HENRY VII.

HENRY VII. acceded to the throne on August 22nd, 1485, but did not take any formal steps in relation to the coinage until November 2nd in that year, when letters patent were issued to Sir Giles Dawbeney, Kt. and Bartholomew Reed, goldsmith, appointing them masters and workers, and keepers of the exchange, within the Tower, the realm of England and the town of Calais. Two days later the king entered into an indenture with the new officials, by which they covenanted to make:—

5 manner of moneys of gold.

The ryall, running for 10s, of which 45 shall weigh 1lb. Tower.
The half and quarter ryall (or ryal ferthyng) in like proportions.
The angel, 6s 8d, of which 67½ shall weigh 1lb. Tower.
The angellet, in like proportions.
There shall be 23° 32 and of fine gold and 1½ of allay in each pound Tower,
which shall contain £22.10.0 in coined moneys by tale.

And 5 manner of moneys of silver.
The grote, 4d, of which 112½ shall weigh 1lb. Tower.
The half grote, penny (or sterling), half penny and farthing in like proportions.
There shall be 11° 2 and of fine silver and 18 of allay in each pound
Tower, which shall contain £7.6.0 in coined moneys by tale.

A “remedy” is provided for both gold and silver.
An indented standard trial piece shall be made in each metal. The masters and workers shall make a privy mark on all coins. The pyx shall be opened every three months. The proportions to be placed therein shall be 10 or more of every 10 pounds weight of gold, and 2 or more of every 100 pounds weight of silver.

Dated 4 November, 1 Henry VII. (1485).
The contents of this document were not enrolled, but the original parchment is preserved in *Exchequer Accounts* 306/2.

We see that the indenture ordered the half-ryal and the quarter, or "ryal ferthyng," but neither of these coins is mentioned by Mr. R. L. Kenyon in his *Gold Coins of England*, nor has either of them been hitherto identified as existing. The silver coins include the penny and the farthing; of which the former is not mentioned by Hawkins as occurring of the London mint, but it is now known to exist, while the latter is at present among the still undiscovered items.

Henry VII. is not known to have struck money in England elsewhere than at the Tower, and in this connection it should be remembered that the mints at Canterbury, York and Durham were ecclesiastical undertakings solely, for which reason their history at this period is not to be found among the coinage documents preserved at the Public Record Office, with two unimportant exceptions to be presently mentioned.

The king's fifth year, 1489, was marked by an addition to the gold coinage of a piece styled the "sovereign," of the value of twenty shillings, a denomination which has survived, with some vicissitudes, until to-day, when it is the unit of our monetary system. And just as this coin was a new departure, both in value and in type, so the means adopted for its introduction were no less novel.

A commission was issued to the two master-workers on October 28th, 1489, instructing them to make of such bullion as shall be brought into the mint, a new money of gold according to a print of lead attached to the Letters Patent (but not copied upon the roll), to be of standard gold and to be of double the weight of the piece called the royall, of which pieces 22½ shall make one pound Tower, and the same piece shall be called the sovereign, and shall have course for 20s. sterling. And of every pound weight of gold that shall be made within the Tower, the king directs that they shall make two pieces of the said piece of gold and no more, unless otherwise commanded. And the letters are to be their warrant—Dated 28th October. (*Pat. Roll*, 5 H. VII, m. 30 dors.)

There are four varieties of this sovereign, but they possess one
feature in common, viz., an arched crown upon the king's head, from which fact I draw the inference that they were contemporary with or not earlier than the silver coins of the 8th year, which exhibit the same innovation. A similar suggestion may be made as to the approximate date of the ryal, which also shows the crown surmounted by an arch.

On November 20th, 1492, another indenture was executed and enrolled among the Letters Patent, 8 Henry VII., Part 2, mm. 20 and 21. The master-workers on this occasion were John Shaw and Bartholomew Reed, who covenanted to strike gold and silver coins which were to be of denominations identical in weight and fineness with those mentioned in the first indenture of November 4th, 1485, of which an abstract has been already given. It is noticeable that the sovereign was still excluded from the indenture, which goes to prove that the singular order of 1489 was still in force, and that it provided a sufficient number of those pieces. The reason for the second indenture of 1492 was apparently the death or retirement of Lord, formerly Sir Giles, Dawbeney, whose place was then filled by John Shaw; and we shall probably be right in assuming that the issue of silver coins with the arched crown followed the appointment of the new master-worker. The change in the type of the angel may also be assigned to the same date, as the mint-marks correspond with those on silver coins of the second issue.

Ruding says that in 1494 (9 Henry VII.) a new indenture as to the coinage was made with Robert Fenrother and William Reed on the same terms as before, but this must, I think, be inaccurate, as there is no record of any such document in 1494. It is evident that Ruding was content to copy the statement on p. 41 of William Lowndes' Essay for the Amendment of the Silver Coins, 1695, a date when original information on numismatic subjects was not easily obtainable. This little treatise is of considerable interest as being the earliest attempt to write a history of our currency on the plan

1 In this indenture the "clipper of the irons" is mentioned. Can this functionary be the "sinker" of later times, or the smith who made the forgings? The context forbids that the graver was the person indicated.
afterwards adopted by Folkes and by Ruding, and I shall have occasion to refer again to Lowndes in the course of this paper.

On March 23rd, 1498–9, a proclamation was published which ordered, inter alia, that all silver pence bearing the print of the king's coin were to be current, except the pence with spurs or with the mullet between the bars of the cross, which were to pass as halfpence. It may be that the latter were Scottish pennies of James III. or IV. (Library, Society of Antiquaries).

The next event was a new issue of coins based upon a threefold foundation, viz., an Act of Parliament, an indenture and a proclamation, all being dated within Henry's 19th year, 1503–4. Of these three authorities the indenture appears to have been altogether unnoticed in any printed books, owing no doubt to the fact that neither the original contract nor an enrolment of its terms is to be found at the Public Record Office. But fortunately a copy exists (written in a hand of the first half of the sixteenth century) among the Additional MSS. at the British Museum. I will, however, first quote from the material portions of the statute, which takes priority in date.

19 Henry VII., cap. 5. This Act declared that the sovereign, half-sovereign, rial, half-rial, quarter-rial, angel and half-angel, being full weight, should pass for the sums for which they had been coined; also groats and half-groats, whether English or others then current, not being clipped, although they might be cracked. (The declaration as to pence follows the terms of the proclamation of March, 1498–9, already cited.) Clipped silver was not to be current, but might be exchanged at the mint. And to avoid such clipping in future, the king had caused to be made "newe coynes of grotes and pens of too pens" which should have a circle around the outer part thereof. And that all manner of gold thereafter coined within the realm should have the whole scripture around every piece of the same without lacking any part thereof, so that the subjects might know by means of the circle or scripture whether the coins were clipped.

Doubtless the groats and half-groats here mentioned bore the profile portrait of Henry VII., with the arms of France and England quarterly on the reverse instead of the time-honoured cross-pattée and
pellets, and I believe that the new type then introduced was the work of Alexandre de Bruchella, the Flemish engraver, who was employed at the Tower at this time and until the king’s death. (Numis. Chron., 4 S., vol. xiii, p. 352.)

Following the statute is the indenture dated November 20th, 1503, which was a reproduction in all essential details of the two contracts previously mentioned, those of 1485 and 1492. The master-workers in 1503 were Robert Fenrother and William Reed, citizens and goldsmiths, who presumably acted as substitutes for Bartholomew Reed, the surviving holder of the office, as they did not officially succeed him until November, 1505 (Close Rolls). It will accordingly be sufficient to direct attention to the terms of the indenture of November 4th, 1485, as no change was made in the orders for the third coinage; indeed, the real point of interest in the 1503 contract lies not in what it says but in what it omits. Those who desire to see a full and beautifully written copy of this document may be referred to Additional MSS. 24359, in the British Museum.

The sovereign is again omitted from the agreement with the master-workers, but the half- and quarter-ryal are still included. If the gold twenty-shilling piece was made in 1503, or later, the sanction for its issue must once more be sought in the commission of October 28th, 1489.

As regards the silver coins ordered in 1503, their denominations were five in number as before, viz., the groat to the farthing inclusive. That being so, we have, it would appear, cogent although negative evidence that the very rare silver piece generally described as a “shilling” was not in truth a current coin at all, but merely an experimental design prepared for the king’s approval, or, conceivably, a medal struck for presentation. And the case does not entirely rest upon the omission from the third indenture of an order to strike a coin of thrice the weight and value of the groat; there is also the testimony afforded by the statute of the same year, which mentioned, as we have seen, the new type of groat and its half, only.¹

¹ Fabyan's Chronicle, under the nineteenth year of Henry VII., says that Parliament “ordained a new coin of silver as grotes and shillings with half faces” and that “a
Again, the proclamation of the following year, 1504, in like manner refers to the new coin of four pence, but is silent as to the introduction of another and larger denomination in silver. Therefore, we should, I think, depose this handsome pattern, or medal, from its pride of place as being “the first issue of the shilling in the English coinage,” and preferably classify it with the reputed double-sovereigns and other similar trial-pieces of the Tudor period. I would also maintain that the word “shilling” does not occur in our mint records, except, of course, as money of account, until the third year of Edward VI., 1548-9, when the under-treasurer at Durham House was instructed to provide a silver coin of twelve pence, to which that name was for the first time officially given. (Num. Chron., 4 S., vol. xiv, p. 141.)

A few words must be said as to the proclamation of July 5th, 1504, the last of the documents upon which the third coinage was founded. The king proclaimed that although Parliament (19 H. VII., cap. 5) had ordained that groats, English and foreign, being of silver and not clipped, were to be current, nevertheless, English groats, etc., having three points of the cross and most of the scripture, should pass as unclipped, if the coins were old. But this proviso was not to extend to groats newly coined since the Act of Parliament; such groats were to be current only when they had the full print on both sides, in accordance with the said Act. Clipped money was to be taken in exchange at 3s. 2d. the oz., and persons receiving payment by weight in such money were to cut it asunder. The margin of the page shows six wood-cuts of the coins mentioned in the text. (Library, Society of Antiquaries.)

The question may be asked, what has become of the larger gold coins? The aggregate quantities coined of both metals during the last four years of the reign were considerable, as is shown by the annexed figures taken from Exchequer Account 302/16.
Proclamations of 1505.

