

THE 1787 SHILLING – A TRANSITION IN MINTING TECHNIQUE

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'1787. In this year a feeble attempt was made to supply the want of Silver Money by a coinage of that metal. But it appears as if the directors of Mint affairs had exhausted all their powers in the restoration of the Gold Coins, for after an issue of about seventy or eighty thousand Pounds, in Shillings and Sixpences, the coinage of Silver was stopped.'¹

'In the year 1787 the Bank coined £55,280 in New Silver, not with any intention of issuing it in general to the Publick, but only in small quantities to their Customers at Christmastime.'²

Introduction

THE first statement, from Rogers Ruding's *Annals* (1817), represents a general impression held by numismatists: That the coinage of shillings and sixpences in 1787 was a feeble and short-lived attempt by the Government to begin to relieve the severe shortage of silver coins. The second quotation presents the true picture: That the coins were a private striking for the Bank of England, not intended for general circulation.

This was a time of change in the techniques employed by the Mint for the manufacture of dies. The long-established use of individual letter punches to apply the inscription to each die was slow and inefficient, but could only be phased out when fully lettered punches became available. This required the raising of punches from fully lettered matrices. For a time of transition within the Mint, the study of one issue may fill in gaps in the available records. The 1787 shillings (and sixpences) could be expected to be particularly informative about experimentation within the Mint, because of the opportunity afforded the Mint to start from scratch, given the quarter century hiatus since the previous production of shillings in 1763. Indeed, this was the first regular large-scale production of silver coins in a quarter of a century.

Although not a currency issue in a truly practical sense, the 1787s are worthy of closer study for several reasons – as we shall see.

During 1787 several unusual innovations were undertaken in British coinage. The severe and chronic eighteenth century shortage of copper and silver coins for ordinary commerce was partially alleviated by private initiatives but very little by the Government. Gold guineas and half-guineas were coined in sufficient numbers for major transactions (a change of design to a

Acknowledgements: Particular thanks are due to G.P. Dyer who provided copies of all the Mint records appearing in the Appendices, without which the sequencing of issues would not have been possible. P.P. Gaspar's weighing and specific gravity testing established the true nature of the 'Pingo proofs' and their preparation pieces.

¹ R. Ruding, *Annals of the Coinage of Great Britain and its Dependencies*. First edition, 4 vols. (London, 1817), vol. ii, pp. 498–499.

² Mint 1/15: Questions asked by the Privy Council's Committee on Coin on the 21st February 1798 and the Answers given by the Bank. See E.M. Kelly, *Spanish Dollars and Silver Tokens. An account of the issues of the Bank of England 1797–1816* (London, Spink & Son, 1976), Bank Museum Document 695, Appendix B, p. 136.

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Q: 'Have you any Great Quantity of British Silver Coin at present in the Bank?'

A: 'In the year 1787 the Bank coined £55,280 in New Silver not with any intention of issuing it in general to the Publick, but only in small quantities to their Customers at Christmastime; of that, they have £22,800 remaining; as to the Silver Coin which they issue in general to the Public, they do, as all other Bankers do, buy it up, as they want it, giving usually, from a half to one per Cent premium for it, and consequently the Sum in their possession is very trifling.'

A copy of the 'Questions and Answers' also is entered under Mint 1/15, where it is titled 'The following Questions of the Lords of the Committee of Privy Council to the Governor and Company of the Bank of England and their Answers thereto were also communicated to the Mint by Favour of Lord Liverpool.' The Bank's Question and Answer No. 38 is numbered 41 in the Mint copy, although the wording is identical.

spade-shaped shield commenced in 1787)³ – silver hardly at all after 1758 until 1816. Copper halfpennies and farthings, issued 1770–1775, were insufficient to meet the growing needs of an industrializing society. No other official English coppers were issued for more than twenty years, although copper coins dated 1766–1782 were struck for Ireland, where they were badly needed – and were soon extensively counterfeited.⁴ In 1787 the first of what became a flood of private copper halfpenny tokens was struck by the Parys Mine Company, Anglesey, Wales. Silver coinage fared less well. As the first of what became an extensive series of countermarked Spanish dollars in Scotland, and to a lesser degree in England and Ireland, the Cark Cotton Works in Lancashire issued silver tokens with the date 1787 on the obverse – although such a small local issue by itself had no impact on the silver shortage in the country as a whole. In a presage of what was to have a profound effect on British coinage a few years later, Matthew Boulton's steam-driven Soho Mint was erected late in 1787.⁵

A major barrier to silver coinage was the fixed Mint price of five-shillings twopence per Troy ounce paid for bullion brought in for coining. A few companies and agents had done so earlier in the eighteenth century and had been rewarded with an identifying word or device on the coins produced. In 1757–1758 the Bank of England requested that sixpences and shillings be coined from bullion they would supply and a total of £79,198 of the two denominations was struck by the Mint, although not with an identifying provenance mark.⁶ A December 1787 Mint survey of the silver coins in circulation estimated their deficiency, which amounted to 20.6% light for shillings and 35.25% light for sixpences.⁷ Nevertheless, from the mid-1760s until the New Coinage of 1816–1820 Government generally could not agree on what should be the correct standard nor on the number of shillings to be struck from a pound of silver to bring them more into line with the market price. Small silver continued to be struck as needed for the Maundy Ceremony, and although, as shown by a few worn coins encountered today, the groats, threepences, twopences, and pennies circulated to a limited extent as late as the 1780s, they could hardly have had much impact on the chronic shortage of small change.

After the accession of George III in 1760, Mint records reveal that, except for the limited 'Northumberland' issue in 1763 and patterns in 1764, 1775 and 1778, no shillings were struck until 1787. A small number of sixpences (60 lb of silver, yielding 7,440 coins) was delivered to the Bank of England in November 1762, just in time for Christmas – evidently from existing dies dated 1757 or 1758. In 1762–1763 an issue of circulating threepences totalling about 400,000 pieces was struck for general circulation. Nevertheless, these were insufficient to alleviate the silver shortage throughout Great Britain. No more Government-supplied silver coins were struck for over fifty years.

The Bank of England and the Royal Mint

By 1786 the George II coins dated 1757–8 had been doled out and the Bank of England were becoming embarrassed by customer requests for a continuing supply of coins for small gifts (such as the well-known coin in the Christmas pudding). The Bank therefore petitioned the Treasury for permission to have another issue of shillings and sixpences struck from bullion they would pro-

³ Mint 1/14, p. 7; Mint 7/62 (Appendix A).

⁴ P. Seaby, *Coins and Tokens of Ireland* (London, B.A. Seaby, 1970), p. 84n.

⁵ Matthew Boulton was the sole owner of the Soho Mint. The partnership of Boulton and Watt in the steam engine business did not extend to his mint and therefore references to the early Soho Mint as 'Boulton and Watt's Soho Mint' are incorrect.

⁶ E.M. Kelly, as in n.2, p. 7.

⁷ Liverpool, Charles [Jenkinson] 1st Earl of: *A Treatise of the Coins of the Realm in a Letter to the King* (Oxford, 1805), p. 187. 'The present deficiency in weight of the legal Silver Coins, according to their several denominations, has been ascertained by (an experiment) made in December 1787 ... by the Officers of Your Majesty's Mint.

In 1787 it was found that

12.2 Crowns	) were requisite	(12.4 Crowns	) As
27 Half Crowns	) to make up a	(24.8 Half Crowns	) issued
78.1 Shillings	) Pound Troy,	(62 Shillings	) from the
194.6 Sixpences	) instead of	(124 Sixpences	) Mint.

vide. During 1786 the market price of silver bars remained quite steady, although slightly above the official Mint price, and the Bank was willing to absorb the difference.⁸ Coins struck for the Bank were not issued as small change for general circulation. Naturally many did find their way to the public; how could the lucky plum pudding winner be prevented from spending his or her find?

