A STUDY INTO DIE NUMBERS FOUND ON BRITISH HALF SOVEREIGNS IN THE PERIOD 1863-1880

BRIAN UNSWORTH LLB

PART 1 1863-1869

INTRODUCTION

On reading Michael Marsh's books on the Gold Half Sovereign. I decided some years ago to commence an exercise to see what die numbers still existed and to see if the reason for their adoption could be ascertained. The gold half sovereign denomination is an excellent denomination to look at as the use of die numbers on half sovereigns occurred over the longest period, that is 1863-1880 inclusive.

When I first started I envisaged it would be a case of just noting the numbers and initially recording basic information such as the year, the die number, where they were found such as where they appeared for sale, the auction house, internet sites, museum coins, hoards etc. I did not appreciate how complicated the task would become. My records now have over 1100 individual die numbers

I quickly discovered that it was not a case of simply logging individual numbers, as more than one version of the same die number could be used in the same year. In this study I will also touch upon the different variations of half sovereigns that were minted during the period, and I will attribute the Spink reference to these variations

For each year in the study apart from 1868, because no London Mint half sovereigns were produced in this year, I will show how I arrive at the number of die numbers and comment on the figures. It should be mentioned at this point that the Royal Mint published an annual report each year from 1870 ,which details the number of obverse and reverse dies that were used to produce the coins of a particular year. Numbers of reverse dies used by the Mint is known for all years from 1869 to 1880, although the 1880 figure is somewhat useless as it contains dies that were used to produce non die number coins.

Finally a word of warning it is very easy to confuse die numbers on such a small coin as the half sovereign, for example 3's and 5's are very easily mixed up especially on coins that have seen a great deal of wear. The advances in digital photography in recent years and the increase in value of half sovereigns has led to better images being available to identify die numbers. To be honest I am amazed so many die numbers have survived the ravages of time.

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HALF SOVEREIGN DIE NUMBER SERIES 1863-1880

Die numbers

Die numbers appeared on half sovereigns during the period 1863 to 1880. The exact reason for using die numbers is not known, however some have suggested that die numbers were used to determine the lifetime of a die.

In his book "The Gold Coins of England" in 1884, Robert Lloyd Kenyon commented *"On the reverses of some gold coins of 1863, and on all those of the following years may be observed a very small numeral under the shield… These numerals were placed on the dies in order to test how long each particular die lasted, every die having a different numeral, and the series of numerals beginning again at the beginning of each year… These numerals were used on the sovereigns as long as the shield of arms continued to be the type of the reverse and on the half sovereign until 1880. They were not found, however to be of any practical use, and are now discontinued."*

However I need to take issue with the above comment, from 1870 the Royal Mint started publishing details of the numbers of dies that were used to produce each denomination, for most denominations the number of obverse dies far exceeds the number of reverse dies. In 1869, for example, a total of 84 obverse dies were used compared to only 30 reverse dies to produce the gold half sovereigns in this year. If the obverse die wore out more quickly what is the point of adding the die number to the reverse. Also as the dies were examined on a regular basis during the Victorian manufacturing process why would you need to record this.

I would also like to take issue with the statement that die numbers started afresh each year, from my studies this may have been the original intention but did not happen in practice. I would refer you to comments section at the end of each year for an explanation of what was actually happening.

It should be noted that The Royal Mint gave preference to the production of gold coinage above all other metals, the following is taken from the 5th Annual Report for 1874 page 29.

"*I need not enter into a detailed statement to show the nature and extent of the defects of machinery by which the mint is hampered in its different departments but some idea may be obtained of the inadequacy of the present arrangements from the fact that coinage of only one metal can be executed in it at a time… it has thus being frequently happened that the simultaneous demand for gold, silver and bronze has been very heavy and that there has been no alternative to suspend coinage of silver and bronze until the position of the Bank of England with regard to sovereigns has been made secure."*

The report also states that when silver and bronze coinage was being minted the die department would turn its attention to making dies for stock which would be used when production resumed. The trouble with this is that demand from the Bank of England for gold coinage was haphazard sometimes the requirement was minimal other years substantial, if you have already

prepared the dies with a dated the obverse and the demand for gold coinage from the Bank of England did not materialise until the following year, the obverses would be useless. From my studies the obverse dies were produced undated only to have the date completed before being issued to the coining department. The Royal Mint Museum contains examples of half sovereign die punches which have combinations of date digits.

The dies not issued to production that remained in stock would be issued to production with the next year's date again input manually. This accounts for the wide range of date variations seen on coins of the period. A good example of this from an early period are the small and large dates in 1853 but there are also coins with a mixture of both small and large numerals in this year.