Gold coinage struck at the Tower mint:—

In 1505-6, 4059 lbs. weight Tower.

,, 1507 3804 ,, ,, ,, 
,, 1508 5452 ,, ,, ,, 
,, 1509 4920 ,, ,, ,, 

To September 1st, 1 Henry VIII.

Silver coinage in the same years:—
19545, 16161, 12793, 4609 lbs. weight Tower, respectively.

This account runs on without a break to the end of the first five months of Henry VIII., which suggests that there was no immediate change of portrait or title. The great rarity of the 20s. and 10s. pieces may be due to their forming only a small fractional part of the gold coins then issued; but on the other hand, it is not impossible that many sovereigns and ryal.s were converted into the debased gold currency struck in the later years of Henry VIII. and under Edward VI. When we consider that the standard of gold was reduced in fineness from 23 c. 3½ grs. to 20 c. in the pound Troy, and that the weight of the sovereign fell from 240 grs. to 192 grs., the profit derivable from a re-melting and the temptation to an impoverished treasury are equally obvious.

On April 27th, 1505, there was another proclamation as to coinage matters. A scheme was made public whereby all clipped coins and others not current would be received by weight at the Exchange in Leden Hall at the rate of 3s. 2d. the oz., and would be paid for in "gold pence" only. A second proclamation, undated but shortly after the first, was to the same effect, but payment was to be made in "gold penny and twopenny pieces." I confess that I am unable to suggest a meaning for these latter words, unless "penny" was used in a generic sense as denoting a piece of money; for instance, Grafton speaks of the gold florin of Edward III. as "the penny."

In 1507, we have a side light upon the affairs of one of the three ecclesiastical mints, the occasion being an intervention by the Crown after the death of the primate of the Northern province. On a Patent Roll of 23 Henry VII. (Part I, m. 15 dors) there is a commission
to Thomas Pygott appointing him warden and surveyor of the late Archbishop's mint in the city of York during the vacancy, and granting to him authority to coin denarii commonly called pence of twopence, and oboli called halfpence, and no other under pain of punishment, according to the stamp and form used by the late Archbishop—dated September 20th, 1507. The deceased prelate was Thomas Savage, who died on September 3rd in that year. His successor, Christopher Bainbridge, was not translated to York until December, 1508, so the king received the profits of the ecclesiastical mint during a period of about fifteen months.

I found among the national archives one other stray reference to the episcopal coinages of this reign. Letters of privy seal upon a K.R. Memoranda Roll of Hilary term 16 Henry VII., confirming Alexandre de Bruchsella in his office as graver, state that the king had restrained the mints of Canterbury, York, and Durham for a certain season, whereby the work of the Tower graver had been proportionately increased. Therefore we must assume that the mints in the three cathedral cities were closed for an unknown period before the year 1500, and possibly until a later date.

I should not omit to add that no memoranda or accounts concerning the pyx trials in this reign are now extant. Having regard to the orderly care with which other branches of the mint business were chronicled, I think it is almost certain that the coins were proved agreeably to the several indentures, and that the absence of these particular minutes is due to some casualty during the intervening centuries.

HENRY VIII.

Henry VIII. succeeded his father on April 21st, 1509.

On August 6th, in the same year, a mint indenture was executed by William Blount, Lord Mountjoy, as master-worker within the Tower, elsewhere within the realm of England and in Calais. He covenanted to make—

(1) Five manner of gold moneys;

The royall, running for 10s., of which 45 shall weigh one pound Tower;
The half royall, and the quarter royall, or royall ferdyng, with proportionate weights and values;
The angel, running for 6s. 8d. of which 67½ shall weigh one pound Tower, and the angellet in like proportions.
Every pound Tower shall contain £22 10. 0. by tale, and shall be of the standard of 23c.3½ grs. fine gold.

(2) And five manner of silver moneys;
The groat, running for four pence, of which 112½ shall weigh one pound Tower;
the half groat, penny (called the sterling), half penny, and farthing, in like proportions.
Every pound Tower shall contain 37s. 6d. by tale, and shall be of the standard of 11 oz. 2 dwt. fine silver.
The usual conditions as to the use of the privy mark and the pyx.
Dated August 6th, 1509. (Close Roll, 1 H. viii., No. 20.).

It will be observed that the foregoing extracts are identical with the stipulations contained in the indentures of the first, eighth and nineteenth years of Henry VII.

The silver coinage made in pursuance of this contract reproduced the portraits and types of the last issue of the previous reign, the numeral VII being altered to VIII.

As regards the gold coinage, the absence of any instructions to make the sovereign is the most noticeable point in the indenture. Unfortunately, the sovereigns of Henry VII, and those attributed to the first and second coinages of Henry VIII, are without any numerals after the king's name, an omission which compels us to rely upon the mint-marks when apportioning the coins to their respective periods. Mr. Kenyon tells us on p. 83 of his *Gold Coins* that the sovereign was included in Henry VIII.'s first coinage, and having presumably satisfied himself that this denomination was then ordered, the author assigns to 1509 two sovereigns, one with the double mint-mark lys and cross-crosslet, and the other with the mark portcullis crowned, but the former coin would, I think, be more correctly placed among the sovereigns of Henry VII. The British Museum *Handbook*, edited by Mr. H. A. Grueber, follows Mr. Kenyon in giving these three marks to Henry VIII., but the cross-crosslet is not known upon any coins.
undoubtedly struck by that king, and it does occur on both gold and silver issues of Henry VII.

There is, I believe, no existing authority for the issue of sovereigns at the beginning of this reign. The indenture, as already stated, ignores that denomination, the commission of October 28th, 1489, would have become inoperative at the death of Henry VII., and there is not even a trace of evidence that the provisos of the latter document were revived by Henry VIII. The earliest mention of the sovereign was in a proclamation of August, 1526, when the face-value was declared to be 22s., a statement which does not assist us in determining the date of the coin, or the circumstances under which it was struck. It is not until 1533 that I find a quite definite order to make this piece, as will presently appear when the second coining is reached.

The so-called double sovereign (or piedfort, as I regard it) marked with the cross-croslet must, of course, be placed with the corresponding sovereign, and it should be remembered that the terms of the respective indentures of Henry VII. and Henry VIII. render it most improbable that this impression from the dies of the sovereign upon a blank of excessive thickness, was intended for ordinary currency.

There is one more observation to be made with regard to the 1509 indenture, namely, that the half-ryal and the quarter (or ryal farthing) are at present unknown and were probably not made.

On June 23rd, 1512, John Sharpe, armiger, and George Ardeson were appointed joint wardens of the mints at the Tower and Calais for a term of thirty years, Ardeson having received on the 3rd of the same month letters of naturalisation. (Pat. Roll, 4 H. VIII., Part 1.)

We then meet with an illustration of the system under which the more highly placed officers of the mint delegated their functions to other persons, who received presumably a lower rate of pay. There is an original deed, perhaps the only document of its kind which has survived, between Lord Mountjoy, the master-worker at the Tower, and Robert Amadas and Rauff Rowlet, goldsmiths of London, dated November 10th, 1514, in which the latter were appointed as the deputies of the master-worker, and were to take the profits, houses and fees of that office from Christmas then next until the following Michaelmas, in
consideration of which Rowlet covenanted to pay £100 to Mountjoy at Easter, Midsummer and Michaelmas by equal portions. And Amadas and Rowlet also covenanted to fill the office properly, and if there was any good and reasonable cause Mountjoy might discharge them and re-enter upon the office. And the two deputies had found sufficient sureties in the sum of ten thousand marks. (*Exchequer Account 306/2.*)

Next in chronological order comes a trial of the pyx, the first among the surviving records of these ceremonies. The papers containing the results of this trial and of the others to be mentioned later, appear to be drafts or copies in a mutilated or unfinished condition. Sometimes, as in the present case, there is no heading, in others the heading only is to be found, and in none of the verdicts are there any references to a mint-mark, a neglect which considerably lessens their value. In one instance there is a confirmatory entry upon the Patent Rolls, which serves as a release and acquittance of the master-worker.

The present document is endorsed *assaia auri et argentii* but the details as to gold are now missing, together with the heading.

The assay of silver was made before Cardinal Wolsey and others, viz., of two kinds of money struck at the Tower between June 1st, 14 Henry VIII. (1522) and October 26th in his 15th year (1523), each day inclusive.

Eighteen satchels contained £7 16s. in groats and half-groats, which had been taken from 14,886 pounds weight Tower. The sum of 15s. in the two denominations was weighed and assayed by fire, and was found to be agreeable to the standard. (*Exchequer Account 302/17.*) The date was in all probability the day last above mentioned.

In 1523 an Act of Parliament, cap. 12, was passed which regulated the proportions in which the various denominations of gold and silver were to be struck, without prejudice to the customary practice at the ecclesiastical mints; and Parliament also directed that the halfpenny and farthing should thenceforth be of different types in order to avoid confusion. As *Riding* quotes fully from this statute it will be unnecessary here to repeat its provisions.
The Second, or Wolsey's, Coinage, 1526 (18th Year).

A perusal of the extracts from the records of the four years 1526-30 will, I believe, justify the use of the alternative title placed at the head of this section, as it will be made sufficiently evident that Thomas, Cardinal Wolsey, was responsible for all the administrative steps which were taken, from the time when the weight, fineness and design of the new money were settled by goldsmiths under his instructions, to the day when, as Chancellor, he presided at the Star Chamber in Westminster over two trials of the finished products contained in the pyx. We shall find that the Cardinal was invested with vice-regal, almost royal, powers, authorising him to arrange the details of the new issue in such a way as seemed to him good, the king having waived, on that occasion, his prerogative of making a contract with the mint officers defining the required changes. Instead of the customary indenture there exists a document which, in a less exalted sphere, would be described as a power of attorney to Wolsey in matters relating to the currency.

Ruding at this stage (3rd edition, pp. 305-6) rightly corrects Lowndes for confusing the first two indentures of Henry VIII., and then proceeds to quote the terms of a contract which he assigns to the eighteenth year (1526). These particulars are, as a matter of fact, derived from a similar deed of the twenty-fourth year (1533), which Ruding in turn confuses with the supposed, but non-existent, "indenture" of 1526.