Although the average condition of specimens known today is higher than one might expect from extensive circulation, most saw at least some circulation, not only in Great Britain but also as 'Proclamation Pieces' officially authorized for use in Australia.⁹ Others were abused for use as jewellery by enamelling, looping or piercing for suspension, engraving as 'love tokens', punching with private ownership marks, or were used as gaming counters (**Pl. 6, 1–6**).

Responding to the Bank's request for a special issue of shillings and sixpences, on 2 May 1786 the Treasury issued a warrant 'To Our loving Friends the Principal Officers of his Majestys Mint in the Tower of London' authorizing receipt of 50,000 pounds of silver bullion from the Bank and to coin it into 33,000 pounds of shillings and 17,000 pounds of sixpences.¹⁰ Over the summer of 1786 silver was duly received, refined, melted and cast into bars suitable for rolling into strips for blanking.¹¹ By September Lewis Pingo, the Chief Engraver, advised that the former designs for the silver issues of George II, and indeed for the 1763 'Northumberland' shillings, with crowns above each of the four arms on the reverse, severely restricted space for engraving the king's titles, **MAGNÆ BRITANNIÆ FRANCIÆ ET HIBERNIÆ REX FIDEI DEFENSOR BRUNSVICENSIS ET LUNEBURGENSIS DUX SACRI ROMANI IMPERII ARCHI-THESAURARIUS ET ELECTOR**, which already had been abbreviated to **M•B•F•ET•H•REX•F•D•B•ET•L•D•S•R•I•A•T•ET•E•**. Lord Effingham, Master and Worker of the Mint, petitioned the Treasury to transmit to the Privy Council a request to change the reverse design by placing the four crowns between the shields – leaving the entire rim available for the titles and date.¹²

Anticipating approval for the design change, which had been given by 'The King's most Excellent Majesty in Council' on 4th October 1786, although the warrant was not forwarded until after the first of the new year,¹³ master tools and dies dated 1786 were prepared for shillings and sixpences and a handful of test pieces struck.¹⁴ If formal approval from the Privy Council to the Treasury had been received in October or November, the Mint were ready to begin striking – and probably would have delivered a first shipment to the Bank in time for Christmas. Although the Order of Council had been drafted in time, the Prime Minister, William Pitt the younger, had tucked it away in a drawer and forgot about it until the Deputy Master of the Mint made enquiries. After he waited on Pitt to answer some questions about the expense, the original approval was then forwarded on 9th January 1787.¹⁵

⁸ In 1786 the price of silver in bars fluctuated in a narrow range of a penny per ounce (between 5s. 2 3/4d. and 5s. 3 3/4d.); Spanish dollars varied by a halfpenny (between 5s. 1 d. and 5s. 1 3/4d.). In 1787 the variation was penny farthing for silver bars (between 5s. 2 3/4d. and 5s. 4d.) and halfpenny for Spanish dollars (between 5s. 1 1/2d. and 5s. 2d.). The Mint, by law, could only coin silver at a rate of 5s 2d. per ounce and therefore, from whatever source the Bank obtained the silver it sent to the Mint, it received less value in coined silver than the market price of bullion.

An Account of the Market Prices of ... Standard Silver in Bars; and Spanish Dollars, or Pillar Pieces of Eight ... From the 3d of January 1746 to the 1st of March 1811, from Lloyd's Lists. Ordered, by the House of Commons, to be printed, 4 March 1811.

⁹ *Rennicks Australian Coin & Banknote Values*, Ian Pitt, (ed.), (Banksmeadow, NSW, Rennicks Publications, 2002), p. 7.

¹⁰ Mint 1/13, p. 235 (Appendix B).

¹¹ Mint 9/56 (Appendix C).

¹² Mint 1/13, p. 243 (Appendix D).

¹³ Mint 7/61 (Appendix E).

¹⁴ The 1786-dated coins were first recorded after the death of James Dodsley Cuff (1780–1853), who had been employed at the Bank of England for about forty-eight years – the last twenty-eight in the Bullion Office. His principal collection was sold by Sotheby & Wilkinson, over eighteen days in June–July 1854.

Lots 1622–1623. Two 1786 shillings. 'Only one other specimen is known besides the above, and is in the British Museum' (acquired by dealer H.O. Cureton for £4.2.0. and £4.4.0.).

Lots 1629–1630. Two 1786 sixpences. 'These two Sixpences are extremely rare, like the Shillings, the only other specimens known being in the British Museum' (acquired by dealers William Webster and Cureton for £3.15.0. and £3.1.0.), p. 124.

Note: Lots 1624–1628 included five specimens of the 1798 ('Dorrien & Magens') shillings.

¹⁵ Mint 4/19 (Appendix F).

The Mint in 1787

Once the warrant approving striking the Bank's shillings and sixpences had been received, the Mint moved swiftly. On 20 January, the Deputy Master, James Morrison, reported to the Master, Lord Effingham, that striking of the new coins had commenced on 17 January – even before the required proofs had been forwarded to the King in Council.¹⁶ Between 8th February and 23rd May 17,800 lb. Troy of shillings and sixpences were 'issued from the Mint' (i.e. delivered to the Bank), of which 200 journeys of 60 lb. each totaled 744,000 shillings.¹⁷ At the time of striking, coins of all denominations had been placed in the pyx, including 200 shillings. These were assayed by the Goldsmiths' Company in a Trial of the Pyx on 22nd August 1787 and the tested coins were found to be 'within the remedy'.¹⁸

In September 'The Directors of the Bank of England, & some other Officers, and also several Officers of the Mint, and the Company of Moniers ... requested that they may be supplied with Proofs of Gold & Silver Coins from the new Guinea and Half Guinea, and the Shilling and Sixpence Dies'. This request was approved by the Master and on 19th September Chief Graver Lewis Pingo was authorized to prepare 168 four-coin sets for those who reimbursed him for the value of the metal and his workmanship. One hundred of the sets were struck for the Directors of the Bank, eighteen for other Bank officers, thirty-eight for Mint officials, and twelve for the Company of Moniers.¹⁹

The Mint's responsibilities to the Bank were not quite completed, however. There remained a small amount of silver to be accounted for and this remainder was delivered in December 1787. The weight of silver received from the Bank in 1786 had amounted to 17,801 lb. 7 oz. 11 dwt. 14 gr. By May 1787 the Mint had delivered 16,800 lb. of coins to the Bank and the remaining 1001 lb. 7 oz. 11 dwt. 14 gr. was delivered to the Bank on 19th December. (Presumably the odd penny-weights and grains were provided in cash or scrap silver.)²⁰ With the final delivery of 40 lb. of shillings just in time for Christmas, the total weight of shillings struck in 1787 was 12,040 lb., which at 62 coins per lb. amounted to 746,480 coins.²¹ Similarly, the number of sixpences delivered in 1787 amounted to 712,380 coins. As shown in the Mint's Controllment Roll for the year 1787, the value of the shillings struck that year was £37,324 (i.e. the same number – 746,480 coins).²²

The Coins

The cited documentation accounts for four types of 1786–1787 shillings: the pre-production coins dated 1786, a 'January proof' submitted to the King's Council for final approval, the pieces struck for and delivered to the Bank of England, and the 'Pingo proofs' of September 1787 (Pl. 7, 1–4). A study of the coins themselves suggests several refinements in this seemingly straight-forward enumeration. We shall here concentrate on the shillings, though the sixpences by and large tell the same story.

