussed in Chapter V, leaving only $3 \frac{1}{2}$ years to accommodate the coins of the leopard's head crowned, lis-issuant-from-rose, anchor and greyhound's head marks, a proposition manifestly untenable. If the currency of the pansy mark was in fact extended for some reason for a further year, this would account for the compensating reduction in the period of the L.H.R./L.I.R. marks, a reduction certainly supported by the comparative scarcity of these coins and the absence of any L.H.C. gold.

We are left now only with the crosslet and pheon marks, and it is reasonable to assume that the change from one to the other was occasioned by the coming into force of the indenture with Robt. Fenrother and Wm. Reed on 20 November 1505. This would give to the crosslet mark a currency of a little over eighteen months, or about the same as the greyhound's head, and to the pheon the remaining $3 \frac{1}{2}$ years of the reign. The bullion figures show that the mint year Michaelmas 21 to Michaelmas 22 Hen. VII was split into two periods with a gap of one month-November 1505-when production must have ceased at the mint, probably to allow the accounts of the old partnership to be settled. We can therefore assume with some certainty, I think, that the crosslet mark ceased to be current on 1 November 1505, and the mark of the new masters, the pheon, was brought into use when the mint reopened on 1 December.
The pheon was still current on the death of the king in April 1509 and it remains only to add that the totals allotted to the last two marks under the foregoing arrangement, viz.

$$
\begin{array}{ll}
\text { Cross-crosslet } & \text { Silver: } 32,000 \mathrm{lb} \text {. Gold: } 3,800 \mathrm{lb} \\
\text { Pheon } & \text { Silver: } 53,000 \mathrm{lb} \text {. Gold: } 18,250 \mathrm{lb} .
\end{array}
$$

correspond very well with the surviving specimens of each.
There remains now only to discuss the problems of date relating to the appearance of the shillings, groats, and halves with the profile portrait. It has already been stated that no order is known for the production of the shilling, nor for the fundamental change in style to the 'half-face' portrait. However, the position is by no means as obscure as it would seem as there are references to the new coins in the works of three sixteenthcentury chroniclers, namely: Robert Fabyan, in his 'Concordance of Histories', Raphael Holinshed, in his Chronicle, and John Stow, in his 'Summary of English Chronicles'.

Unfortunately, only the first-mentioned of these was actually living at the time, the others having written some fifty years later. Here are the relevant extracts:

1. Fabyan, under the 19th year of Henry VII (1504), writes:

Upon the XXV day of January began a Parlyament at Westminster . . . and in the forenamed parlyament was ordeyned a new coyne of sylver, as grotes and shyllynges with half faces . . . an a correccyon was dyvysed for clipped grotes.
2. Holinshed, under the year 1504, writes:

On the five and twentith of Januarie began a parlement at Westminster. . . . A new coin of silver was ordeined of grotes and halfe grotes, which bare but half faces; and some pieces of the value of twelve pens were then stamped, though very few of that sort came abroad.

## 3. John Stow, under 1504, writes:

The 29 of January began a Parliament at Westminster. A new coine was appoynted, that is to say, groate and half groate which bare but half faces; the same time also a groate, which was in value 12d, butt of those few were coined.

It will be noted that all three chroniclers, the last two probably copying from Fabyan, connect the appearance of the profile coins with the enactment for coins with a full outer circle, which was the only Act concerning the coinage passed by this parliament. The wording of this (cap. 5), however, was as follows:

[^0]grotes and pens of two pens, and that every pese of the same coynes shall have a sercle aboute the utter part thereof
with no mention whatever either of shillings or of coins with 'half-faces'.
The confusion may have arisen with the meaning of the word 'coin'. It is probably correct to say that this word could mean either design, i.e. die, or 'coins' as understood today. The Act itself was undoubtedly retrospective, i.e. it referred to something which had already taken place - 'The King . . . hath causid to be made . . .'-before the new sitting of Parliament which merely ratified the proceeding, and the new coins with the full outer circle were probably already in circulation but had not been particularly noticed. About the same time, however, the experimental profile coins must have begun to appear and these were sufficiently novel, if not startling, in appearance for the public to assume that these were the new coins referred to in the Act. Whatever the real explanation may be, I think it is amply demonstrated that the profile coins, including the shillings, made their first appearance about the beginning of 1504 .

There remains to say a further word on the question of the special privy marks on the coins of this reign. As will already have been noted these are quite as complicated as those of any previous period, and, in fact, might at times be considered even more complex. We have seen the use of a variety of stops in the reverse legends, stops in various positions by the mark of the cross over the crown, mutilations of the stops themselves, varieties of fleurs, broken letters in innumerable combinations, and the use of varying spellings of words in the obverse legend. None of these can be related to three-monthly Pyx periods and of none can we even hazard a guess as to its significance.

As all these extra marks have been specifically mentioned and related to the different types, denominations, and metals when they were described, it is not proposed to go over them again. However, to illustrate the fantastic complexity of at least one of the systems employed I would like to deal a little more fully with the type of reverse stopping which I have called 'coded', which I think merits some further description. These are the stops - saltires or rosettes-which are to be found in the inner legends of the full-face groats from the cinquefoils onwards before and after the words civitas and London. ${ }^{1}$ That these were purposely inserted and are not purely ornamental or meant as space fillers is easily seen from coins having wide gaps where stops could have been placed but were not and others where the stops had to be struck over part of letters or the cross to get them in.