The details of the somewhat involved procedure adopted at the time of the second coinage will now be summarized.

A Patent Roll of the eighteenth year (Part 2, m. 27, dors) sets out two warrants as to the moneys, both being dated July 24th, 1526. The first is addressed to the officers of the mint, ordering them, in accordance with instructions to be received from Thomas Wolsey, Cardinal and Chancellor, to alter the values and fineness of the moneys of gold and silver and their print and fashion.

The second warrant directs Cardinal Wolsey to see that the standard and fineness of the coins shall be made equivalent to the rates
and valuations in foreign countries, and he may also devise the “printe, iron, and stroke of the same.”

On August 22nd, in the same year, 1526, a proclamation was issued, the material portions of which run as follows:—

Owing to the enhancement of value abroad, money was carried out of this realm by secret means, nobles, half nobles and ryalls, and as a remedy, it is proclaimed that all gold current within this realm shall be of the same value as it is in other outward parts; therefore, the crown of the sun shall be received as 4s. 6d. having due weight and fineness, and the King thought it convenient that there should be a piece of gold of his own coin of the same weight, fineness and value, to be called the crown of the rose and to be current for 4s. 6d.

Gold brought to the mint of the fineness of the sovereign, ryal, noble or half noble, shall be paid for at the rate of 44s. the oz. in crowns or other current moneys, that is:—

For every piece of gold weighing $\frac{1}{3}$ oz. as the sovereign, 22s.

$\frac{1}{4}$ oz. " ryal, 11s.

$\frac{1}{6}$ oz. " noble, 7s. 4d.

$\frac{1}{10}$ oz. " 40d., 3s. 8d.

(Wolsey having been thus placed in control of mint affairs, called in the practical aid of the goldsmiths, and these experts set out the result of their calculations in a report of October 30th, 1526. (18 H. VIII.) :—

Hereafter ensueth the verdict of Sir John Daunce and others, citizens of London, charged upon their oaths to know, search and try (1) the fineness of the standards of sundry golds and silver whereupon divers coins of gold and silver shall be new made and be current within England and shall have new stamps and marks upon every of the same, devised by the King and his council, and (2) the number of each of the pieces of gold and silver that shall make the lb. Troy, and the valuation of the said pieces. The King was determined to order by proclamation that the angel of fine gold weighing 80 grs. shall be 72 in each lb. Troy, and shall be current for 7s. 6d. which amounteth in value in each lb. Troy to £27, by reason of the enhancement. The residue of the coins of fine gold shall be in proportion to the weight of the angel and be current for proportionate value, that is to say every half-angel 3s. 9d., the
sovereign 22s. 6d., the demi sovereign 11s. 3d., the royall 11s. 3d., the demi royall 5s. 7½d., and the quarter royall 2s. 9½d. And the King was determined to have a new coin called the George noble, of a less value than the angel noble by 10d., to keep the fineness of the angel and to be current for 6s. 8d.; whereupon the jury devised that 8½ shall weigh one lb. Troy, namely, 3 dwt. 8 grs. of the new weight, and likewise a half George noble at 162 in the lb. Troy, and otherwise in proportion, being 40 grs. of the new weight. And the King was determined to have a new coin called the crown of the double rose, to be current for 5s., and to be of 22c. fine gold in the lb. Troy and 2c. of sterling silver, which has been accounted one oz. Troy of silver. Whereupon therefore, the jury had caused a standard to be made and devised the weight to be 64⅔ grs. of the new weight, 100½ shall weigh one lb. Troy, but will lack 2¼ grs., and shall be in value 5s., and one lb. Troy shall amount to £25 2s. 6d. by tale. And the half-crown of the double rose in like proportion, for 2s. 6d.

Groats, half-groats, pence, half-pence and farthings, then current were at the rate of ten groats to one oz. Troy, or 40s. in the lb. Troy by tale, but the King determined to have silver coins made and sized according to the valuation of the fine gold coins, so that every oz. Troy of bullion would make eleven groats and one penny. Whereupon therefore the jury made a standard of sterling fineness (i.e., 11 oz. 2 dwt.), and after that rate every lb. Troy made 45s. in money. And the jurors say that the double-plack or carolus lacks twenty pence in fineness in every lb. Troy, if brought in for conversion to new groats.

The lb. Troy exceedeth the lb. Tower by 3 oz. (Exchequer Accounts 302/18.)

Perhaps the most important change effected by the foregoing verdict was the introduction of an inferior standard of 22 carat fine gold and 2 carats alloy in the lb. Troy, which proportions, I may add, are used to-day for our twentieth-century coinage. Two new denominations of fine gold were ordered, viz., a George noble and its half, and two other new coins of 22 carat standard, viz., the crown of the double rose and its half. Another point was the adoption of the angel (not the sovereign, be it noted) as the unit of weight and value for the purpose of rating the other denominations of fine gold. We also meet with an official mention of the sovereign and its half, which
were apparently then current, while the half and quarter ryal are still included among the authorised coinage. The angelet, too, reappears, but no specimens of this little piece have as yet been assigned to the second issue.

The silver coinage, although no additions were made to its denominations, exhibits some radical variations from the then existing coins. A profile portrait of Henry VIII. was substituted for that of his father, which had done duty for eighteen years; the standard of the metal remained at 11 oz. 2 dwt. of fine silver in the lb. Troy, but the weight of the groat was diminished by $5\frac{3}{4}$ grains and the smaller pieces in a proportionate degree, with the result that twelve ozs. of silver yielded 45s. by tale, as against 37s. 6d. in the first year.

The weights and values of the coins, old and new, having been thus settled, and the lb. Troy (5,760 grains) having taken the place of the lb. Tower (5,400 grains), as the standard of weight, it became desirable to put forth another proclamation, as Daunce's report was of course a private communication; and this was done on November 5th, 1526. The proclamation, which cancelled that of the previous August 22nd, repeated in effect the verdict of Daunce's jury, and published the future current values of the old and new gold coins and of the newly devised silver issue. The document is of considerable length, and as it is fully quoted by Ruding it will be sufficient to say that it expressly ordered that the lb. Tower should be no more used, and that all gold and silver should be weighed by the lb. Troy, which was three-quarters of an oz. more than Tower weight. (Pat. Roll 18 Henry VIII., Part 2, m. 27, dors.)

The new coinage evidently required an increase in the number of working moneyers and certain structural additions to the mint buildings at the Tower. A full account of the expenditure thereon is included in vol. xcix, Miscellaneous Books of the Exchequer (Treasury of Receipt), from which I have taken a few items—

Expenditure upon the old mint house in the further mint yard, against the coming of the coiners strangers from the parts beyond the seas, from March 25th, 1526.
Removing the king's ordnance out of the old mint at a cost of £9 16s. 5d.

Work done upon building the new gold-shearing house £5 2s. 15d. (sic), and extras £1 16s. 10d.

Taking down the old receipt house and new setting up the same, £4 8s. (The glazier's bill for certain new windows in that house included 88 feet of new Normandy glass set in cement at 5d. the foot, and 22 feet of new Burgon glass at 4½d. the foot.)

For the arms of the King's Grace 3s. 4d., and for two badges of the King's and Queen's Grace 16d. apiece.

A casual reference to the "sovereign" question may be interpolated here. A dispute had arisen between Lord Mountjoy, the master-worker, and his three deputies, Amadas, Rowlet and Bowes, in the course of which a long statement of the latter's case was prepared, covering four years, 1526–30. During the quarter beginning October 1st, 1526, there had been a surplus from the mint operations, "the fourth penny" of which was payable to Mountjoy. This one-fourth part was £6 and 22½d. (sic), as to which Rauf Rowlett says that Lord Mountjoy had desired him to deliver "xii sofferaynes" of gold at 22s. 6d. the piece, amounting to £13 10s., "for his necessary against new year's day"; that the sovereigns were accordingly delivered as appeared by a bill, and that Mountjoy had promised to pay the over-plus of £7 8s. 4d. in the following quarter. This domestic transaction proves that sovereigns were obtainable in 1526, but whether they were newly struck or were old coins taken from store is not so clear.

In the same document Rowlett and Bowes ask for an allowance of £20 "by reason of" receiving counterfeit groats and smaller pieces, some of tin and lead, which in the melting were never seen again, some of copper, and some plated with iron and silvered over, of which iron plates they had a peck ready to show. Other entries mention the expenses of Daunce's "grand jury," amounting to 26s. 8d., which compares favourably with the cost of a Star Chamber trial of the
Two Pyx Trials in 1527.

pyx, £8 16s. 8d., and the charges of a jury, £9 6s. 8d. on the same occasion. Boat hire to Westminster was £6 8s. in one quarter, an expensive luxury. There is an item of 16s. 8d. for fifty ells of canvas to hang before the coiners for the windows, which suggests that the apertures were unglazed and that the moneyers were cold in winter. A charge of 5s. for “the procession in gang week as of old time is once in the year accustomed” refers, no doubt, to the beating of the bounds of the Liberty of the Tower at Rogation-tide. An outlay of 16d. on “the charges of St. Nicholas on St. Nicholas eve” (December 5th) is rather cryptic; possibly it alludes to a festivity connected with the saint, whose emblem was three purses of gold or three gold balls, the latter being adopted as a sign by the Lombard goldsmiths who settled in London (Exchequer Account, 302/19, and Lansdowne MSS. 4, fo. 209).

The next events to be chronicled are two trials of the pyx, both of which related to the money struck under the Cardinal’s direction. The earlier assay was held at the Star Chamber on June 4th, 1527, in the presence of Thomas Wolsey and others. There were eight satchels of gold moneys containing £80 8s. 4d., viz., £30 in fine gold of angels, half-angels, George nobles, and half George nobles, and £50 8s. 4d. in crown gold of crowns of the double rose, and half-crowns of the same, which had been taken from a total weight of 3,083 lbs. Troy of both standards, and which had been struck at the Tower between October 22nd, 1526, and June 4th, 1527. There were also seven satchels of silver moneys containing £33 4d. in groats, half-groats, pence, half-pence, and farthings, taken from 13,703 lbs. weight Troy and struck within the same limits of date. All were found to be good and legal (Exchequer Account, 303/2). It will be observed that both the sovereign and its half were absent from the pyx.