So-called 'patterns' dated 1786

According to the statement in Sotheby's 1854 catalogue of the Cuff collection, only three sets of shillings and sixpences dated 1786 were struck.¹⁴ Two sets can be accounted for today (one in the British Museum) and there seems no reason to doubt this number, although it has not been possible to verify it from Mint records. Although the obverse legend on the shillings breaks over the king's bust, the top of his head rises towards the rim, leaving relatively little room for the stop

¹⁶ *Ibid.*

¹⁷ Mint 9/76 (Appendix G).

¹⁸ Mint 7/131 (Appendix H).

¹⁹ Mint 1/14, p. 12 (Appendix I).

²⁰ Mint 9/56 (Appendix J).

²¹ Mint 1/14 (Appendix K).

²² Mint 9/212; Mint 9/61 (Appendix L).

over his head that became a common feature of the Bank's pieces. The reverse has seven strings in the Irish harp but lacks the *semée* of hearts in the Lüneburg portion of the Hanoverian arms, and does not have stops on either side of the date.²³ The sixpences are similar, although with six harp strings and the obverse legend continuous over the bust, requiring a stop between III•DEI. Both denominations were struck in sterling silver (one pair measuring roughly 10.40 s.g. for the shilling and 10.38 s.g. for the sixpence – pure silver for struck coins being about 10.5 s.g.). The weights are close to normal for circulation coins: 6.00 grams (92.6 grains) compared to standard 6.02 g (92.9 gr) for the shilling; 3.03 g (46.7 gr) compared to standard 3.01 g (46.4 gr.) for the sixpence; and exhibit minor bifurcation ('fishtailing') of the letter bases on each side. Unlike normal circulation coins, their die axis is upright, which does suggest a special issue. There is no beading – its place on the rims being taken by overlapping notches from the edge graining.

These 1786 pieces therefore do not fit most of the eighteenth century criteria for proofs and patterns, which usually have square and unindented letter bases, with well-defined and complete beading, and smooth edges. 'Proofs usually have an upright die axis and show a disregard for standard weight and fineness; they are generally made of fine gold or silver and their weights may vary considerably from standard and, for coins of the same denomination and date, from each other.'²⁴ The actual 1786 coins exhibit diagonal edge graining, presumably applied by a parallel-bar edge-marking machine. They are dated the previous year to a regular issue, with upright or medal-axis, and differ from the 1787 strikings in placement of the obverse legend. Although generally listed as patterns,²⁵ two further shilling dies with 1786 dates were prepared – evidently for circulation issues and their existence explains some 1787/6 coins (see below). These two additional dies, however, have the bust shifted slightly downward, leaving more space above the top of the head – as on all the Bank's 1787 coins. In sum, the 1786 coins evidently were pre-production strikings for normal circulation-type pieces and many additional specimens could have been struck in time for Christmas if official approval had been received promptly.¹⁵

'January proof' dated 1787

The next piece, a proof known to have been struck in January 1787 for submission to the Council, is now known by a single specimen in the British Museum. It came to the Museum in the Sarah Sophia Banks collection, as noted in her acquisitions notebook (now in the Coins & Medals Department): 'a proof without graining and without a dot, the only proof of the first impression as Mr Pingo informs me'. From the context, 'without a dot' refers to the stop over the bust and, in fact, the only obverse stop on this piece is after GRATIA, and there is no beading around the rim. However, the bust has been placed slightly lower than on the 1786 coins, similar to the issued pieces, so that there was room for a stop if this slight design change had been requested. The reverse has seven strings in the Irish harp, no *semée* of hearts in the Lüneburg shield, and lacks beading around the rim. It was struck in fine silver within a collar, which produced a smooth, very slightly concave, edge with a single witness line and weighs 6.80 grams (104.95 grains).

The presence of a single witness line on the edge of a coin suggests the use of a flexible steel band surrounding the blank within a solid collar. The use of this band permitted the release of the struck coin (and band) from the collar without motion of the coin relative to the band, which would have scored the edge of the coin. The tempered steel band would spring open when pushed out from the collar, releasing the struck coin. This technique allowed the application of grained or lettered edges to proof and pattern coins as well as the production of 'plain' edges. At the beginning of the eighteenth century Sir Isaac Newton reported, 'If the impression is to rise high like that

²³ Heraldically, and omitting colours/tinctures, the Hanoverian arms are described: Tierced in pairie reversed: 1. two lions passant guardant in pale (for Brunswick); 2. a *semée* of hearts, a lion rampant (for Lüneburg); 3. a horse courant (for Westphalia); and over all an inescutcheon charged with the crown of Charlemagne (signifying the king's arch-treasurership of the Holy Roman Empire) – emphasis added.

²⁴ G.P. Dyer, and P.P. Gaspar, 'The Striking of Proof and Pattern Coins in the Eighteenth Century', *BNJ* 50 (1980), 117–27, at p. 118. Also, G.P. Dyer, 'Further thoughts on the striking of British eighteenth-century proof coins' (unpublished paper read at the International Numismatic Congress, London, 1986).

²⁵ P. Alan Rayner, *English Silver Coinage from 1649*, 5th (revised) edition (London, Seaby, 1992), pp. 125, 155.

of the late medallion upon the peace, they must be coined in a Ring and it will take a week more to coin 1400 medalls of this sort, every 200 medals requiring about a day to coyn in this manner.²⁶

The Bank's 1787 coins

There are differences in the number and placement of stops on the Bank's 1787 coins, but the best-known difference is the presence or absence of a *semée* of hearts in the Hanoverian arms. A *semée* was definitely called-for, and we have wondered if this was haphazard, reflecting occasional carelessness on the part of the engraver. The number of each engraving variety is roughly equal – perhaps a few more 'with' than 'without'. But it does appear that there is a definite sequence – no *semée* followed by *semée*. Note, for instance, that those which *must be first* – 1786, the 'January proof', and 1787/6 – have no *semée*.

Considering that the total weight of shillings struck in 1787 was 12,040 lb., amounting to 746,480 coins, it is not surprising that several minor varieties are known. What is surprising is that apparently no one noticed that on the 1786 coins, the 'January proof' submitted to the Council of State, and during the weeks it took to strike about half of the Bank's coins, the *semée* of hearts in the king's Lüneburg arms had been omitted. Granted that the area available for a sprinkling of hearts is tiny, still this feature had always been present on the coins of George I and George II – and the 'Northumberland shilling' of 1763. All but the December handful of the 1787 shillings were struck in 200 journeys and delivered between 8 February and 28 March. So it may be surmised that sometime during these eight weeks, the omission was noticed.

This is supported by the known proofs. A shilling is known to have been struck in January 1787, when the Deputy Master reported that Chief Engraver Pingo had prepared proofs for the king,¹⁵ and others in September 1787, when Pingo was authorized to strike 168 sets for officers of the Bank and the Mint.¹⁸ The common proofs, which have the *semée*, must be from September and the rare proof in the British Museum, which does not, must be from January. The September proofs are the *last* to be struck, the small delivery in December being an odd weight of already-struck coins.

When the *semée* omission was discovered about half-way through the production of shillings and sixpences, six 'hearts' (actually more like check-marks) were quietly added to individual dies by hand – along with the harp strings and one or two small punchings – such as the Westphalian horse in the Hanoverian arms. Thus there are two major types of the Bank's 1787 shillings and sixpences, known as 'without *semée*' or 'without hearts' and 'with *semée*' or 'with hearts', so there is a sequence. And this should not be a surprise since the inclusion of the *semée* is surely a question of right or wrong, not an opinion of taste. A correct representation of the Royal Arms requires its presence and what we have is almost certainly a corrected error.

