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BRONZE COINAGE AT THE PERTH MINT 1951-1953: THE TRANSITION TO WORKING DIE PRODUCTION

by Paul M. Holland

The centenary of The Perth Mint celebrates 100 years of coinage beginning with gold sovereigns in 1899 and ending with the wide range of today's mint products. The focus of this article is on the middle years of this period, when the Perth Mint first began producing dies for the coinage of pennies and halfpennies. Newly available records from Perth Mint archives^{1,2} which have long been in storage and unavailable, now make it possible to explore details of this interesting transition period. These records, coupled with detailed examination of features on the coins themselves provide a number of new and sometimes surprising insights. For example, it is now clear that all of the 1951 dated halfpenny reverse dies prepared at the Perth Mint were actually made in 1952, that the production of 1952 dated penny dies was continued until mid-1953, and that 1953 dated halfpenny dies continued to be made during the first few months of 1954. Perth Mint records also clear up a minor numismatic mystery over the 1953 dated penny reverse die tools supplied to Perth by London, for which no evidence of use has been found. These tools were analogous to similar tools sent to Melbourne which were employed in preparing dies for the rare "long 5, different 3" Melbourne Mint pennies. Records now reveal that specific instructions were sent to Perth from the Commonwealth Treasury not to use these new reverse tools. Finally, examination of the records also provides an explanation for the observation that two different types of penny reverse master tools were provided to Perth in 1951.

Before getting into details of this transition period, it is perhaps first worthwhile to place the transition into historical context. The history of the Perth Mint itself is one of great ups and downs. It began as Australia's junior branch mint, created for coinage of the output of the western gold fields using dies supplied by the Royal Mint in London. When gold coinage ceased in the early 1930s the Perth Mint nearly closed, but was resurrected for emergency bronze coinage early in World War II, with all dies supplied from the Melbourne mint. By the end of the war years it was well on its way to assuming primary responsibility for coining Australian pennies and halfpennies, and it is here that the Perth Mint made the important transition to full status as a mint by beginning to produce its own coinage dies using tools directly supplied by London. Since then, the Perth Mint has proven itself to be a hardy survivor. Of the three original Australian mints, it is the only one to have survived the changeover to decimal coinage, first by sharing a significant portion of bronze coinage production with the new mint at Canberra until 1983, and then by making a remarkable transition to the production and world-wide marketing of a great variety of numismatic products. A new history of the mint is being published as part of the centennial celebration in a book titled "Striking gold : 100 years of The Perth Mint" by John McIlwraith and Anthea Harris.

The transition to the production of working dies at the Perth Mint required both experienced personnel and master tools for die

making from the Royal Mint in London. Among the key figures was a Mr. George Knight, now in his 90s, who was transferred to the Perth Mint from London as Foreman of Mechanics, arriving in Perth with his wife and children in 1948.² Another was Mr. C. A. M. Cook, who later became Deputy Master of the Perth Mint. Their signatures are scattered throughout records of the transition period, particularly in the “Die Account” book, a series of ledgers originally begun at the Perth Mint in 1899.²

From the “Die Account” book, the “Bronze Ledgers” which record daily coinage production, and various correspondence files of the Perth Mint, many interesting details of the transition period can be gleaned. By further correlating this information with records from the Royal Mint in London on the production of master tools and detailed observations of numismatic features of the coins themselves, a much more complete picture of the transition to working die production can be built up.

Correlation of Perth Mint records with other records and numismatic observations

Because mints take special care with dies and die tools for security reasons, mint records often contain much useful numismatic information. For example, records of the Royal Mint in London concerning the production of die tools provide important details including their dates of fabrication and the relationship between the various tools for Australian pennies and halfpennies. These have been analyzed in classifying master die types and the results reported in previous articles in this journal.^{3,4} In the case of Perth Mint records the “Die Account” book² provides a wealth of new information,

including a dated record of each batch of dies made available for minting, the number code used to label each die, the dates it was employed, whether it was an obverse or reverse die, on which of the four coining presses it was used, the raw mintage figure of coins struck by each die, its state on being removed from the press, e.g. “cracked”, “worn”, etc., along with enough information to deduce with which die or dies it was paired. Further, the numbering system itself allows the dies produced at Perth to be readily distinguished from those supplied by Melbourne. Here, the numbering of dies made at Perth started over using a prefix “A”, e.g. “A1”, whereas the numbering of the dies supplied from Melbourne continue in their earlier un-prefixed numbering sequence, e.g. “369”.