The second trial took place on November 21st in the same year, 1527, before Thomas Wolsey and others. The assays were of five denominations of silver coin, viz., the groat to the farthing inclusive, which had been made at the Tower between June 4th then last past and the day of trial, November 21st, 1527. The details as to the
number of satchels and the aggregate quantity coined are missing, and there is no mention of an assay of gold moneys on this occasion. (Exchequer Account, 303/2.)

It will be desirable to turn aside for a moment to consider the position of the three ecclesiastical mints, which, although they do not lie within the scope of this article, were apparently affected by the new regulations made at the Tower in 1526. Contemporary letters disclose a feeling of nervousness in the mind of Archbishop Warham, who wrote to the Cardinal on November 17th in that year in the following strain:—He had heard that new ordinances had been recently made with regard to the mint in the Tower and elsewhere; he and his predecessors had always had in the Palace of Canterbury a mint of coinage, and as he desired to conduct “my mint” according to the new ordinances he requested the Cardinal to declare his mind to Owen Thomson, the keeper of the ecclesiastical mint. Upon knowledge whereof Thomson had been ordered to follow the Cardinal’s instructions. The letter concludes by assuring Wolsey that the writer did not desire any great profit, but rather the convenience of the king’s subjects.

The Archbishop then pursues the subject in a second letter of December 3rd (1526), in which he says that he understood from Owen Thomson that the Cardinal was disposed to continue the ecclesiastical mint, and that Robert Amadas, the master-worker at the Tower, had been consulted thereon. The latter’s advice was that a bill should be signed by the king’s hand; if the Cardinal was content to have such a bill for his mints at York and Durham, then Warham would ask for the same for Canterbury (Arch: Cantiana, vol. i).

Although a crisis did not then develop, the suppression of the privileges of the Archbishop was evidently in the air, and Warham’s uneasiness was justified a few years later by the final extinction of the mint for which he had pleaded.

Wolsey’s association with the mints at York and Durham is attested by the silver coins of the second issue bearing the letters T. W. in conjunction with a Cardinal’s hat. The York groat is an historical coin in the fullest sense of that phrase, inasmuch as it gave rise to one of the charges formulated against the occupant of the see.
It would appear that it was the striking of the groat rather than the addition of the Cardinal's personal badge which provoked his enemies, as no archbishop or bishop had ever presumed to issue money of a higher denomination than the half-groat.

On May 20th, 1530, there was a further trial of the pyx before Sir Thomas More, who had been appointed Chancellor after Wolsey's dismissal in October, 1529. There were 31 satchels containing £34 9s. in five denominations of silver, the groat to the farthing, which had been taken from 94,755 lbs. weight Troy. The coins had been made at the Tower between June 4th, 1527, and the day of trial, May 20th, 1530, John Copynger being warden and William Blount (Lord Mountjoy) master-worker. *(Exchequer Account 303/2.)*

But although Wolsey fell into disgrace and was deposed from his high offices of state, it is satisfactory to learn, as we do, that his royal master had no fault to find with his virtual control of the Tower mint. This is abundantly shown by a warrant of 1530, which, in effect, ratified all that the Cardinal had done, and ordered the work to proceed without interruption. The new Chancellor, Sir Thomas More, is directed to issue Letters Patent addressed to the master-worker, the warden, and other officers at the Tower; forasmuch as the king had lately caused divers new coins of gold and silver to be made, therefore it was considered necessary that new indentures should be made with the master-worker for establishing the coins, and in order that expedition might be had in dealing with merchants who brought bullion or plate into the Tower to be coined, the king commanded that until the contrary was signified by him, the master-worker should cause to be made "moneys of gold and silver of such sorts and proportions as heretofore had been limited and given you in commandment on our behalf by the most Reverend Thomas, Lord Cardinal Archbishop of York, then being our Chancellor" and others. And that

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1 There is a torn piece of paper, without date or other guide to identification, on which a few words can be read, viz., "George noble and its half, twelve ounces make £27—Crown of double rose and its half, twelve ounces make £25 2s. 6d." This may conceivably be the portion of the verdict of this date which recorded the quality and amount of the gold issues. But it is doubtful.
Documentary Evidence for Coinages of Henry VII. and VIII.

all moneys so coined shall be of such fineness, weight and goodness as our said late Chancellor limited and appointed. And these letters shall be his warrant. Dated August 5th, 1530. (Privy Seal Warrant.)

The new indenture prescribed by this warrant was not in fact executed for nearly three years, so there was but little haste to revert to the system which obtained before the late Chancellor assumed control.

The mint officers had, however, been guilty of some unnamed breaches of duty, for which they now received the King's forgiveness in the following terms—

The King by his especial grace pardons and relieves Lord Mountjoy, master-worker at the Tower, Robert Amadas, goldsmith, his deputy, Ralph Rowlett his deputy, and Martin Bowes, goldsmith, deputy of Robert Amadas, from all offences in connection with the coinage at the mint, or arising out of indentures between the King and Lord Mountjoy and remits all forfeitures and penalties incurred by them.

(Privy Seal Warrant, August 5th, 1530.)

A pyx trial was held at the Star Chamber on March 1st, 1532-3, before Sir Thomas Audley and others. There were 20 satchels containing £28 5s. 7d. in five denominations of silver moneys as before, which had been taken from 40,405 lbs. weight Troy between May 20th, 1530, and the day of trial. There is no mention of gold coins on the surviving paper. (Exchequer Account 303/2.)

On April 5th, 1533, Ralph Rowlett and Martin Bowes received a joint grant of the office of master-workers at the Tower mint, they having previously acted as deputies to Mountjoy. The appointment was preparatory to the new "indentures," which should have been drawn up in accordance with the warrant of August 5th, 1530. The contract was signed on the following day, April 6th, in the 24th year (1533) and its terms may be thus abridged:—

Rauf Rowlett and Martin Bowes covenant with the King to make 6 manner of gold coins, viz.,

The sovereign, ryall, angel, George noble, angelet, and the half George noble, called the 40 pence of gold. The pound Troy shall contain £27 sterling by tale, and shall be of 23° 3\(\frac{1}{2}\)° fine gold.
An Acquittance for the Master-workers.

And two other moneys of gold, the crown and the half crown with the double rose, of 22° fine gold. The pound Troy to contain £25 2s. 6d. by tale.

And to make 5 manner of silver coins, the groat, half groat, the penny called the sterling, half penny, and farthing of 11° 2dwt fine silver, and every pound Troy shall contain 45s. by tale. (Close Roll, 25 Henry VIII., m 38d.)

This agreement should not be regarded as creating a new issue of money, and I have not so treated it, but rather as restoring the old administrative practice which had been in abeyance during the Cardinal's régime. There are, however, three points in which the indenture of 1533 differs from the verdict of Daunce's jury on October 30th, 1526, and from the proclamation of November 5th, 1526. The half sovereign, half ryal, and quarter ryal are no longer mentioned, and the two latter coins finally disappear from English numismatic history. Otherwise the documents of 1526 and 1533 are identical in all material respects.

Eighteen months later the coins were again tested at Westminster, and I will, in this instance, quote from the formal acquittance entered upon the patent rolls, which is more comprehensive than the memorandum in the Exchequer accounts:—

An assay of silver coins had been made at the Star Chamber on 30 October, 1534, in the presence of Sir Thomas Audeley, Chancellor of England, and others, of five manner of moneys struck at the Tower between 1 March, 1532-3 and the day of trial, each day included. There were 19 satchels in apta pixide containing £9 11s. 8d., in groats to farthings, taken from 20,467 pounds weight Troy. The trial was adjourned on several occasions by reason of unreadiness; finally, on 3 December in the same year the money was found to be good and lawful. An assay of gold coins was made on the same day, of one kind of money struck at the Tower within the above mentioned dates. There were 19 satchels in the pyx containing £29 15s. 0d. in crowns and half crowns of the double rose, taken from 1,087 pounds weight Troy there coined. The jury found that £25 2s. 6d. by tale (i.e., 22° gold) were made from each pound weight, and that the money was good and lawful. Rauf Rowlett and Martin Bowes, the master-workers, were by those presents acquitted and exonerated until the said 30 October. Dated 10 December, 26 H. VIII. (1534). (Patent Roll of that year, Part 2.)
Although the foregoing particulars are comparatively full and explicit, it is to be regretted that the release to the officers did not identify by means of the privy mark the various coins which had been proved. It will be seen that gold coins of the old standard (23c. 3½grs. fine) were not made during the twenty months in question.

On November 13th, 1534, a patent was sealed appointing Thomas Pope to be warden of the Tower mint as from Michaelmas then last, in place of John Copynger, but the former held that post for a comparatively short time, being succeeded by John Browne on December 23rd, 1536 (Pat. Rolls passim).

In the year 1537 there was apparently a trial of the pyx on May 8th, but there are no particulars beyond the heading of the verdict, and a list of those who were present.

There is also another incomplete record relating to the same subject, in which the details of the assay are without heading or date. The surviving portion of the sheet of paper indicates that the trial related to five denominations of gold money. There were 32 satchels containing £34 6s. 7d. in ryals, angels, half angels, George nobles and half George nobles, taken from 746 lbs. weight Troy. (Exchequer Account 303/2.) This is the extent of the information, and I feel that it would be unsafe to attempt to assign the facts to any of the trials already noted. Nevertheless this fragment of a verdict can be approximately dated. The presence of George nobles in the pyx tells us that the year cannot have been earlier than 1526, when they were first introduced; on the other hand, the ryals and George nobles fix May, 1542, as the latest possible date, because the indenture of that month and year omits them from the list of coins to be thenceforth struck.

We now reach the last of the papers relating to the Star Chamber ceremonies, an unsatisfactory series when it is contrasted with the full and methodical returns prepared by the mint accountants during the Stuart dynasty. Such information as has survived does not extend beyond 1540, and so deprives us of sorely needed light upon the welter of confusion and change which characterized the last five years of Henry's reign.
On June 16th, 1540, Sir Thomas Audley again presided, when 37 satchels of silver containing £15 and 20d. (sic) in groats to farthings inclusive, and 37 satchels of gold containing £81 in crowns and half-crowns of the double rose, were tried. The period during which the coins were made is not stated. (Exchequer Account 302/21.)