Catalogues list a variety of 'without *semée*' proof shillings,²⁷ but, except for the 'January proof', none of these is in the British Museum, nor in the Mint collection, and the authors have not examined any except the 'January proof'. Although it appears possible that another type of 'without *semée*' proof may exist, unless a museum or collector comes forward with specimens, perhaps as a result of this paper, it appears likely that several of the claimed varieties are merely

²⁶ Mint 19/3, pp. 330–332.

²⁷ [H.A. Seaby] *The Milled Silver Coinage of England from Charles II to the present day, including Patterns and Proofs, with a chapter on Maundy Money*, reprinted from *NCirc* 1924, with revisions and additions (London, Spink, 1925), in addition to the 1786 'proof', lists two 'without ermine' proofs, one 'plain edge, heavy flan without collar' (this may have been confused with the so-called 'with *semée*' proof that actually is something quite different (see below), and a 'no dot over head, edge milled' proof that may exist, p. 107.

By 1949 in H.A. Seaby, *The British Imperial Silver Coinage or The English Silver Coinage 1649–1949* (London, Seaby, 1949), the list of 'without *semée*' proofs had expanded to include 'proof, plain edge' (ESC-1217), 'no stop over head, grained edge' (ESC-1219), 'no stop over head, plain edge' (ESC-1220), same 'heavy flan' (ESC-1221), 'no stops on obverse, plain edge' (ESC-1224); p. 82.

In subsequent editions, including the fifth and last: Rayner, as in n.25, p. 125, the list had been further refined: ESC-1217 now is 'on thick flan', ESC-1224 changes from 'no stops on obverse, plain edge' to 'stop after GRATIA'. This latter fits the description of the 'January proof', which is on a heavy flan (6.80 g. – 104.95 gr.).

slightly different descriptions of the same coin. For instance, is there a difference between 'thick flan' and 'heavy flan' – both listed in a standard work?²⁸

Laying aside the question of possible additional varieties of 'without semée' proof shillings, in addition to the number of harp strings, which may be randomly six or seven, one major die-sinking variety and two of minor importance have been reported. The first is listed as: no stops at date, possibly the last 7 of 1787 over a 6.²⁸ These were struck by two pairs of dies, both definitely with the second 7 over a 6. Although neither pair was repunched from the dies for the 1786-dated coins, the lack of stops on either side of the date is a feature of the 1786 dies and a thin curved remnant of the original 6 may be traced on all the 1787 'no stops at date' coins. Some coins struck from one of the seven-over-six dies may show a progressive weakening of the stops between M • B and B • F at the beginning of the reverse legend until they appear to be missing altogether. These are not die varieties, however (Pl. 7, 5–6).

A second 'no semée' variety lacks the stop over the bust on the obverse. These are relatively common, the single observed obverse die is paired with at least three different reverses. This variety only appears on the Bank's 'no semée' coins, although the 1786-dated coins and 'January proofs' also lack the upper stop. One 'with semée' specimen has been noted with the stop over the head erased in an attempt to create a new variety, but under a glass the shadow of the original stop may easily be discerned.²⁹

The final 'no semée' die-sinking variety lacks all four of the usual stops on the obverse. This variety is rarer than the others and only a single die pair has been noted.

A sole die-sinking variety of 'with semée' 1787 shillings has been reported. The die-sinker evidently first punched in the 1 in the date upside down on one die and, when this mistake was discovered and before the die was used to strike any coins, the die was repaired by over-punching the 1 right-side up. The variety shows as a 1 with two apparent upper serifs. Alternatively, since the punches used to sink the reverse dies were at least partially dated, and there is no indication that the '1' on the punch suffered damage, there is at least the possibility that the 'upside down 1' is actually an 'I' which it was intended to punch elsewhere on the die to strengthen a weakly-punched letter or a vertical stroke of a letter.

Thus, the 1787 shillings supplied to the Bank of England include 'without semée' with repunched seven over six in the date, others engraved with six or seven strings, and three die-sinking errors; 'with semée' varieties occur with six or seven strings, and one corrected die-sinking error.

September ('Pingo') proofs

A frequently encountered type of 1787 shilling has been catalogued as a plain-edge pattern, with the semée of hearts, and a border of dots each side. Similar coins exist for guineas, half-guineas, and sixpences. These coins are not patterns but were included in the 168 sets prepared by Lewis Pingo for the Bank of England and other interested officials. Throughout the eighteenth century, and indeed well into the nineteenth, the striking of patterns and proofs, as well as medals, was the prerogative of the engravers, not the moneyers, and the engravers were allowed to sell these pieces for private profit. Such pieces were struck in the Die Department, not on the coining presses, on blanks brought in by the engravers that had not gone through the usual assaying, melting, and blanking processes. The four denominations of these special 'Pingo proofs' were struck in fine gold or fine silver, evidently from virtually pure gold and pure silver buttons obtainable from private sources. These button disks would have been somewhat thicker than the coins struck from them, requiring several blows by the dies to flatten and bring up sharp design details – as was done with medals. During this process, extra metal would be squeezed out between the dies above the collar and presumably trimmed away after each impression. As a result, there would be a lack of uniformity in weights: recorded shilling proofs vary from 5.78 g (89.2 gr) to 7.56 g

²⁸ Rayner, as in n.25, p. 125.

²⁹ Coin examined courtesy of Michael Sharp, A.H. Baldwin & Sons.

(116.65 gr). That these proofs lack fishtailing indicates striking on medal-presses within a smooth collar (leaving a single witness line, whereas the Bank's coins were struck in the Coining Room without collars and had their graining rolled on in a separate operation) which meant that beading inserted on the proof dies confined within a collar during striking would be well struck up.

As pointed out earlier, the presence of a single witness line reflects the use of a flexible steel band as a liner between the solid collar and the blank. The band allowed the struck coin to be released from the collar without scoring the coin's edge.

Under 'with hearts' coins, the *E.S.C.* lists a 'proof, plain edge, heavy flan, struck without a collar'.³⁰ Tests of several of these pieces reveal that they were struck in fine silver from a special die with eight strings to the Irish harp. The edges are rough and the weights vary: two tested specimens weigh 7.269 g (112.2 gr) and 7.884 g (121.6 gr). The evidence suggests strongly that these are preparation pieces struck from special dies to flatten out the buttons and begin striking up design devices, helping to preserve the die pair that would be used only for the final striking. These pieces then, are half-way between plain buttons with rough edges and the finished proofs with smooth edges. Interestingly, although the purpose of the preliminary dies was to help preserve the final dies, the reverse final die developed a pitting in the field of the Lüneburg shield that shows on several specimens as a progressing flaw.

According to Royal Mint accounts of matrices, punches and dies prepared for 1787 shillings, two obverse and five reverse matrices, seven obverse and seven reverse punches, and 122 obverse and 125 reverse dies had been prepared. Of these, all except one of each type, for a total of six tools, had been destroyed by 1812.³¹ Most interestingly, the obverse punch has the king's bust but lacks the legend, which must have been added to the die by hand; whereas the reverse punch exhibits all of the main design features, albeit lacking several of the finer details, and a complete legend without stops between the letters.