These stops were used for privy marking by taking various combinations of none, one, and two stops in the four positions mentioned. Used in this way there are eighty-one possible combinations available but, as far as I have been able to check from the limited quantity of coins examined, probably less than half of these were used in any one mark. As an illustration of the sort of combinations which are encountered, here is a list of those found on typical lots of twelve each of the leopard's head crowned, lis-issuant-from-rose and crosslet groats and thirty-four of the anchors, from the British Museum and my collections:

|  | L.H.C. | L.I.R. | Anchor | Crosslet |
| :---: | :---: | :---: | :---: | :---: |
| $00 / 00$ | 5 | 3 | 2 | $\cdots$ |
| $00 / 10$ | 1 | 1 | 2 | .. |

[^1]|  | L.H.C. | L.I.R. | Anchor | Crosslet |
| :---: | :---: | :---: | :---: | :---: |
| 00/11 | 1 | .. | .. | .. |
| $01 / 00$ | 3 | 2 | 2 | . |
| 01/10 | . | 2 | . | . |
| 01/11 | . | $\cdots$ | . | 1 |
| 10/10 | . | 3 | - | . |
| 10,11 | 1 | I | . | . |
| 11/01 | .. | . $\cdot$ | .. | 2 |
| 11/11 | $\cdots$ | .. | 1 | 1 |
| 11/12 | . | . | . | 1 |
| 20/00 | . . | .. | 3 | . |
| $20 / 10$ | . | . | 7 | . |
| 20/20 | $\cdots$ | . | 2 | . |
| 21/00 | 1 | . | 3 | $\cdots$ |
| 21:02 | .. | , | .. | 1 |
| 21/10 | . | . | 9 | 3 |
| 21/11 | . | .. | - | 1 |
| 21/20 | $\cdots$ | .. | 1 | $\cdots$ |
| 21/22 | $\ldots$ | $\cdots$ | . | 2 |
| 22/00 | . | .. | 1 | . |
| 22, 22 | $\cdots$ | $\cdots$ | 1 | $\cdots$ |
|  | $\overline{12}$ | $\overline{12}$ | $\overline{34}$ | $\overline{12}$ |

The most obvious thing here is that the early marks used mostly combinations of 0 and 1 stop, whereas the later concentrated more on those containing 2 stops. It will be noted that among this small collection of coins no less than twenty-two different combinations can be found, so that it is quite possible that an examination of many more examples could show that almost all of the eighty-one possibles were employed at one time or another during the reign.

I hope that this digression will interest some other coin enthusiast sufficiently for him to delve deeper into the fascinating question of these really extraordinary indicators, with all the others mentioned, and one day perhaps the lost secret of their significance will be unravelled. The answer should be something fairly impressive to require the addition of such a complex system of indicating marks.

## KEY TO PLATES <br> PLATE IX

## Chapter VIII: Gold Coimage

1. Angel, mm. Lis over sun and rose, henric over Ricard (RCL 1670).
2. ", same obverse die, but reverse of no mark issue (BM).

3/4. , mm. Rose (only two known) (BM).
5. ,, no mm. (BM-St. Albans Find).
6. „, no mm. Rev. Heraldic cinquefoil (EJW).
7. ", mm. Heraldic cinquefoil. Rev. no. mm. (EJW ex HAP).
8. ,, mm. Escallop, design 2, plain lettering B (BM).
9. , $\quad \mathrm{mm} . \quad, \quad, \quad 3$, lettering Cl (BM).
10. ,, mm. ,, ,, 3, small lettering EI (EJW).
11. ,, mm. Pansy type $11 I c$, mark of new form (Ashm.).
12. ,, mm. ,, ,, ,, late mark with saltire, small lettering (Ashm.).
13. ,, mm. Anchor/late pansy. Third type of spear end (RCL 1683).
14. ,, mm. G.H. I, small lettering (WJP).
15. Angel, mm. G.H. 2/Cross-crosslet (only one known) (Ashm.).
16. " mm. Cross-crosslet, early head of St. Michael and spear end, rosette stops on reverse (WJP).
17. ,, mm. Cross-crosslet, late head of St. Michael, rosette stops both sides (EJW).
18. " mm. Cross-crosslet, rosette stops on obverse, saltires on (reverse only one known) (EJW).
19. ," mm. Cross-crosslet and pheon on obverse, pheon on reverse (only one known) (RCL 4044).
20. Half-angel, mm. Lis on rose, henric over ricard (BM).
21. " mm. Rose/Cross-crosslet, four saltires enclosing rosette by reverse mark (Schn.).

PLATE X

1. Sovereign, mm. Cross fitchy, on reverse only (BM).
2.,$\quad \mathrm{mm}$. Heraldic cinquefoil (BM).
2. ", mm. Dragon (Schn.).
3. " mm. Lis/Dragon, obverse only shown, and has no inner circle (BM).
4. " mm. ", normal obverse shown (Ashm.).
5. ", mm. Lis/Crosslet, obverse only shown. Reverses of nos. 4, 5, and 6 are similar to that of no. 3, except for the mint-mark.
6. Ryal mm. Cross fitchy, on reverse only (Ashm.).

## KEY TO THE ABBREVIATIONS USED FOR COLLECTIONS

AHB Messrs. A. H. Baldwin \& Sons
Ashm. Ashmolean Museum, Oxford
BM British Museum
CEB C. E. Blunt
EJW E. J. Winstanley
FAW F. A. Walters
Fitz. Fitzwilliam Museum, Cambridge
GVD G. V. Doubleday
HAP H. A. Parsons
Hunt. Hunterian Collection, The University, Glasgow
LAL L. A. Lawrence
RCB R. Carlyon-Britton
RCL R. C. Lockett
Schn. H. Schneider
WJP W. J. Potter



1


4


5


6



$=$


[^0]:    The King our Soverayn Lord, by thadvyce of his Counseill hath causid to be made newe Coyns of

[^1]:    ${ }^{1}$ I do not propose to discuss possible equivalents on other silver denominations or on the gold which may or may not exist.