It will again be noticed that no coins of 23c. 3½grs. fine gold were included in this pyx, and the Exchequer accounts show that only 22c. gold was struck in the succeeding twelve months ending Michaelmas, 1541. (1595/2.)

The ecclesiastical mints at Canterbury, York and Durham must, I think, have ceased their operations at an unknown date before the end of the period covered by the second coinage at the Tower, that is, before 1542. We have evidence that Durham received from the warden of the Tower in June, 1539, trussels and piles for pence, that Archbishop Lee, of York, received in April, 1532, the irons for use in his mint, and that Canterbury was working as late as 1533-4, when Archbishop Cranmer entered into an agreement for the coining of silver there. This contract is not without interest. William Tillesworth was thereby appointed master-worker at Canterbury, and covenanted to make half groats, sterlings and half sterlings of a standard and weight which accorded with the terms of the Tower indenture of April 6th, 1533. Tillesworth undertook to place in a box 2 dwt. of every 10 lb. of coined silver, which was to be tried before the Archbishop in the most just manner; he also promised, inter alia, to "bere hym towards the said Archebishop well and convenable." Dated January 16th, 25 H. VIII. (Lambeth Library. Cartae antiquae II, 3). Although I have so far been unable to trace the date of the presumed decree which extinguished the prelates' mints, it seems reasonable to believe that the policy which resulted in the suppression of the monastic houses was also the cause of the withdrawal of the privilege of coining money in these three cities. Canterbury and York, after an interval of some years' duration, were re-opened by the king as royal mints under his own control. Durham, however, did not enjoy a further lease of life in any form.
The Third Coinage, 1542 (34th Year).

Shortly before the introduction of this coinage, viz., on January 23rd, 1541-2, a proclamation announced that Henry VIII. had decided to add the title of King of Ireland to his other dignities. It is recited that the king by desire of the Irish Parliament took upon himself the title and name of King of Ireland, and that justices and ministers who may omit to use the new style shall not be impeached for such an omission if made before April 30th then next, and that all writings with the old style shall be valid if written before that day.

The date of this declaration is a little important because it suggests an explanation of the words Hib. Rex which occur on a few groats of the second issue with the mint mark Pheon. It is possible that these pieces were struck during the five months which elapsed between January 23rd, 1541-2, and May 16th, 1542, the latter being the date of the indenture which regulated the third coinage, and it follows, of course, that the mint-mark Pheon must be assigned to the years 1541-2. This confirms the opinion expressed by Mr. L. A. Lawrence in Num. Chron., 4 S., xi, p. 34, where he discusses a find of coins which included several examples of the groats in question. On the other hand, there is some evidence that moneys of the second and third coinages were struck concurrently. An Audit Office account (1595/3) from Michaelmas, 1542 to the same day in 1543, shows that work was then being done in accordance with the indenture of April 6th, 1533. (See also Exchequer Account 302/22, to be subsequently quoted.)

The first step towards the third coinage was the reappointment of Sir Martin Bowes and Rauf Rowlett as master-workers, Bowes on this occasion taking precedence of his senior colleague. This was done on May 15th, 1542, and on the following day an indenture on the usual model was executed by the two goldsmiths. The original deed can still be seen at the Public Record Office, and as its terms were not entered upon either the Patent or Close Rolls its survival is still more to be welcomed. The text-books generally give the year as 1543, but 1542 is more exact.
The master-workers bound themselves to make five manner of gold coins.

The sovereign, for 20s., of such weight that 28 plus 2 angels shall equal 1 lb. Troy (i.e. 200 grains each).

Half sovereign, for 10s., of such weight that 57 plus one half angel and one quarter angel shall equal 1 lb. Troy.

Angel, for 8s., 72 in 1 lb. Troy.

Angellet and quarter angel in like proportions.

To be of the standard of 23 c. fine gold and 1 c. allay in the pound Troy, which shall contain £28 16s. by tale.

And six manner of silver coins.

The teston, for 12d., of such weight that 48 shall equal 1 lb. Troy.

The groat, half groat, penny, half penny and farthing in like proportions.

To be of the standard of 10 oz. fine silver, and 2 oz. allay in the pound Troy, “that is to say, to hold two ounces of allay more in the pound weight than doth the sterling money made before the date of this indenture.” [The words within inverted commas are very strange.] Each pound Troy shall contain 48s. by tale. Two ounces of copper or red allay shall be used in each pound weight of silver, for which the king will pay. A privy mark on all coins, and the pyx to be opened every three months. Dated 16 May, 34 H. VIII. (Exchequer Account 306/2).

The terms of this contract exhibit another stage on the downward course which began with the use of crown gold in 1526. The standards of fineness of both gold and silver were now reduced, the former from 23 c. 3½ grs. to 23 c., the latter from 11 oz. 2 dwt. to 10 oz. in the pound Troy, respectively. The weight of the angel remained unaltered, but that of the sovereign was reduced by 40 grains, the latter coin being rated at 20s. only, as a set-off, perhaps, to the loss in weight. The ryal and the George noble and its half, of fine gold, together with the crown and its half of 22 c. gold, were no longer to be made.

The weight of the silver pieces was once more diminished, the penny being now 10 grains only, and the other denominations in proportion. As was the case in the second issue, it is again the silver
coins which show the greater variation from the last preceding types. The king's profile portrait was then abandoned, and thenceforth we see a full-faced picture, for which Sir Thomas Wriothesley, then chief graver, would have been nominally responsible. The obverse legend of the three largest coins in silver always includes the words "Hib. Rex," or a further abbreviation thereof, and the Arabic 8 sometimes takes the place of VIII.

There are two denominations which were certainly new, and one which should probably be placed in that category. The quarter angel makes its first, and also its last, appearance in our monetary system. The silver teston, to pass for 12 pence, is the earliest current coin of this value, and I will repeat here that the word "shilling" is never used in contemporary mint writings of Henry VIII. The coin which may have been struck for the first time in 1542 is the half sovereign; it is true that a statute of 1503 and Dauce's verdict of 1526, both previously cited, refer to this denomination as if it were already existing, but I find no definite order to make such a coin before the date of the indenture now under consideration, nor is any specimen known which could be assigned to a date earlier than 1542.

Immediately following the indenture was a proclamation which, although by some mischance not fully dated, is easily referable to May, 1542. This public notice is more useful than others of the same kind, as it explicitly mentions the new coins and describes some of them, in addition to fixing the values of the previously existing gold currency. Ruding (3rd edition, p. 310) sets out a list of the moneys, but adds in a footnote that "all these coins are said to be newly made," a comment which the words of the proclamation do not support. It will be desirable, therefore, to cite a portion of the broadsheet in order to make the facts clear. The document states that its purpose is to declare the values of sundry gold and silver coins, and to raise the price of (24 c.) gold to 48s. the ounce, and (12 oz.) silver to 4s. the ounce. That whereas gold coins, "nobles, half nobles and royalls," had been enhanced in value in outward parts beyond the sea, to the loss of the king's subjects, the king commanded, in order that coin should not be secretly carried out of the realm, the values of gold coins to be enhanced
to countervail such increases in outward parts. His Majesty, to the intent that money might be more plentiful—

"hath caused a piece of gold to be newly made which his Highness wills shall be called the sovereign and shall be current for 20s. Item, an half sovereign which his majesty wills shall be current for 10s."

The royall, being weight, shall thenceforth be current for 12s.
The angel 8s.
The half angel 4s.
And the quarter angel, "being also newly made," shall be current for 2s.
And the king had "likewise caused to be newly made certain pieces of silver," that is to say—

A piece called a testorne which shall be current for 12d.
A grote with a whole face 4d.
A half grote of the same stamp 2d.

All sums due to the king and others before the first day of "this present month of May" shall be paid after the rate of 7s 6d the angel.

(Library—Society of Antiquaries.)

The only direct clue to a date lies in the allusion to the month of May, but the text of the announcement establishes beyond question that it relates to the coins which were ordered, as we have seen, on May 16th, 1542.

Of the gold pieces, the ryal, angel and half angel had been in circulation for a long period, and were mentioned only for the purpose of an increase in their rating.

As regards the silver currency, the proclamation removes any doubt that the earliest "whole face" coins were struck in 1542.

Two exchequer accounts, from July 1st, 1542, to March 31st, 1544, tell us that work in accordance with the last-mentioned indenture began in the following July and that 541 lbs. Troy of 23 c. gold were coined in the nine months ending March 31st, 1543. No more of that metal was used by the moneyers during the remaining twelve months of the account. Silver of 10 oz. fine, amounting in round figures to 22,053 lbs. Troy, was coined throughout the whole period of one year and nine months. (Exchequer Account, 302/22, and Pipe Office 2075.)
During the same twenty-one months gilt plate weighing 34,044 oz. Troy at 4s. 2d. the oz., and parcel gilt and white plate weighing 38,697 oz. at 3s. 8d., were received and melted at the Tower. This mass of silver, say 2½ tons avoirdupois, was doubtless part of the spoil taken from the religious houses at the time of their suppression.

The mint papers do not contain, as far as I have observed, any instructions to place upon the gold coins the initials of the king's successive consorts, although we know that this was done in several instances, if not regularly, after 1526.