With the reverse dies any dies that had been numbered, but not used could be carried over to the next coining run. A good example of this working in practice can be seen with the die numbers issued to production in 1869 and 1870. In 1869 the royal mint report states that 30 reverse dies were used, and these are in the range off 1-31. In the following year, 1870, of the 22 reverse dies there are distinct ranges, the first range 33-46 (14). these continuing the sequence from 1869. Thereafter the Mint would have then used some of the coarser border dies numbered 1 to 8 (8), to complete the production for that year,. The remaining coarser border dies from die number 9 onwards would be dated for production in 1871, along with other reverse dies using the previous type of reverse starting at die number 1.

Moreover if you were using the reverse die number to measure how long a die lasted why would you have numerous versions of the same die number in the same year, surely this would be confusing.. The most notable example of this occurs with the repositioned legend coins of 1871 and 1872, where the same die number can exist with both the repositioned legend and the normal legend coins. With the 1871 the reposition legend coin there is no dot on the centre line whereas the normal legend coin has the dot therefore the reverses are obviously different. With the 1872 coin this is also the case, as the repositioned legend reverse has 122 denticles whereas the new reverse 1872 coin has 147 denticles .

From low numbers of die numbers used up to 1870, there is a vast increase in the number of die numbers used in years from 1871, this corresponds with problems experienced with the steel used for the dies which will be touched upon later.

I think the real reason for the use of die numbers was the piece work system. The Royal Mint operated a piece work system were worker's wages had an element of pay that was linked to the amount of "good coins" coined It should be noted that by 1873 with the increase in quantities of coins being produced, and the introduction of more modern presses, the use of die numbers had probably run its course, both the new St George and Dragon reverse sovereign and the re-introduced half-crown did not feature die numbers.

No additional value should be attributed to individual die numbers. It should be remembered that half sovereigns are kept as a store of wealth and can disappear from the marketplace for

years. The growth of the internet and advance in digital photography has aided the recording of die numbers with access to coins appearing in auctions all over the world; however I do not doubt that although a great number of die numbers have been lost to history, many more die numbers are still waiting to be discovered.

As of March 2025, I have recorded over 1100 distinct reverses, however please bear in mind that there can be multiple versions of the same die number bearing the same date year. Again this will be explained after each year's figures.

At this point I should also point out that both Michael Marsh and Michael Mapleton also recorded die numbers. The latter's die numbers were published in the "Coin 1973 Yearbook" I have decided not to include die numbers which I have not recorded, but appear in these studies. In the few years that I have balanced back to the Royal Mint Records, all have highlighted obvious flaws in the previous studies. I think one of the reasons for this was that the authors of these studies had to rely on written auction catalogues which can be notoriously incorrect.

Finally I should point out that the mintage figures I show are taken from the Royal Mint Annual Reports. In these reports there are two figures shown for each year. The ones I have used are taken from the schedules that account for all Gold Silver and Copper Monies coined at the Mint and differ from the figures shown at the start of each annual report. The explanation for this is shown as a note at the bottom of the tables.

"The accounts for (year) shown in this Report differ from those given on pages 4 and 5, as the latter give the number of good pieces actually coined while the former show the amount of coin delivered to the public, or into store at the Mint Office , during the year". Note the difference between the two figures can be substantial.

COIN DETAILS

Spink Ref 3860 - Second Portrait 1863-1871 Die number with dot

Die number half sovereigns that started to appear bearing the date of 1863 utilise the second portrait coin which started to be used in 1858. The die number was manually punched onto the die below the lower garnishing

Obverse – Portrait of Victoria facing left, the hair is tied with two visible ribbons the first ribbon is much wider than the second ribbon, the latter on which the hair encroaches. The hair is tied into a bun at the back of the head. The legend reads VICTORIA DEI GRATIA and the date is positioned below the truncation. (Denticles 117)

Reverse - The Ensigns Armorial set within a garnished shield surmounted by a royal crown. The legend reads BRITTANNIARUM REGINA FID: DEF: There are two flower stops placed either side of the lower garnishing and dot on the centre line. (Denticles 120)
Technical specifications:

Diameter: 19.33mm

Weight: 3.994 grams

Fineness: 91.66% (0.117677 troy ounce pure gold)

Alignment: Coin Alignment (Reverse die alignment ↑ ↓)

1864 Half Sovereign DN35

Year	Mintage	Rarity	Best	Grading body
1863	<327,000	N	MS61	PCGS

Die Numbers: **2, 3, 4, 6, 7, 9,**

Total **6**

Comment

The Royal Mint's report "An account of gold moneys coined" for 1863, shows that production of half sovereigns was split over two periods in the year. Most were produced during the months of February and March, with a small quantity of approximately 327,000 produced in November of the same year (See Part 3 Appendix 1). I am of the opinion that due to the small number of dies numbers occurring on 1863 coins, that the half sovereigns that bear die numbers were produced during this latter period, or more likely at the end of this period.