The 1780s were a transitional period between the use of unlettered punches and the adoption of the much more convenient lettered punches. Examination of a large sample of 1787 shillings permits the conclusion that on the obverse there are many variations in the position of the letters. This can only mean that the obverse punch remained unlettered – as we see from a surviving punch in the Mint collection. On the reverse, however, there is a remarkable consistency in the position of the letters, and it seems clear that something different was happening. Indeed, the conclusion seems to be that lettered punches were being used at long last. There is such an object in the Mint collection, but it has no stops and examination of a large sample of coins shows that the stops do in fact vary in position.

Conclusion

This is an interesting coinage – far more so than might have been thought – and it stands at an important transitional period in the die-making process.

The 1787 shillings were a private venture of the Bank of England intended to please favoured customers and not as a circulating medium of exchange. The ubiquity of surviving high-grade specimens and the long retention of the 1787 shillings in the Bank of England's vaults are consistent with their distribution on a small scale.

These coins reflect an intermediate stage in the modernization of coinage techniques. The inscriptions on the obverse dies were made with individual letter punches, a centuries-old practice, but the reverse dies were sunk from fully-lettered punches, a major advance. Even on the reverse dies, however, fine features such as stops, the Westphalian horse, the semée of hearts in the Hanoverian arms, and the strings of the Irish harp were added individually, suggesting that truly complete punches (except for the last two date digits) remained difficult to manufacture or impractical to use.

Only c. 7,000 of these shillings were struck, on average, from each pair of dies. Given the care with which the obverse dies were lettered, and the rarity of surviving specimens from cracked

³⁰ Rayner, as in n.25, p. 126.

³¹ Mint 1/14 (Appendix M).

dies, the short average die use may reflect a high standard at which production was aimed, rather than early die failure. More 1787 shillings from failing dies might have shed light on the advantages and disadvantages of the old screw presses.

Postscript

After this paper had been presented to the Society in February 2003, Philip Mernick very kindly offered to consult copies of the *Universal Daily Register* (subsequently *The Times*) for 1787 at the Guildhall Library and found these references to the 1787 shillings and sixpences:

February 12 (2d)

'A silver coinage, consisting of shillings and sixpences, to the amount of seventy-five thousand pounds sterling has at length been completed in his Majesty's Mint at the Tower, and a few days ago they were brought to the Bank and deposited in the Treasury.'

March 10 (2b)

'The amount of ten thousand pounds of the new silver coinage is to be exported to Ireland.'

March 10 (2d)

'In consequence of the trouble of attending the numberless applications at the Bank, for the new silver lately coined, Mr Newland, the cashier, has we hear, determined to put a stop to that mode of circulating it.

So great is the curiosity to see the new silver coinage, that two or three clerks, in the cashiers office at the Bank, have been constantly employed, for some time past, in giving out the new coins for the old.

The above coinage is not only most beautiful, but very large; proper steps ought therefore to be taken to prevent it being improperly exported.'

March 16 (3c)

'If the new silver is intended for public circulation, and not for card counters and childrens playthings, why is it not issued, as yet trade has not received the least benefit from the coinage.'

March 22 (3b)

'Counterfeits of the new silver coinage are already in circulation, but they are struck in so indifferent a dye, that it is almost impossible for them to be mistaken for the real ones.'

May 21 (2d)

'40,000*l* of silver coins in shillings and sixpences is to be issued from the Bank to bankers and merchants who make application. This coinage is the last of the late reign.'

May 26 (3b)

'On Wednesday a further sum of 60,000*l* in shillings and sixpences of the new coinage, lately struck off at the Mint, was carried from the Tower to the Bank of England and deposited in the treasury there.'

August 28 (2b)

'A further coinage of silver is going on at the Mint, and as soon as it is completed, which is expected to be by Christmas, the old silver will be called in, and received according to weight and the new coin will be issued into public circulation.'

August 29 (3b)

'The silver coins of the late reign, a quantity of which is always kept at the Bank for special purposes, is the coin that will be first issued into circulation. The new silver of the present year will not be issued until the bad silver is called in, the period of which has not yet been fixed by the Lords of the Treasury.'

Attentive readers will see that in every instance these press reports are incorrect – both in specific details and in their speculations on the purpose and distribution of the 1787 coins.

APPENDIX A

Mint 1/14, p. 7

Entered in the Office of His Majesty's Mint the 28th day of March 1787

Wm Dick Dept & King Clerk & Clerk of the Papers

My Lords

The Proposal I had the honor to make last year, to your Lordships for alterations in the Reverse of His Majesty's Silver Coin, having met with the approbation of the King in Council; And having found great convenience at the Mint, in allowing so much room for the Legend on these Coins; I now beg leave to propose to your Lordships an alteration for the same purpose on the Gold Monies, which will require a new shield for the Arms on their Reverses; And as the Effigies of His Majesty on the new Shillings and Sixpences seem to have given general satisfaction; I propose therefore to improve those for the Guineas and Half Guineas in like manner, according to the Draughts which I have caused to be depicted in the Margin.

If therefore these proposals meet with your Lordships concurrence, I must beg your Lordships will transmit the same to His Majesty's most honourable Privy Council for consideration; that if the same should be approved I may duly authorized to prepare Puncheons and Dies for the said Coins accordingly, I am

My Lords

Mint Office

13th April 1787

Y^r Lordships Most Obed^t Hble ServtEffingham, Mast^r & Work^r.

The Right Honble the Lords Commissioners of His Majesty's Treasury

Mint 7/62

Endorsed: 4th May 1787. Order in Council Rel: to the Alteration proposed in the Die of the New Gold Coinage

SEAL

At the Court at S^t James's the 4th of May 1787

Present,

The King's most Excellent Majesty in Council.

Upon reading this day at the Board, a Letter from The Right Honourable The Earl of Effingham Master of His Majesty's Mint, dated the 13th of last Month, Representing, That the proposal made by His Lordship last year for alterations in the Reverse of His Majesty's Silver Coins, met the approbation of His Majesty in Council; and that having found great convenience at the Mint in allowing so much room for the Legend on the said Coins, His Lordship therefor proposes an alteration for the same purpose on the Gold Coins ... as the Effigies of His Majesty on the new Shillings and Sixpences seem to have given general satisfaction. ...

Rich^d OrlebarPro W^m Fawkener

APPENDIX B

Mint 1/13, p. 235.

After our hearty Commendations. Whereas the Governor & Company of the Bank of England have represented unto Us, that they have a quantity of Silver Bullion to the value of Fifty Thousand Pounds, which they are desirous of bringing into his Majesty's Mint to be coined into Shillings and Sixpences. These are to authorise and direct you to receive the same into the Mint, and to Coin Thirty three thousand Pounds into Shillings and the remaining part, Seventeen thousand Pounds into Sixpences, agreeable to the request of the said Governor & Comp^y. For which this shall be your sufficient Warrant. Whitehall, Treasury Chamber, 2^d day of May 1786

J. Buller

Graham

Ed. J. Eliot

To Our loving Friends the Principal Officers
of his Majestys Mint in the Tower of London.