Unfortunately, similar details on the fabrication of both the master tools and dies have not been located in the Perth Mint records that have come to light so far. Such records would almost certainly have existed, recording an inventory of master tools, dates and lineages of their production, and their use in die manufacture. Lacking such records, it becomes necessary to “fill in the gaps” by deduction, using the detailed records of master tools provided to Perth from the Royal Mint in London,^{3,4} Annual Reports of the Royal Mint⁵ which provide the number of master tools and dies produced each year, and by careful observation of numismatic features on the coins themselves. In many cases, this approach can provide definitive answers, in others, assumptions are necessary and results may have to be revised if and when more detailed Perth Mint records become available.

A summary of the master tools provided to Perth from London^{3,4} for George VI coin-

Date	Notes	Comment
11 Oct 1950	Obverse penny master die from United Kingdom working punch of 2 June 1949, taken from master die of 2 Dec 1948. Sent to Perth, July 1951.	1d Obv 3
26 Oct 1950	Obverse penny working punch A from master die of 11 Oct 1950. Sent to Perth, Oct 1950.	1d Obv 3
21 Feb 1951	Kangaroo reverse halfpenny prep punch from spare soft punch of master die of 10 Jan 1939. Punch finished with numerals cut away to alter date to read 19--.	1d Rev B
13 Mar 1951	George VI Obverse halfpenny master die from reduction punch, beaded and edged. Sent to Perth, April 1951.	½d Obv 4
14 Mar 1951	Kangaroo reverse halfpenny master die dated 1951 from punch of 21 Feb. Sent to Perth, April 1951.	½d Rev B
29 Mar 1951	George VI Obverse halfpenny punch from 13 March master die. Sent to Perth, April 1951.	½d Obv 4
30 Mar 1951	Kangaroo halfpenny reverse punch from master die of 14 March. Sent to Perth, April 1951.	½d Rev B
10 May 1951	Kangaroo reverse penny prep punch created from master die of 5 Nov 1937 and de-dated to 19--. Transferred to Royal Mint collection, 1964.	1d Rev A
7 June 1951	Kangaroo reverse penny master die dated 1951 with PL mintmark from de-dated reduction punch of 13 Oct 1937. Date completed, beading and PL added. Transferred to Royal Mint collection, 1964.	1d Rev D
28 June 1951	Reverse penny working punch B dated 1951 as above with PL removed. Sent to Perth.	1d Rev D
29 Aug 1951	Reverse penny master die dated 1951 from prep punch of 10 May 1951 and therefore already beaded. Sent to Perth.	1d Rev A

Table 1. Source of master tools for Australian pennies and halfpennies for Perth, from the Royal Mint, London during 1950-1951.

age is given in Table 1. For the numismatist these tools are especially interesting in that most of them are distinguishable from those used at Melbourne for the preparation of dies, and thus they provide a “fingerprint” for identifying the origin of particular coins and dies. In the case of master tools for George VI coins, all but the penny obverse are distinctive. The halfpenny obverse is especially distinctive being from a new, separately beaded, obverse 4 master die with 149 border beads, rather than the 146 border bead die type used at Melbourne. This new obverse is easily identified by the alignment of the letters “I” in FIDEI, which are now between and not pointing to border beads. The 1951 dated halfpenny reverse punch supplied by London is closely related to 1951-PL tools, although in this case, a spare punch of the Perth type was used to create a master die for PL halfpennies by the addition of the mintmark.⁴ The result is that the date configuration on the Perth tools differs subtly from those used at Melbourne, mainly the tops of the “1”s of the date are taller on the tools used at Melbourne, and better aligned on those at Perth (and London), as shown in Figure 1.

Two different types of penny reverse tools were also provided to Perth, both of which are readily distinguished from those used at Melbourne. While the 1951 dated reverse A master die is of the same type as that used in Melbourne, it was re-dated at the Royal Mint in London and the numeral “5” now appears without serif, whereas all 1951 dated dies supplied to Perth by Melbourne occur with a strong serif on the “5”. The penny reverse D master punch supplied by London has different beading and numeral “5” without serif, being made from a dated 1951-PL punch with the mintmark removed.

The two types are readily distinguished, with reverse A having the upright of the “P” of PENNY aligned with a large border bead, whereas on reverse D this is aligned between beads. Why two different penny die types were provided by London to the Perth Mint in 1951 had always been a mystery to me. The apparent answer to this question appears in an airmail letter dated September 4, 1951 to inform Perth that the penny reverse master die of 29 Aug 1951 (i.e. reverse A) was being sent from London under separate cover.² The letter regrets the delay in delivering the matrix (master die) which had been promised at the end of May, stating that “To expedite the pence we had to use the 1d matrix then being made to supply to you, for our own purposes, and replace this with another matrix as opportunity offered.” Clearly the original matrix (or master die) had been “borrowed” to make the punches for 1951 PL pennies which were of the reverse D type. While a reverse D punch (dated 7 June 1951) made from this die was sent to Perth in July, with the notation “penny reverse matrix follows later” in an accompanying telegram,² the reverse A matrix described above was later substituted for the reverse D matrix (master die) originally prepared for the Perth Mint.