**The Fourth Coinage, 1544 (36th Year).**

The year 1544 deserves particular attention by reason of a fundamental change that was then effected in the constitution of the mint, and before commenting on the meagre records of this coinage, it will be needful to explain the nature of the reorganisation at the Tower which came into force on May 28th in that year. The object of this domestic revolution is not at all apparent, but the result was to divide the establishment into two, and shortly afterwards into three separate mints which worked independently, each being placed under the control of an officer who was styled "under-treasurer." So thorough-going were the outward signs of these reforms, that the time-honoured office of warden was abolished, and its title discarded, as was also the almost equally ancient designation of master-worker. John Browne was the last warden, or titular head, of the undivided mint under the old system, and the office was not again created until the middle of Elizabeth's reign, during, I think, the year 1578. As an alternative system, we now have two, and then three Tower mints, with their respective under-treasurers rendering accounts to a high treasurer, who was the connecting link between them and the king's exchequer. Whether this method of administration was more desirable than the old plan, and whether the officers with their brand-new labels were more efficient than their predecessors, may well be doubted when we consider the state of the currency during the remainder of Henry's reign and during that of his son.
The Patent Rolls of 1544–45 disclose the under-mentioned changes in the staff at the Tower:

John Browne, on relinquishing the office of warden, an annuity of £18 6s. 8d.
Hugh Egleby, on relinquishing the office of controller, an annuity of £20.
Sir Edmund Peckham to be treasurer, £200 p. a.
Sir Martin Bowes to be an under-treasurer, 200 marks p. a., and an annuity of £66 13s. 4d. on relinquishing as master-worker.
Stephen Vaughan to be an under-treasurer, 200 marks p. a.
Thomas Knight to be an under-treasurer, 200 marks p. a.
Robert Brock, clericus, controller, £100 p. a.
John Yorke, assay master, 100 marks p. a.
Thomas Stanly, assay master, 100 marks p. a.
William Billingsley, assay master, 100 marks p. a.
William Knight, assay master, 100 marks p. a.
Henry Basse, graver, £20, and afterwards £30 (this office was not duplicated or triplicated).
Denys Coventrie, priest, to be surveyor of the meltings and purger of the allays.
Thomas Fleetwood, teller, 50 marks p. a.
Thomas Bowes, teller, 50 marks p. a.
John Browne, to be surveyor, £53 p. a.
Richard Wigmore, to be surveyor, £53 p. a.

The first business of the newly-constituted mints was to strike the fourth coinage of 1544, and I think that we shall be obliged to revise the commonly accepted opinion as to the character of this issue of money. I will, however, preface my explanation by saying that not one indenture or commission is to be found which relates to the period between 1542 and the end of the reign, although there were two additional coinages as the books tell us, or three as I shall hope to prove, during those four years. The missing documents would have dealt with a critical time in currency matters, when each new contract with the officials was the occasion of a further debasement of the standards of fineness. But there are, happily, some valuable Exchequer Accounts which supply certain details, limited though they are, and the appended extracts bear witness to the standards which were used by Sir Martin Bowes and by Stephen Vaughan in 1544. It is a singular
fact that these accounts were not prepared in the ordinary course, but were due to the subsequent dissatisfaction of some keen-eyed persons who caused Bowes to be summoned before commissioners appointed in 4 Edward VI. and to produce a reckoning which is much fuller than the usual statements (Exchequer Accounts 302/27).

Sir Martin Bowes, one of the under-treasurers of the Tower, furnishes an account from June 1st, 36 H. VIII. (1544) to September 30th, 1 Ed. VI. (1547), three years and four months. He recites in the preamble that an indenture had been made with himself and Stephen Vaughan, dated May 28th, 1544, and containing the standards of 23 c. gold and 1 c. allay, and of 9 oz. silver and 3 oz. allay in the pound Troy, respectively.

He then goes on to state the weights of the two metals which had been struck into coin in his office.

Between June 1st, 1544, and March 31st, 1545. Gold of 23 c. fine, 5,761 lbs. Troy.

Between June 1st, 1544, and March 31st, 1545. Silver of 9 oz. fine, 62,203 lbs. Troy.

These extracts bring to light two new factors in determining the arrangement of Henry's debased coins: (1) That the standard of 23 c. gold, as ordered for the third issue, was continued during the fourth, and that gold of 22 c. was not then used. On this point our text-books seem to require amendment. (2) That the standard of silver was 9 oz. during the fourth issue, and not 6 oz. as generally conceived and stated. I do not observe that writers on numismatic subjects have associated the 9 oz. standard of silver with any English issues of this reign.

Bowes also mentions that angels and half angels, groats and half groats (six of each) were delivered to the king that he might view the print and stamp; that on another occasion sovereigns and half sovereigns, angels, half and quarter angels (six of each) and 60 groats were submitted for a like purpose. Both deliveries were of the 23 c. gold and 9 oz. silver standards, respectively. This incident is not altogether without value, as it affords presumptive evidence that at least a few angelets and quarter-angels were struck during the period of the fourth issue.
The Fifth Coinage, 1545.

Before passing on to the next chapter I will add that no accounts of the work done in Stephen Vaughan’s Officina have survived, but as he was a party to the indenture of 1544 we may suppose that he was not unemployed, and that the products of his "establishment" were much the same as those made by his colleague Sir Martin Bowes.

The Fifth Coinage, 1545 (36th Year).

The spring of the year 1545 was signalized by the inauguration of royal mints at Canterbury, York and Southwark, but it will be convenient to deal first with the three undertakings at the Tower which controlled the principal supply of current moneys.

In describing the fifth issue I must be content to rely mainly on the source of information which aided me in respect of the last preceding chapter, and to quote those parts of Exchequer Account 302/27, which are applicable to this year, with the addition of extracts from a corresponding return by another under-treasurer at the Tower, which opportunely fits in at this juncture.

William Lowndes (1695) tells his readers that the pound Troy of gold in 36 H. VIII. (1545) contained £30 by tale, as against £28 16s. in the previous coinage, and probably he is right. It is not unlikely that Mr. Kenyon procured the similar statement on p. 95 of his work from Lowndes’s Essay, as the author of the Gold Coins evidently had not seen the indenture itself or a copy. The gold crown and half-crown were apparently reinstated in the order of this year, while the angel and its divisions were omitted. Lowndes also says that the pound Troy of silver in 1545 contained 48s. by tale, and I see no reason to question that figure, as it was still obtaining in the first year of Edward VI.

Turning again to the Exchequer Accounts, Sir Martin Bowes recites that an indenture had been made with himself, Stephen Vaughan and Thomas Knight, as the three under-treasurers at the Tower, dated March 27th, 36 H. VIII. (1545) and containing the standards of 22 c. gold and 2 c. alloy, and of 6 oz. silver and 6 oz. alloy in the pound Troy, respectively.
Bowes had struck into coin in his office—
Between April 1st, 1545, and March 31st, 1546, gold of 22 c. fine, 6,869 lbs. Troy.
Between April 1st, 1545, and March 31st, 1546, silver of 6 oz. fine, 73,398 lbs. Troy.
These two standards have been usually classified as belonging to the fourth coinage in the 36th year, according to the arrangement accepted in *The Silver Coins of England* and in the *British Museum Handbook*.

The parallel account by Thomas Knight narrates the execution of the last-named indenture of March 27th, 1545, by himself, Bowes and Vaughan. His figures begin from July 1st in that year, and end on March 31st, 1547 (1 Ed. VI.).

During the period of this coinage he had struck into print in his office—
Of 22 c. gold, 2,310 lbs. Troy; and of 6 oz. silver, 27,572 lbs. Troy.

Thomas Knight also notes that the white alloy cost 37s. 4d. the lb., and the red alloy 2d. for the same quantity (*Exchequer Account 302/29*).

I will now deal with the three subsidiary, but nevertheless royal mints of Canterbury, York and Southwark. Here, as at the Tower, there is only indirect evidence as to the denominations of the coins which were ordered to be struck, the indentures in every case having been apparently lost or destroyed, and the customary enrolments omitted. It will at all events be helpful to know precisely when the country mints began their respective operations, more particularly in the case of Southwark, which did not place its name upon the coins, a practice which has caused the attributions to that mint to be rather speculative.

Canterbury began working in June, 1545, as is proved by an account which also recites the fact that an indenture between the king and William Tillesworth, as under-treasurer, had been executed on March 27th in the same year. The administrative system installed at the Tower in 1544 was now adopted in the Kentish city, the under-
Canterbury and York, 1545.

treasurer being presumably the goldsmith who had previously been master-worker for Archbishop Cranmer at the defunct ecclesiastical mint. The accounts show that no gold was wrought and that the standard of the silver coins was 6 oz. fine, as at the Tower. On May 28th, 1545, Tillesworth was directed by a royal warrant to strike a fifth coin, viz., the groat of the standard lately devised, until All Saints Day next following, and during that time groats alone, notwithstanding that the king had ordained half groats to farthings only. (Chan. Warrant 37 Henry VIII.) 345 dozen of coining irons, at 7s. the dozen, had been made and engraved at the Tower for use at Canterbury during the five years covered by the under-treasurer's account, and there is a charge for men, horses, and a barge to convey the irons between London and Canterbury every month. It is also mentioned that a trial of the money in the pyx took place before Sir Edmund Peckham, the high treasurer, an allowance being made to Tillesworth for certain "6 oz. silver coins" then melted. This would appear to have been a private assay, and not one of the Star Chamber proceedings. Tillesworth had struck into coin at Canterbury between June, 1545, and April, 1546,—

Of silver of 6 oz. fine, 21,309 lbs. Troy.

The king's gain was 20s. on every pound weight so coined, pure silver then costing 4s. 8d. the oz. (Exchequer Account 302/25.)

I feel conscious that bare figures such as those just mentioned are perhaps unsatisfying to the collector-numismatist, but at all events they enable the student to compare the output of the country mints with that at the Tower.

The mint at York was established, as appears from the under-treasurer's account, by an indenture dated March 27th, 1545, between the king and George Gale and others, and work began on May 1st in that year. About twelve months after the commencement a difficulty arose as to the provision of suitable workshops and quarters for the moneyers, and in April, 1546, a letter was sent to the Council in the north requiring them to appoint a better place for the mint, as the site then used was unwholesome and insecure. This request was followed by a letter to the Archbishop in the next month, instructing him to provide
a more convenient place, in the Palace if possible, or, alternatively, at St. Leonards within the city, but there is no minute stating the result of the correspondence.

The coinage made by Gale was limited to silver of 6 oz. fine, in conformity with the standard then used at the Tower. Between May 1st, 1545, and March 31st, 1546, he coined 20,290 lbs. Troy of that metal. No gold coins were issued there. On May 28th, 1545, the under-treasurer at York was ordered to strike groats alone until All Saints Day then next, the warrant being identical with that sent to Canterbury on the same day which has already been quoted here.