APPENDIX C

Mint 9/56 – Gold and Silver Ledgers, p. 170

Mr Lyde Brown, Refiner

Silver

1786

July 18 To delivered to refiner . N^o 1

669 1 11 9

25 To d^o2

669 11 8 7

Aug^t 23 To d^o3

58 10 18 13

 1397 11 18 5

1787	
March 13 To delivered to Refiner N° 4	237 5 11 7
Apr. 11 To d° .....N° 5	26 11 1 23
	<hr/> 264 4 13 6

1786	
August 2 By received Refined Silver N° 1	754 7 19 11
8 By d° .....2	555 0 9 9
30 By d° .....3	88 3 9 9
	<hr/> 1397 11 18 5

1787	
March 27 By received Refined Silver N° 4	221 5 17 14
By d°	19 1 0 23
April 18 By d° .....N° 5	23 9 14 17
	<hr/> 264 4 13 6

Mint 9/56 – Gold and Silver Ledgers, p. 174
Melter for Silver

1786	
Sep ^r 9–30 To Ingots & scissel	26228 11 1 16
Sep ^r 9–30 By Bars and Supply	13883 3 1 13
Balance 30th Sep ^r	12345 8 0 3
Nov ^r 8–22 To scissel	2640
	<hr/> 14985 8 0 3
Nov ^r 1–22 By Bars and Supply	6544 0 9 12
Balance 30 Nov ^r	8441 7 10 15
Decem ^r 13 By Supply	1075 11 2 18
Balance 31 Decem ^r	<hr/> 7365 8 7 21

Mint 9/56 – Gold and Silver Ledgers, pp. 164–165
Melter for Silver

1787	
Janry 8–31 By Silver Scissel	2160
Janry 8–31 Silver Bars Delivered to Moniers	3960
Febry 3–28 By Silver Scissel	4860
Febry 3–28 Silver Bars Delivered to Moniers	9180
Mar: 3–28 By Silver Scissel	3360
Mar: 3–23 Silver Bars Delivered to Moniers	5070
Apr: 4–21 By Silver Scissel	1290
Apr: 4–21 Silver Bars Delivered to Moniers	1765
Sept 11–20 By Silver Scissel	420
Sept 12–20 To Silver Bars	600
Oct ^r 11 By Scissel	180
Oct ^r 11–8 To Silver Bars	420
Nov ^r 1–28 By Scissel	528
Nov ^r 1–22 To Silver Bars	486
Dec ^r 12–19 By Scissel	45 10 14 13
Dec ^r 5–12 To Silver Bars	90

APPENDIX D

Mint 1/13, p. 243.

My Lords

The Governor & C^o of the Bank of England, having Imported into his Majestys Mint a quantity of Silver Bullion. which your Lordships have directed to be coined into Shillings & Sixpenny Pieces, I must beg leave to represent to your Lordships, that as New Dies &c must be prepared for this Service, I have to propose an Alteration from the usual form of the Reverse by placing the Crowns between the Shields to give room for making the Legend more distinct & legible. Of this design I have caused Draughts to be depicted in the Margin, which if your Lordships approve, I beg you will transmit to the Honorable privy Council for his Majesty's directions thereupon, I am

My Lords

Mint Office

Your Lordships, Most Obedt^e Hble Servt22nd Sept^r 1786Effingham. Mas^r & Work^r.

To the Right Honble the Lords Commissioners of his Majestys Treasury

APPENDIX E

Mint 7/61

Endorsed: Council Office 4 Oct^r 1786 Order approving New Dies for Silver coin

SEAL

At the Court at S^t James's the 4th October 1786.

Present,

The King's most Excellent Majesty in Council.

After reading this day at the Board, a Letter from the Right Honourable the Earl of Effingham Master of His Majesty's Mint, dated the 22^d of last Month, representing that the Governor and Company of the Bank of England, have imported into the Mint a quantity of Bullion, which is ordered to be coined into Shilling and Sixpenny Pieces; And as new Dies must be prepared for this Service, proposing an alteration from the usual form of the Reverse, by placing the Crowns between the Shields to give room for making the Legend more distinct and Legible, according to the Draughts depicted in the Margin of His Lordships Letter – His Majesty in Council approving of what is therein proposed, is pleased to Order, that the Crowns be placed between the Shields of the said Silver Coins to give room for making the Legend more distinct and legible, according to the said Draughts, which are hereunto annexed [The designs were taken off to be put into the Book at the Council Office] – And the Right Honourable the Lords Commissioners of His Majesty's Treasury are to give the necessary Directions, herein accordingly.

W. Fawkener

Let the Worker and Master of His Majesty's Mint take Care that His Majesty's Pleasure signified in the foregoing Order of Council be duly complied with. Whitehall Treasury Chambers the Ninth Day of Jan^y 1787.

WPitt

John Aubry

Morrington

APPENDIX F

Mint 4/19 [copies of private correspondence between the Deputy Master and the Master]

Letter from Deputy Master to Master (Lord Effingham).

My Lord

I had supposed your Lordship would be in Town on or about the Birth day. and it did not appear to me needfull to trouble your Lord^{sh} sooner with any business of the Mint.

I have now to inform your Lth that on the Duplicate appⁿ to Treasury for the Order of Council respecting the New Silver Die. appearing at that Board, Mr Pitt recollected he put the Order in his Drawer for the purpose of first asking some questions about the Expence & at his desire I attended and satisfied his enquiries thereon, since which the Original Order is recced at the Mint. Mr Pingo has sunk some Dies from his Puncheons, and the Moniers com^{ed} Stamping Silver on Wednesday last [i.e. 17 Jan 1787]. and it is to be little doubted they will be ready to make a Delivery of Silver in 14 or 20 days if ordered so to do.

Mr Pingo desires me to acquaint yr Lth the Proofs you ordered for his Majesty are ready, and it is submitted when it may be proper time for your Lth to present them to the King, it being thought necessary, or it has generally been done previous to any delivery of Money struck from a New Die. ...

J[ames] M[orrison] 20 Jan 1787.

APPENDIX G

Mint 9/76

An Account of the Silver Monies Issued from the Mint 1787

1787			Monthly Totals	
February 8 N ^o 1	30	Journies of Shillings	) 3000.0.0.0	
"		20 D ^o Sixpennys)	
February 21 2	40	D ^o of Shillings	) 3000.0.0.0	
"		10 D ^o Sixpennys)	
28 3	44	D ^o of Shillings	) 3000.0.0.0	
"		6 D ^o Sixpennys	)	9000.0.0.0
March 13 4	50	D ^o of Shillings	) 3000.0.0.0	
28 5	36	D ^o D ^o	) 3000.0.0.0	
"		4 D ^o of Sixpennys	)	6000.0.0.0
May 23 6	30	D ^o Sixpennys	) 1800.0.0.0	
"		40 lbs of pennys)	
"		25 of two pennys	) 105.0.0.0	
"		20 of three pennys)	
"		20 of four pennys)	
pence	£122.	6.6		
twopences		76.16.8		
threepences		62. 1.0		
fourpences		61. 8.4		
		322.12.6		
deficient		2.17.6		
		£325.10.0		

APPENDIX H

Mint 7/131

23rd August 1787

Received of the Right Honourable Thomas Earl of Effingham (Master) and Worker of His Majestys Mint the sum of Fifty Pounds by Virtue of a Warrant dated the 15th Day of August inst. to defray the Charges of entertaining the Jury of Goldsmiths and Officers of the Mint who attended the trial of the Pix on the 22nd Instant.