A summary of master tools for Perth from the Royal Mint in London^{3,4} for Elizabeth II coins in 1953 is presented in Table 2. Because dies were no longer being supplied to Perth from Melbourne at this point, distinguishing features between these tools and those of Melbourne are of less consequence. None the less, it is numismatically interesting to point out that the die types used at the two mints are quite distinctive in 1953. Here, London provided separate Elizabeth II obverse master die types to the two mints

for both pennies and halfpennies. For the penny obverse the number of border beads for Perth is 117 with 116 for Melbourne, the die for Perth being easily identified by the of the letter "I" of GRATIA pointing to a border bead. The halfpenny obverse for the two mints were also separately beaded, but as no halfpennies were struck at Melbourne for 1953 and no inked impression of the die (as is often found in Royal Mint records from London) has been located, the details of this halfpenny obverse have apparently been lost. The standard reverse die types used for coining pennies at Perth and Melbourne in 1953 also differ, with Perth using reverse D and Melbourne reverse A. However, the Royal Mint in London had also provided each mint with new separately beaded penny reverse master dies and punches. That for Melbourne (reverse E) was used for striking the rare "long 5, different 3" pennies and an inked impression of this die exists in the Royal Mint records. The new reverse tools for Perth were never used (see discussion in next section) and as no inked impression was made in Royal Mint records, the design details of this penny reverse created for Perth appear to have been lost.

A summary of results during the transition years for the Perth Mint taken from Annual Reports of the Royal Mint⁵ is given in Table 3, below. These official published reports provide the number of master tools and dies produced each year and can generally be considered to be reliable. However, the reports tend to be cursory at best and provide little numismatic detail. Careful analysis of the much more detailed records of the Perth Mint shows that it should not be assumed that the dates on the dies (or tools) listed in the Annual Reports neces-

sarily correspond to the year of the report. However, since the listing of master dies and punches made at Perth in these reports is presently the only available source of information on these tools, this provides crucial information for interpreting numismatic observations.

A summary of the number of obverse working dies produced by year is presented in Table 4. This is derived from careful analysis of the "Die Account" book of the Perth Mint,² and a number of somewhat surprising results appear. Firstly, 11 trial obverse penny dies were made in 1951, of which only 10 are listed in the Annual Report (see discussion in next section). Another is that more George VI obverse dies were produced at the Perth Mint in 1953 (i.e. during the reign of Elizabeth II) than in any other single year with the Annual Report total of 222 combining both types. Also, there is a discrepancy in the number of halfpenny obverse dies produced in 1953, mainly an apparent shortage of 24. This can probably be explained by the two batches of dies (12 in each) that appear in the "Die Account" books on January 5th and 13th, 1954, which may have actually been made before the first of the year. Because detailed records of die manufacture at the Perth Mint have not yet been located (assuming they still exist), such apparent discrepancies should not be too surprising. Finally, it is interesting to note that many of the halfpenny obverse dies used for 1953 dated coinage were produced in 1954.

A detailed summary of the number of reverse working dies, their dates, and the year they were produced is presented in Table 5. Again, this is the result of painstaking analysis of the "Die Account" book of the Perth Mint. It should be noted in Table 5 that the

Date	Notes	Comment
14 Apr 1953	Elizabeth II obverse penny reduction punch with no beading. Transferred to Royal Mint collection, Dec 1955.	1d
21 Apr 1953	Elizabeth II obverse halfpenny reduction punch in 5/8 relief from Australian modified Int. Model of 19 March, sized for halfpenny.	½d
27 Apr 1953	Kangaroo reverse penny reduction punch dated 19-- in 3/8 relief to facilitate coining with new obverse. Last two figures of date removed. Transferred to Royal Mint collection, 1964.	1d
8 May 1953	Obverse penny master die (P) from reduction punch of 14 April, beading added. Sent to Perth, May 1953.	1d Obv 2
22 May 1953	Obverse penny working punch (P) from master die (P). Sent to Perth, May 1953.	1d Obv 2
22 May 1953	Reverse penny master die (P) dated 1953 from reduction punch of 27 April. Beading added and date completed. Sent to Perth.	not observed
5 June 1953	Elizabeth II obverse master die (P) from punch of 21 April, beaded and letters deepened.	½d Obv 5
12 June 1953	Reverse penny working punch (P) dated 1953 from master die (P). Sent to Perth.	not observed
18 June 1953	Obverse punch "A" (P) from master die (P). Sent to Australia.	½d Obv 5