The third of the lesser mints was erected in a new district, namely at Suffolk House, a royal manor in the borough of Southwark, and placed under the care of John Yorke, who had previously been assayer at the Tower. Indeed, all the principal members of the staff at Southwark were transferred from the headquarters on the other side of the river. John Yorke's tenure of office as under-treasurer began on June 19th, 1545, and, although his indenture is not to be found, we may fairly assume that its date and terms were similar to those of the contracts made with the officers at the two cathedral cities above mentioned, viz., to strike money of 6 oz. fine silver, probably in the form of the half-groat down to the farthing. There are no Southwark accounts now existing, consequently we might be in doubt as to whether that mint was more than a paper organization were it not for a return made by Sir Edmund Peckham, the high treasurer, in which he credits John Yorke with a payment in July, 1545, of profits due to the king. This affords good evidence that work had been begun there without delay. The absence of the mint name on the reverse causes the identification of John Yorke's coins to be a difficult matter, for the reason that no silver coins of Henry VIII. are known with the mint mark Y, which has been regarded as a distinctive Southwark mark when it appears on the currency of Edward VI. The privy symbol used at Suffolk House during 1545/46 is still to be sought for and found. On September 5th, 1545, Sir Thomas Wriothesley writes to Sir William Paget ("Letters and Papers of Henry VIII.") , saying that they would get money sooner if a commission were signed for
Southwark to coin gold, as John Yorke's former commission was for silver only. There is, however, no proof that this mint was authorised to strike gold earlier than the first year of Edward VI., but it is not impossible that the Southwark indenture of 1546, which is among the missing items, might have contained such an order.

In November, 1545, Wriothesley again writes to Paget, and, after commenting on the scarcity of money, remarks that a certain sum would shortly be ready from the mints, "Our holy anchor." In the following year the same writer tells Paget that "the mint is drawn dry and much owing for bullion." These phrases suggest that the undertakings at the Tower and elsewhere were regarded by the courtiers of that day as expedients for meeting the extravagance of the King, and not as instruments for satisfying the requirements of his subjects.

The Sixth Coinage, 1546 (37th Year).

The available evidence as to the sixth and last issue is derived from the documents which were quoted in the two preceding years. Sir Martin Bowes states (Exchequer Account 302/27) that an indenture had been executed by himself, Vaughan and Knight, as the three under-treasurers at the Tower, on April 1st, 37 H. VIII. (1546), containing the standards of 20 c. gold and 4 c. alloy, and of 4 oz. silver and 8 oz. alloy in the lb. Troy, respectively. These figures exhibit the worst of the adulterations then imposed upon English people, there being no further change before the King's death, which occurred on January 28th, 1546/7.

Sir Martin Bowes had coined in his office—

Between April 1st, 1546, and March 31st, 1547, gold of 20 c. fine, 3,586 lbs. Troy.

And between April 1st, 1546, and March 31st, 1547, silver of 4 ozs. fine, 50,100 lbs. Troy.

The separate account of Thomas Knight also recites the same extracts from the last-mentioned indenture, and states that he had struck into print in his office in the course of the same twelve months—

Of 20 c. gold, 1,249 lbs. Troy.
And of 4 ozs. silver, 30,731 lbs. Troy (Exchequer Account, 302/29).

No accounts from Stephen Vaughan are now forthcoming in relation to this or either of the two preceding issues, but he was nevertheless a party to the three Tower indentures and duly received his annual fee as an under-treasurer.

Thomas Hearne, the antiquary, relates an unvouched anecdote in connection with this silver coinage, so largely composed of copper or other alloys. The workmen on Tower Hill had complained that they "were sick to death with the savour." By way of remedy they were ordered to drink out of skulls, and the heads of malefactors were removed from London Bridge to be converted into cups for use in the melting house.

William Tillesworth and his colleagues at Canterbury were also parties to a new indenture dated April 1st, 1546, which ordained that the coins struck in that city should thenceforth be of 4 ozs. fine silver, and the operations were begun in the next month, but no gold was wrought there. The under-treasurer struck into coin between May, 1546, and March, 1546–7, thus slightly overlapping Edward's reign—

Of silver of 4 oz. fine, 17,944 lbs. Troy.

The King's gain was 29s. 4d. on every pound weight so coined.

A portion of the necessary bullion was obtained by melting silver ornaments taken from the cathedral church, a list of which is now appended. The gold vessels, etc., were, however, consigned to the crucibles at the Tower. I think that these particulars have not been hitherto printed in any history of the city or cathedral.

325 lbs. weight Troy of gilt silver and enamelled plate, part of the ornaments of the altar, were molten in the mint, but no schedule is given.

Also, from the vestuary of the same church—

1 pare of white candellstyccks, 57 oz.; certain white plates being parcel of a roodes coate, 65 oz.; In like plates of a roodes cote, being of thone side gylted, 100 oz.; 2 pare of sensores, thone pare percent gyllte, 82 oz.; 1 pare of cowrse candelsticks caste, 282½ oz.; and the remains of thaulter plate, 22 oz.
The Destruction of Church Plate.

Total 50 lbs. 8¾ oz. Troy.
Also, gold ornaments from the vestuary,—
"A crowete; a rowde boxe; and a pyx of gold," weighing together 41½ oz. The total (melting) value of the plate then taken from the cathedral was £1281. (Exchequer Account 302/25.)

The mint at York in like manner changed its standard to 4 oz. fine silver, in obedience to the provisions of a contract dated April 1st, 1546, as recited in George Gale's account. The under-treasurer in that city struck into print between April, 1546, and March, 1546–7—

Of silver of 4 oz. fine, 28,736 lbs. Troy.

The account further shows that many of the churches in the northern province had been similarly despoiled and their plate used for coinage purposes, but the articles are not individually set out. From the minster church in York there had been taken 328 oz. of gilt plate and 20 oz. of parcel gilt, wherein the relics of the cathedral were kept. From the fraternity of Corpus Christi, in York, 1,009 oz. of gilt and 21 oz. of white plate, part of the ornaments of one shrine appertaining to the said Guild. From the East Riding of the county 149 lbs. weight, and so on from the neighbouring counties, with the details of which I will not burden these pages, as the names of the churches are omitted.

It is not quite clear when this church plate was in fact converted into coin, either at York or at Canterbury; the bulk of it was undoubtedly seized during Henry's reign, but some at all events was still unmelted in the month following Edward's accession. Probably the metal was used at various times during the four years and eleven months covered by Gale's account, viz., from May, 1545, to March, 1550 (Exchequer Account, 296/18). In this document I also noted some details as to occurrences on the death of Henry VIII. It then became necessary to send the treasure, amounting to £20,000, from York to London, and the transport of this sum was effected by 40 men with 40 horses and weapons and eight cariars (carriages). As it was then winter time, the men were provided with 40 frieze coats which cost 2s. 6d. each. The journey to and fro occupied sixteen days. The mint officers at York wore mourning after Henry's death; 21 yards of
black cloth, at 8s. the yard, were made into gowns for them, and the
cost was debited to the Crown.

Southwark has handed down to us neither the indenture nor the
accounts of 1546, so we are again obliged to take for granted that the
instructions given to that mint on April 1st, 1546, were similar to those
issued for the guidance of Canterbury and York, subject to the
possibility that Wriothesley's suggestion as to a gold coinage may have
been adopted for Suffolk House.

In this year, 1546, a new mint was set up at Bristol, the annals of
which have been described by me in Num. Chron. 4 S., vol. ii, p. 331.
It will therefore suffice to say here that Bristol differed from the King's
other provincial mints in some important respects. The under-treasurer
in the western city was authorized to strike gold money of 20 c. fine in
addition to Irish and English silver currency, and also to employ a
graver for the local coinage, an exceptional privilege. The industry
in Bristol Castle began soon after April 1st, 1546, the date of the
indenture with William Sharington, a document which has suffered
the fate of other contemporary writings of that class.

I have now reached the end of the extracts, which serve to
illustrate, with varying degrees of clearness, the numismatic history of
the early and middle Tudor age. Although the latter portion of the
evidence has been scanty and too much in the nature of mere statistics,
the figures are nevertheless valuable as being the only available
means of establishing the fact that there were, at the Tower, six
distinct coinages of silver and five of gold during Henry's reign.

I will conclude this portion of the paper by an allusion to an
event which doubtless contributed to the efficient working of the
Tower mint, viz., the provision of an artificial supply of water, and
it is perhaps remarkable that the subject has escaped the notice of
the historians who have written concerning the city's stronghold.
The Exchequer Account 302/27, which has been so useful to me in
the foregoing pages, contains this additional memorandum—

The conduytt of water. Also the said accomptante is allowed for
money by him paid for leade, workemanship, laborers wages,
brick, lyme, tyles, digging and layeing of pipes of leade in a conduit
Analyses of Silver Coins of Henry VIII.

made for the conveyinge of water from Bednall greane withowte the suburbes of London unto the Towre for service of the mintes aforesaid and of all other offices within the Towre, being of great necessitie and comoditie for the service of the King, the chardges whereof do amounte as apeth in thadvouchement of this accompte to clxli. (£160).

The accomplishment of this scheme to bring water to the mints from beyond Bethnal Green, at that time a rural district, anticipated by 70 years the more ambitious New River Channel of Sir Hugh Middleton, who was himself a goldsmith and a juror at trials of the pyx under James I.

Assays of Silver Coins.

In order to determine if possible the years in which some of Henry's silver coins were struck, more particularly those of the debased issues, eleven groats have been tested by Messrs. Johnson, Matthey and Company, and the results of their analyses are set out in the following table. Although the reports are in some respects inconclusive and do not by any means correspond with the respective standards ordered by the indentures, it is most remarkable that the proportion of fine silver exceeds the presumed official ratio in every case save that of the profile groat (No. 1 in the table), which alone is slightly deficient in purity. I observe that all the groats which are generally assigned to the latest and worst coinage (Nos. 5 to 11) are better in varying degrees than their prescribed standard of 4 oz. fine silver in the lb. Troy, a result which proves honesty in the mint workshops, even if more accuracy might be expected. A certain number of these low-grade pieces may have been, nay, probably were, struck in the days of Edward VI., who also adopted the 4 oz. standard, among others. I was desirous of identifying a coin of the 9 oz. standard used for the fourth issue in 1544, according to my classification in the foregoing pages, and it would appear that No. 2 was struck in that year, as the quality of the metal approaches more closely to the ratio ordered in 1544 than to any other.
No. 1 is a groat of the second coinage, 1526; Nos. 2 to 11 are
groats of the full-faced coinages with portrait, etc., of Henry VIII.