By me Tho^s Lane

Clerk of the Goldsmiths Company

Trial of the Pix. 22nd August 1787

The Silver Monies by the Assay Report Proves. **Standard**

Weight of Silver Monies in the Pix		The Amount in Coin	
By Computation	3.10.15.11	By Tale	12. 1. 8
Real Weight	3.10.16. 0	Computed on Real Weight	12. 1.10
Excess of Weight	13	Excess of Tale	2

Number of Pieces and their Weight taken by the Jurors for the Ingot

Shillings	50				
Sixpences	21				
Four Pences	2	1.0.0.0	By Tale	3. 2. 0	Weight of the Ingot
Three Pences	2		Computation	3. 2. 0	after melted
Two Pences	1				Loss
Pennies	2				3

Remedy on 3.10.15.11 0. 0. 7.19 1/12

Excess Weight

Fineness

13

Within the Remedy

0. 0. 7. 6

Report by the Goldsmiths Company of the Trial of the Pix, 22nd August 1787:

... We ... found in & took out of the said Pix Silver Coins consisting of Two Hundred Shillings Eighty Half Shillings Two Groats Two Quarter Shillings Two Half Groats & Two Pennies being together Three Pounds Ten Ounces & Sixteen Pennyweights in weight and making by tale the Sum of Twelve Pounds One Shilling & Eightpence but which at Sixty Two Shillings to the Pound Troy should make Twelve Pounds One Shilling & Tenpence And having taken of the said

Silver Coins Fifty Shillings Twenty one half Shillings with all the groats and Quarter Shill^{rs} One of the Half Groats & all the Pennies being in tale Three Pounds Two Shillings did find the same to weigh exactly One Pound and to be by the Assays and Trial thereof agreeable to the Standard Trial Plates of Silver in His Majestys Exchequer dated the Eleventh of April One Thousand Seven hundred & Twenty Eight.

Minutes, at Trial of the Pix. 22^d December 1789. By Mint Indenture, dated 28th November 1770.

Silver Shilling – 1 Half Shillings – 16

By Computation 1^{oz} 14^d 20^{gr} Allowed – – 7^{gr} –

By the Scale .1:14:20 Lack of Weight – – – of Fineness – – –

By Tale. £0.9.0. Lack of Weight – – – Within Remedy – – 7^{gr} –

Minutes, at Trial of the Pix. 22^d August 1787. By Mint Indenture dated 28th November 1770

Silver At £3.2.0 to the Pound Weight Troy

With Remedy of 2 Dw^l on each Pound

And by Trial Plate dated 11th April 1728

Amount of Silver in the Pix		Weight of Silver Coin in the Pix		Remedy on all the Silver in the Pix	
Species			£ oz dwt gr.		dw ^l gr
Shillings	200	By Computation	3 10. 15 11	Allowed	7. 19 1/12
Half Shillings	80	By the Scale	3 10. 16. –	Excess of weight	– 13 –
Groats	2			– fineness	– – –
Quarter Shillings	2				
Half Groats	2				
Pennies	2		gr		
By Tale	£1 21. 8	Excess of Weight	13	Within Remedy	– 7 6 1/12
Amount of Silver Coins in the Pix		Weight of the Silver Coins in the Pix		Weight and Assay of Silver after Melting	
Species			oz		oz d ^l g ^l
Shillings	50	By Computation	12	Ingot and Grains	4:19:21
Half Shillings	21	By the Scale	12	Loss in Melting	– – 3
Groats	2				12: –: –
Quarter Shillings	2				
Half Groat	1				
Pennies	2				
£ 3.2.0		Error in weight	–	By the assay	Standard

APPENDIX I

Mint 1/14, p. 12.

The Directors of the Bank of England, & some other Officers, and also several Officers of the Mint, and the Company of Moniers, having requested that they may be supplied with Proofs of Gold & Silver Coins from the new Guinea and Half Guinea, and the Shilling & Sixpence Dies, making together the following Numbers of Each Viz^l.

Guineas – – –	168
Half Guineas – – –	168
Shillings – – –	168
Sixpences – – –	168

These are to authorize you to Strike them off, and to deliver them to the Persons undernamed in such Numbers as are sett against their Names respectively on their Paying the Charge of the Metal, and such expence for Workmans^p as may be reasonable for you to add thereto, and for so doing this shall be to you a sufficient Warrant, Given under my hand this 19th day of Sept^r 1787.

To Lewis Pingo Esq^r
Chief Graver of His Majesty's Mint

Effingham Mast^r & W^r.

Directors of the Bank of England	Mr Thompson	100 [sets of 4 coins]
Officers of the Bank	Mr Torr	18
Warden of the Mint & his Clks viz ^l 2	Mr Edward Lucas	8
Mast ^r of the Mint & his Clks – 3	Mr Morrison	8
Compt ^r and his Clk	Mr Bastin	5
Kings Assayer	Mr Joseph Lucas	2

Weigher & Teller & his Dept ^y	Mr Asher Jones	2
Surveyer of the Meltings & his Dept ^y	Mr In ^o Jones	2
Kings Clk and His Dept ^y	Mr Dick Jun ^r	2
Masters Assayer	Mr Alchorne	2
Engravers — — — — Viz ^t 3	Mr Pingo	4
Surveyer of Money presses	Mr Chambers	1
Porter of the Mint	Mr Kemp	1
Die Forger	Mr Fletcher	1
Provost of Company of Moniers	Mr Tage	12
		168

APPENDIX J

Mint 9/56 – Gold and Silver Ledgers

1786 [received]

June 20 Gov ^r & C ^o of the Bank. .. N ^o 1	4976 11 12 20
27 d ^o N ^o 2	7540 4 0 12
July 4 d ^o N ^o 3	5284 3 18 6
	<hr/> 17801 7 11 14

1787

Octo ^r 9 To Mr Lyde Brown N ^o 4	93 9 19 12
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1787 [deliveries]

Febry 8 By Silver Monies Deliv ^d to the Gov ^r & C ^o		[Mint 9/212]
of the Bank, of England	3000 – – –	[Shillings 30 Journies, Six Pennys 20]
21 By ditto	3000 – – –	[Shillings 40 Journies, Six Pennys 10]
28 By ditto	3000 – – –	[Shillings 44 Journies, Six Pennys 6]
March 14 By ditto	3000 – – –	[Shillings 50 Journies]
28 By ditto	3000 – – –	[Shillings 36 Journies, Six Pennys 14]
May 23 By ditto	1800 – – –	[Sixpennys 30 Journies]
Octo ^r 24 By Silver Monies deliv ^d for the Maundy	105 – – –	
Dec ^r 19 By D ^o Delivered to the Bank of England	1001 7 11 14	[Shillings 40 lb. Troy, Sixpennys 945 lb. Troy]
	<hr/> 17906 7 11 14	

Note: Weight of Shillings and Sixpences delivered, after subtracting 105 lb. Troy for the Maundy Money – 17,801 lb. 7 oz. 11 dwt. 14 gr. – exactly balancing the weight of bullion received in 1786.

APPENDIX K

Mint 1/14

Shillings delivered by the Moniers to the Mint office

8.2.1787	1800 lb. Troy [30 journeys]
21.2.1787	2400 lb. Troy [40 journeys]
28.2.1787	2640 lb. Troy [44 journeys]
13.3.1787	3000 lb. Troy [50 journeys]
28.3.1787	2160 lb. Troy [36 journeys]
19.12.1787	40 lb. Troy [2/3 journey]
Total	12,040 lb. Troy

APPENDIX L

Mint 9/61 – The Controllment Roll

Of the Gold and Silver Monies Molten and Coined within the Mint of Our sovereign Lord King George the Third in the Tower of London, kept in the Office of Joseph Smith Esquire (To Wit) Gold Bullion of Twenty-two Carrats of fine Gold and two Carrats of alloy in every pound weight Troy, and of Silver Bullion of Eleven Ounces and two penny weight of fine Silver and Eighteen penny weight of alloy in every pound weight Troy. Received by virtue and authority of an Indenture made between His said Majesty on the one part and the Honorable Charles Sloane Cadogan now Lord Cadogan Master and Worker of the said Mint on the other part bearing Date the 28 Day of November 1770 in the Eleventh Year of His Majesty's Reign; and also by virtue of a Warrant under His Majesty's Sign Manual dated the twenty-eighth day of January 1784 for continuing the Coinage according to the regulations and Covenants contained in

the said Indenture and directed to the Earl of Effingham (then by His Majesty's Letters patent bearing Date the 26th Day of January aforesaid) appointed Master and Worker of His Majesty's said Mint in the room of the Right Honorable Lord Cadogan. By virtue whereof the said Earl of Effingham hath received Molten and Coined from the first Day of January 1787 to the Thirty first day of December following both inclusive.