Table 2. Source of master tools for Australian pennies and halfpennies for Perth, from the Royal Mint, London during 1953

date on the die often does not correspond with the year it was produced and that this occurred some 20-25% of the time during the transition period. With the exception of 1952 penny reverse dies where both reverse A and D types were used, the die types can be readily deduced from numismatic observations and other available information.^{3,4}

Discussion and numismatic analysis of the coinage of the transition period

The earliest dies made at the Perth Mint were penny obverse dies. Unfortunately, there is no way to distinguish these from those of Melbourne. In the case of 1951 dated reverse dies, it is certain that none were made at Perth since all coins exhibit

Year	Master Dies and Punches		Working Dies	
	Obv	Rev	Obv	Rev
1951 ½d	--	--	24	--
1951 1d	--	--	10	--
1952 ½d	--	3	78	48
1952 1d	--	7	120	210
1953 ½d	4	7	252	192
1953 1d	--	1	222	150

Table 3. Master Dies, punches and working dies manufactured at Perth, as taken from Annual Reports of the Royal Mint.⁵

Year	Obv Type	Working Dies	
		½d	1d
1951	George VI	24	11
1952	George VI	78	120
1953	George VI	--	138
1953	Elizabeth II	228	84
1954	Elizabeth II	150*	--

Table 4. Production of obverse working dies at Perth by year and type, based on analysis of records.
*up to end of production of 1953 dated reverse dies

Year	Date on Die	Reverse Working Dies	
		½d	1d
1951	1951	--	--
1952	1951	24	--
1952	1952	24	210*
1953	1952	--	90
1953	1953	192	60
1954	1953	60	--

Table 5. Production of reverse working dies at Perth by year and date on die, based on analysis of records.
*first 24 are believed to be reverse A type, the rest reverse D (see ref 6)

the characteristic numeral 5 with serif of Melbourne dies. Examination of the Perth Mints "Die Account" record² shows that the first die made at the Perth appears on July 6, 1951 and was a single George VI penny obverse die numbered A1. This must have been an initial trial made directly from the master punch provided by the Royal Mint late in 1950. The result was inauspicious, as the die cracked during its first use on coining press #1 on July 9, 1951 without a single accountable coin being struck. No official comment on what must have been an embarrassing moment has yet surfaced in the records, and this die is apparently not included in the tally for the Annual Reports.⁵ Another attempt was made with a batch of 10 obverse penny dies on July 12th, with the numbering of the dies suggesting that a full batch of 12 may have originally been intended. Of these, only two appear to have been used, although the production of 10 obverse penny dies was acknowledged in the Annual Report.⁵ The first of these, number A13, was tried on July 17th, yielding 3600 coins on press #2 before being removed with the notation "sunk". The same die was placed in press #1 the next day and a further 7200 pennies struck. Another Perth made obverse die, number A12, was used the same day in press #4 to strike 28,800 coins before being replaced with the notation "chipped". This was more respectable, but still far short of the usual totals for Melbourne made obverse dies of about 150,000. However, it should be noted in fairness that a large coin like the penny is especially difficult to strike in a hard metal like bronze, and that even the Royal Mint in London had a terrible time with preparing suitable dies for this coin in 1860.⁷

The next dies produced at the Perth Mint

were a batch of 12 halfpenny obverses on Dec 11, 1951 followed by a second batch of 12 on Dec. 18th. These were numbered A1-A12 and A13-A24, respectively, restarting the Perth numbering sequence.² These must have been made directly from the master punch for halfpenny obverse 4 supplied by London in April 1951. The fabrication of halfpence working dies at Perth was much more successful, with mintage totals for dies of the first batch ranging from 5,760 to 190,080, and the second batch from 34,560 to 224,640. By the second batch, most of these totals were comparable to those for dies supplied from Melbourne.