I am also of the opinion that prior to November 1863 a range of numbered reverse dies were produced, from which a limited number where issued to production during November. The reverse dies that were taken from the presses after production ceased and deemed suitable to be used again i.e. 6, 7, & 9 were matched with new obverses dated 1864 and issued to production in 1864 along with some of the remaining stock dies. A good example of this is the positioning of the 9 die number which is identical on both the 1863 and 1864 half sovereigns, being positioned noticeably left of centre under the garnishing.

SINCONA British Collection, Part 5 (October 24, 2023), Lot 1665.

Heritage Auctions / HA.com Auction 3057 (September 2017) Lot 33285

I am of the opinion that die number 1 & 8 were issued to coining department in 1864 along with more of the die numbered dies from 1863 and therefore will not exist on a 1863 half sovereign but I could be proved wrong.

Year	Mintage	Rarity	Best	Grading body
1864	1,758,490	N	MS64	PCGS

Die Numbers: **1, 6, 7, 8, 9, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23**

24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 45, 64,

Total **34.**

Comment

Note die number 64, which seems to be out of the range, the next highest die number is 45 therefore it would be easy to assume that the die numbers have been stamped the wrong way round. However I am of the opinion that this die number was part of the original series of dies that were numbered prior to November 1863.

An example of this die number was originally sold at Downies Royal Bank of Australia auction back in 2005, catalogued as die number 84, the same coin reappeared at a St James Auction in 2011. However the appearance of better example of the coin has now confirmed the number to be 64. Die numbers this high next appear during 1871, and some may come from this original series. See 1871 for details

Year	Mintage	Rarity	Best	Grading body
1865	1.834,750	N	MS64	NGC

Die Numbers: **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18,**

19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33,

34, 36, 37, 38, 39, 40, 41, 44, 45, 47, 48, 49, 50, 52, 53,

54, 56, 57, 59,

Total **52**

Comment

All die numbers previously recorded in earlier studies have now been confirmed. The total figure of 52 reverse die numbers includes 12 die numbers previously unrecorded.

Year	Mintage	Rarity	Best	Grading body
1866	2,058,776	N	MS64	NGC

Die Numbers: **1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17,**

18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31,

32, 33, 34, 35, 36, (34)

Two version dies **19A** **(1)**

Total **35**

Comment

Two distinct coins featuring die number 19 can be found, One of the dies was previously used on 1865 production run, and presumably deemed suitable to be used in 1866 with a new obverse. There is also a rare overdate in 1866 details of the die numbers that the overdate have been found are given below.

Year	Mintage	Comment	Rarity	Best	Grading body
1866	N/A	Overdate last 6 over 5	R2		MS62 PCGS

Die Numbers: **4, 11,**

NB – The overdate can be found on coins bearing these die numbers but not exclusively, non-overdate coins can also found with these die numbers. Please remember that in the half sovereign series far more obverses were used than reverses.

Year	Mintage	Rarity	Best	Grading body
1867	992,975	N	MS64	NGC

Die Numbers: **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19,**

20, 21, 23, 25, (23)

Total **23**

Comment

Again all the coins in previous studies have been confirmed together with 5 new die numbers.

The first annual report of the deputy master and comptroller of the Royal Mint was published for the year 1870 and every year subsequently. These reports include details of the numbers of dies that were used for the year of the report and the preceding two years, the first figure specifying the obverse quantities and then the reverse quantities. It should be noted that usually far more obverse dies were used than reverse dies. The annual reports include figures for three years therefore the report for 1870 included figures for 1869 and 1868, however no half sovereigns were minted in 1868. After each year for the period 1869-1880 I have included the theoretical maximum number of reverse dies to compare with the die numbers that I have recorded. It should be noted that during the coining process some dies would have been rejected due to quality control so you would expect in most cases the number of die numbers picked up to be same as or more likely less than the theoretical maximum.

Year	Mintage ts	Rarity	Best	Grading body
1869	1,861,764	N	MS65	NGC/PCGS

Die Numbers **1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20,**

21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, (29)

2 Version dies **16A, (1)**

Total **30**

Annual Report **30 (Percentage completion 100%)**

Comment. Die number 16 - two coins have appeared at auction were the 6 numeral is markedly smaller and positioned farther away from the garnishing. No coins have been recorded bearing the die number 15 therefore the existence of two separate dies bearing the number 16 may have been an error by the Mint.

The year 1869 was marked by major changes in management of the Royal Mint, The death of Thomas Graham the last Master of the Royal Mint in September, resulted in the title being transferred to the Chancellor of the Exchequer, with the actual responsibilities being assigned to the Deputy Master Charles William Freemantle. Earlier in the year John Graham the younger brother of Thomas Graham had also died. He had been the chief coiner being Superintendent of the Die and Coining Departments, he was replaced by his deputy Mr Robert A Hill.

In parts 2 and 3, I will examine the years from 1870 to 1880 during which there was a vast increase in the number of dies consumed compared to the period just ended.