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<tr>
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<tbody>
<tr>
<td>1 Lys... ... Lombardic ... Tower mint ...</td>
<td>oz. dwt. gr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Lys... ... &quot; Posui Lys in forks of cross</td>
<td>10 19 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Nil ... ... Roman.Civitas $ in forks ...</td>
<td>9 2 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Arrow, rev. &quot; Posui Annulet in forks</td>
<td>6 5 12*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Grappling-iron, rev. &quot; &quot; Half rose &quot;</td>
<td>4 8 0 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Nil ... ... Lomb. Civitas Α and $ &quot;</td>
<td>4 5 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Lys, rev. ... Mixed. Posui Annulet and pellet in forks</td>
<td>4 4 0 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 K, obv. ... Roman. &quot; ... Annulet in forks</td>
<td>4 3 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 E, rev. ... &quot; Civitas &quot;</td>
<td>4 2 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Martlet, to right ... &quot; Posui Half rose &quot;</td>
<td>4 0 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Lys, rev. ... Lomb. &quot; Annulet and pellet in forks</td>
<td>4 0 12</td>
<td></td>
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</table>

* And 6 gr. gold.

Observations on the Mint-marks on Some of the Late Coins with the Portrait and Titles of Henry VIII.

A well-defined attribute of the coinage during Henry's closing years and the whole of Edward's reign is a group of mint-marks in the nature of personal emblems, most, if not all, of which should, I think, be interpreted as referring to the officers who controlled the operations at the various establishments. I am disposed to regard the introduction of this type of symbol as being due to the setting up of new mints and to the subdivisions effected at the Tower in 1544, for it would then have been most desirable to identify the coins struck by the several under-treasurers at a time when the trials of the pyx had apparently fallen into disuse.
The marks in question consisted of (1) monograms, (2) single letters, (3) heraldic devices, (4) punning allusions, and they were used, if I am correct, by Henry's or Edward's officers at all the undertakings save those in the cities of York and Canterbury. During the Henry–Edward period there are some half-a-dozen accepted instances of the practice to be seen on coins attributed to Sharington, Chamberlain, John Yorke, Martin and John Bowes, Peckham, and Throckmorton, all of which come under one or other of the four headings just mentioned. There are also other instances of marks of a similar character, the meaning of which is still debatable. After Edward's death this description of privy mark was entirely abandoned, because, as I think, the concentration under Mary's rule of all the work into one single organization at the Tower cut adrift many officers, and with them went the need for their distinguishing emblems.

The late Sir John Evans discussed, in *Num. Chron.* 3 S., vi, 114–160, the import of the mint-marks used under Henry VIII. and Edward VI. On the present occasion I shall venture to confirm some of his explanations and to suggest alternative readings in other cases.

The mint-mark K occurs, in the usual position, upon a groat and half-groat with the *Posui* legend, and under the shield of a half-sovereign with the young portrait, which is not otherwise marked (*Kenyon*, p. 99, No. 26). I propose to attribute the K coins to the branch of the Tower mint supervised by Thomas Knight who became, as I have already shown, an under-treasurer in 1545, and held the office until he died in 2 Edward VI., 1548. The foregoing assays proved that a K-marked groat was approximately of 4 oz. fine silver, the standard brought into use at the time of Knight's appointment and continued until after his death. The half-sovereign was presumably issued after Edward's accession, but the silver pieces may have been struck in either or even in both reigns. If Sir John Evans had been aware of Knight's post at the Tower, he might have preferred the solution now put forward to his own suggestion that K stood for Katherine, the Queen Dowager.

I will next consider the martlet. Sir John in the same article assigns to Southwark the coins with this mark, on the ground that an official named Thomas Fletewoode bore martlets as a charge upon his
shield of arms. Now Fletewoode was appointed controller of that mint on March 1st, 2 Edward VI., 1547-8, and he retired with a pension in May, 1552 (Pat. Rolls, passim). The weak point is that the controller was only second in command at Suffolk House and that his chief, John Yorke, was using his own mark, the Y, about that time, but possibly the head of the establishment had temporarily returned to the Tower, as he undoubtedly did at a later date. Be that as it may, I can adduce a fragment of circumstantial evidence which helps to corroborate Sir John Evans’s opinion. In the second year of Elizabeth, 1559-60, one of the under-treasurers at the Tower was Thomas Fletewoode, presumably the Southwark controller of the previous decade, and in 1559 or thereabouts the martlet was used as a mark on Tower coins. If this recurrence of the name and the symbol was a chance coincidence it deserves quite a high place among such phenomena. The acceptance of the explanation would necessarily transfer Henry’s “martlet” coins to Edward.

The mint-mark E now claims attention, and it is perhaps the most puzzling in the whole series. It is found upon a young-portrait half-sovereign and a half-crown, and upon a groat and half-groat, all of Henry; also upon an early half-sovereign of Edward, and upon a groat, half, and penny of the latter King. It is noticeable that the E-marked groats and half-groats, of Henry and Edward alike, invariably have the Civitas London legend on the reverses, while the lozenge, as a stop, occurs on gold and silver with either portrait. Should we not, therefore, regard all these coins as belonging to one period, or to immediately successive periods, of Edward VI.? Sir John Evans, on p. 134 of his paper, allocates the E coins to Southwark and states his reasons for so thinking, but there is a serious obstacle to such a deduction. The larger silver pieces bear the Civitas legend only, from which I infer that they were struck at a mint in the city of London. Southwark, however, has never been technically within the city, and its inhabitants have never possessed the privileges of citizenship. Nevertheless it is a fact that Edward VI. granted his manorial rights in that borough to the Lord Mayor and Aldermen on April 23rd, 1550, but the King reserved from the grant Suffolk House and its park, the former of which contained
The Mint-marks.  

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the mint. Consequently I believe that the little group of E-marked coins was a product of one of the sections at the Tower.

With respect to the interpretation of the mark, the same author expresses, on p. 128, a guarded opinion that it may represent the first initial of Edward Seymour, Duke of Somerset and Lord Protector of the Realm. I have tried to find a contemporary reference to such an unusual step, but the documents do not assist in any way beyond making it clear that the King when giving orders to the mint acted upon the advice of the Protector and the Privy Council. So we are thrown back on the probabilities of the case, and these to my mind are slender. If the Duke of Somerset directed the insertion of the letter E as a token of his high authority, he did it in the capacity of Protector and not as a mint official, a position which he is not known to have held. That being so, it is strange that his initial was not placed upon the whole of the coinage and that he was indicated sometimes by E, sometimes by S, and also by both letters. So far as I am aware there is only one functionary at any of the mints who could be said to be associated with this mark. He is Thomas Egerton, who received a patent as treasurer at the Tower on June 8th, 1552, the grant taking effect from the preceding Lady-day. It will be urged against this theory that the E coins with Henry’s portrait would thus be removed to the last eighteen months of Edward’s reign, and that the sequence of the latter’s gold coinage would be materially disturbed. These are at present formidable difficulties, and until it can be shown either that Egerton was holding the reins at an earlier date than his formal appointment would imply, or that the E coins are later than we believe them to be, the solution of the point would appear to be still unfound. Whatever the true explanation may be, there is entangled with it the question of the two marks $ and $. These letters occur on some coins as mint-marks, and on others they are to be seen in the forks of the cross. The British Museum Handbook suggests that $ denotes Hugh Eglonby, a controller at the Tower. This official was appointed in March, 1541-2 and was pensioned on retirement in June, 1544, at the time of the re-arrangement previously described under that year. Therefore, the standard of silver coins bearing the first letter of his patronymic ought to be 10 oz. fine,
but the assay of a groat (No. 6) with € and $ in the forks (which must be allied to € as a mint-mark) showed a result approximately corresponding with the 4 oz. standard of 1546. Under these circumstances Eglonby must, I fear, be excluded, unless other silver coins with the same mark reveal a much higher degree of fineness.

A few of the coins marked with the “annulet enclosing a pellet” bear what may be an additional privy sign. Our member, Mr. A. H. Baldwin, has pointed out to me two examples of the teston, one of which bears a smaller annulet on the inner circle of the obverse under the R of Rex, while the other coin shows the same object in a similar position on the reverse. I have not observed this peculiarity on the lower denominations in silver, but I find that it is noted by Kenyon on p. 97 as occurring in the inner circles of half-sovereigns with the old portrait and with the same mint-mark. Were it not for the fact that the annulet is also known on the angel, it might be regarded as an accident on the teston and the half-sovereign, the inner circles of which have almost identical diameters.

In conclusion, I will express the hope that attention having now been directed to the triple organizations at the Tower, it will become possible to assign one of the unappropriated mint-marks to Stephen Vaughan’s workshops during the years 1544–46, and I may add that it will be equally desirable to establish the identity of the money struck at Southwark under the care of John Yorke in the same two years.
Standards of Fineness.

A Tabular Index to the Standards of Fineness ordered for the Six English Coinages of Henry VIII.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Gold.</th>
<th>Silver.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1st year, 6 Aug. 1509</td>
<td>23c 3\text{'}\text{\textfrac{7}{8}}\text{grs} fine.</td>
<td>11\text{oz} 2\text{dwt} fine, in the pound Tower.</td>
</tr>
<tr>
<td>2. 18th 30 Oct. 1526</td>
<td>23c 3\text{'}\text{\textfrac{7}{8}}\text{grs} and 22c fine, in both years</td>
<td>11\text{oz} 2\text{dwt} fine, in the pound Troy.</td>
</tr>
<tr>
<td>24th 6 Apr. 1533</td>
<td>22c fine, in both years</td>
<td>10\text{oz} fine in the pound Troy.</td>
</tr>
<tr>
<td>3. 34th 16 May 1542</td>
<td>23c fine</td>
<td>9\text{oz} fine in the pound Troy.</td>
</tr>
<tr>
<td>4. 36th 28 1544</td>
<td>23c &quot;</td>
<td>6\text{oz} fine in the pound Troy.</td>
</tr>
<tr>
<td>5. 36th 27 Mar. 1545</td>
<td>22c &quot;</td>
<td>4\text{oz} fine in the pound Troy.</td>
</tr>
<tr>
<td>6. 37th 1 Apr. 1546</td>
<td>20c &quot;</td>
<td></td>
</tr>
</tbody>
</table>
PLAN OF THE RUINS OF ABERYSTWITH CASTLE.

PLATE I.