	Molten Monthly Lbw ^t	Silver Lbw ^t	Total Monthly Lbw ^t	Coined Lbw ^t	Total	Species
[1786]						
January–August	None		None			
September	12720		None			
October	None		None			
November	6540		None			
December	None		None			
		19260				

The above Accountant was Sworn to the Truth of this Account the 8th Day of March 1787, before Ja. Eyne.

[1787]						
January	3960	Nil				
February	9180	9000				
March	5070	6000		lbw ^t		
April	1765	Nil				
May	Nil	1800			Into Shillings	12040
June–August	Nil	Nil			Six pences	5745
September	600	Nil			Four pences	20
October	420	105 [Maundy]			Three pences	20
November	486	Nil			Two pences	25
December	90	985			Pennys	40
	21,571	17890				17890

The above Accountant was Sworn to the Truth of this Account the 22 Day of May 1788 before Ja. Eyne.

Value by Tale of Silver

Shillings	37324
Sixpences	17809.10
Small Monies	325.10
	<hr/> 45,459

APPENDIX M

Mint 1/14

Summary of Mint Accounts of Shilling Matrices, Punches and Dies, prepared and destroyed, between 1760 and 1812.

On hand 29.3.1786. Matrices: 0 obv., 1 rev.
Punches: 3 obv., 2 rev.
Dies: 2 obv., 3 rev.

Note: These may have been for the 1763 (Northumberland) shilling and/or for the 1764, 1775 and 1778 patterns.

On hand 25.4.1788. Matrices: 1 obv., 1 rev. (1 obv., 5 rev. defaced).
Punches: 2 obv., 2 rev. (8 obv., 7 rev. defaced).
Dies: 12 obv., 14 rev. (112 obv., 114 rev. defaced).

Note: These two accounts show that these shilling tools had been prepared in 1787:

Matrices: 2 obv., 5 rev.
Punches: 7 obv., 7 rev.
Dies: 122 obv., 125 rev.

On hand 4.4.1812. Matrices: 1 obv., 1 rev.
Punches: 1 obv., 1 rev.
Dies: 1 obv., 1 rev.

Note: Except for these six tools for 1787 shillings, which remain in the Mint collection, all others reported in 1788, as well as those prepared in 1798 for the 'Dorrien and Magens' shillings, were destroyed in 1796 and 1798.

APPENDIX N

Mint 1/13, pp. 237–238.

To the Right Honble the Earl of Effingham Master & Worker of his Majestys Mint
Sheweth

That your Memorialist was appointed Chief Engraver of his Majesty's Mint in the Year 1780 on the Death of Mr Rich^d Yeo, on which went Mr John Ralph Ochs the Second Engraver declining his right of Succession by reason of his great Age.

That your Memorialist with the Assistant Engraver only hath provided all the puncheons & dies since that period, for the use of the Mint, but on some occasions the demands for the Coinage were supplied with the greatest difficulty from his being without the assistance of the Second Engraver, who is by age rendered incapable of doing any part of the work.

That your memorialist having received your Lordships Command to provide a new series of Dies for the Gold & Silver Coinage, humbly begs leave to represent to your Lordship, that it will not be possible for his to execute the said work, and provide Dies for the current demands of the Coinage, at the same time, and he therefore submits to your Lordship the necessity as well as the propriety of introducing an approved young artist into the Mint, as well for giving the assistance now requisite, as for being perfected in the Art, so as to fill up with propriety any vacancy that may happen.

Your Memorialist therefore prays your Lordship to take the premises into consideration and to take such Measures for obtaining the necessary assistance for carrying on the business of Engrav^d Puncheons & Dies for his Majestys Mint, as to your Lordship shall seem meet. I am my Lord,

Mint Office

Your Lordships, most Obd^t Hble Serv^t.

Aug^t 1786

Lewis Pingo.

APPENDIX O

Mint 6/24 – Master's Accounts, p. 41.

The Account of the Earl of Effingham Master and Worker of his Majesty's Mint within the Tower of London of all Monies by had and received out of his Majesty's Receipt of Exchequer and elsewhere. As Also of all Monies by him paid and Charged for Expences incurred within the said Mint from the 1st day of January 1787 to the 31st day of Decem^r following both days inclusive.

Charge

The said Accountant charges himself with having received by way of Imprest and upon Account out of his Majesty's Receipt of Exchequer within the time above mentioned; as by particulars in the Imprest Roll doth appear

1787 January 19th Received out of Coinage Duties	57 2 8/2
Ap ^t 17 Received out of Coinage Duties	797 3 8
June 15 Received out of Yearly Supplies	8499 8 5
July 18 Received out of Yearly Supplies	4270 7 5/2
	<hr/>
	13,624 2 3
and Aug ^t 22 Received monies of the Pix after trial thereof made this day	7840 2 8
	<hr/>
	21,470 4 11

Mint 6/24 [Master's Accounts, p. 41]

The Account of the Earl of Effingham Master & Worker of his Majesty's Mint within the Tower of London of all Monies by had and received out of his Majesty's Receipt of Exchequer and elsewhere. As Also of all Monies by him paid and Charged for Expences incurred within the said Mint from the 1st day of January 1787 to the 31st day of Decem^r following both days inclusive. ...

Discharge

The said Accountant is discharged by all Monies due to and paid by him and for charges incurred within the time of this Account as followeth Viz

To him the Balance due on his Account ending 31st Decem ^r 1786	11470 12 3/2
All by Indenture	
To him his own Salary for one whole Year	500
for an Assayer and a fireman to his Assayer	125
for three Clerks	150
for a Surveyor	25
for an Office Keeper	25
To Lewis Pingo Esq ^r Chief Graver	200
Mr John Ralph Ochs Assistant Graver to 13 Mar 17.6.8	
more to him on his Warrant of Superannuation	
from 13 Mar to 25 Decem ^r 98.18.8	116 5 4
Mr John Pingo Probationer under Chief Graver to	
13 Mar and as Assistant to 25 Decem ^r	80

	Mr John Milton Probationer under Chief Graver	
	from 13 Mar to 25 Decem ^r	62 13 4
	Mr Dan Kemp Provost of the Moniers	100 „ „
	Mr Ruben Fletcher Smith Assistant to the Gravers	40 „ „
	Mr John Chambers Surveyor of the Money Presses – 40	
	more to him – 10	50 „ „
By Treasury	Joseph Lucas Esq ^r	100 „ „
Warrant	Sir Robert Pigot Bart	50 „ „
	William Dick Esq ^r	20 „ „
		<hr/> 1643 18 8

KEY TO PLATES

Plate 6

1. Worn circulation shilling.
2. Enamelled reverse.
3. Enclosed in a glass locket.
4. 'Love token' engraved with initials and a heart.
5. Punch-marked initials.
6. Ivory gaming-counter box containing three 1787 shillings.

Plate 7

1. 1786 pre-issue shilling.
2. 'January proof' (copyright British Museum).
3. Normal issue with semée of hearts.
4. 'Pingo proof'.
5. Second 7 in date over 6, weak or missing stops to left of date.
6. Second 7 in date over 6.



(Coins not to scale)



1



2



3



4



5



6

(Coins not to scale)