Halfpennies of the Perth Mint dated 1951 are especially interesting numismatically since it is possible in all cases to distinguish between the dies made at Perth and Melbourne. All four possible die pairing combinations are known.⁴ In the "die account" book all dies labeled with a number only are clearly from Melbourne and correspond either to obverse 3 or 1951 reverse dies with the dot mintmark after the Y. Dies labeled with the prefix letter "A" followed by a number are clearly from Perth. Here, Perth made obverse dies would be of the obverse 4 type since only these tools were available. Likewise, Perth made 1951 dated reverse dies show the distinctive variation in the style of the date as on 1951 PL halfpennies (see Figure 1) and occur without the dot mintmark, since the punch provided directly from London was without mintmark.^{4,8} This situation is confirmed by an especially valuable numismatic observation in the "die account" records of a single pairing of a numbered obverse die (obverse 3) with a prefix "A" lettered reverse March 7-11, 1952 on coinage press #1. In fact, this corresponds to a known rare halfpenny die pairing of the



(1a)



(1b)

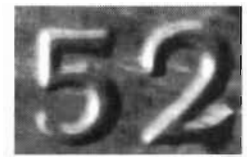
Figure 1. Date numeral configuration of 1951 Perth halfpennies from working dies produced (a) at Melbourne; and (b) at Perth



(2a)



(2b)



(2c)



(2d)



(2e)



(2f)

Figure 2. Date numeral varieties of 1952 Perth Mint pennies: (a) wedge base 2; (b) pointed serif 2, leans right; (c) pointed serif 2; (d) square serif 2; (e) broad 2; and (f) thick broad 2.

1951 “no dot” reverse with obverse 3, with the records showing a raw mintage figure of 126,720 coins.

When this is combined with the fact that 1952 dated halfpennies only occur with obverse 4, it can now be established that two batches of 12 “no dot” halfpenny dies dated 1951 were made at Perth early in 1952. It is also clear that at least some 1951 dated halfpence continued to be struck from Mel-

bourne supplied dies “with dot” up to the end of March when the fault listed for halfpenny dies taken out of service was “obsolete”. Similar analysis also makes it possible to determine which halfpenny reverse dies made at Perth were dated 1952, and this has been incorporated into the results shown in Table 5.

1952 dated coinage at the Perth Mint started with halfpence in April. Careful

numismatic examination of the coins shows no variation in the position of the final date numeral or dot mintmark, indicating that the dies for these must have been prepared from a single dated punch with dot mintmark at the top of the "A" of AUSTRALIA. This change in the placement of the mintmark was designed to signify that the dies were manufactured at Perth.⁹ As the preparation of three master tools is recorded in the Annual Report,⁵ the following procedure is likely to have occurred. First, the 1951 dated reverse master die (negative image) provided by London would have been used to make tool #1, a dated punch (positive image) from which the last date numeral would be removed by grinding it off. This de-dated punch would be used to fabricate a new master die to which a final date numeral "2" and dot mintmark could be added by a hand (tool #2). Finally, this derivative dated master die could be used to make a dated and mintmarked punch (tool #3) from which the working dies would be directly produced. While 1952 Perth Mint halfpence are not very interesting numismatically aside from displaying the distinctive obverse 4, they do provide a measure of the new found efficiency of the Perth Mint since 19 of the 24 reverse dies made were used in a period of only a little over two weeks to produce the entire 1952 dated coinage with a raw mintage figure of some 1,895,040 halfpennies.²

Pennies dated 1952 are the numismatic highlight of the Perth Mint's transition period. These coins utilize two different reverse die types and exhibit a number of important variations in the style of the final numeral "2" in the date, going by descriptions such as "broad 2", "wedge base 2", "pointed serif 2" and "square serif 2". These have long been sought by collectors.¹⁰⁻¹² Detailed numismatic analysis to sort these

out by die variations has been presented elsewhere,⁶ and so only a brief summary will be given here. As shown in Table 5, newly available records from the Perth Mint reveal that a total of 300 reverse dies of two different master die types were prepared for 1952 Perth pennies, including 90 dies actually prepared in 1953, before the new Elizabeth II obverse became available. These reverse dies were prepared using the master die and punch provided by London to fabricate the seven reverse master tools prepared at Perth (Table 3). Unfortunately, neither detailed records concerning the production of these master tools nor direct contemporary Perth Mint correspondence related to date numeral varieties have been located. However, in a response to queries by S.V. Hagley about such date numeral varieties on 2 March 1962 the Perth Mint replied, "We were not happy with the first 1952 date produced and as soon as possible we produced another matrix and punch which we thought more satisfactory".^{2,6} This seems to confirm first, that two 1952 dated sets of a master die and punch each (a total of four 1952 dated tools) were prepared, and second, that the numeral type on the initial set of tools was not satisfactory and was quickly replaced by the second set. Based on the relative ratio of the two types observed it is clear that the first set(s) of dies must have been reverse A and the remaining balance reverse D.⁶ Since both reverse master die types were used for 1952 Perth pennies, an accounting of the probable sequence of producing the seven reverse master tools for these coins can be made.

The creation of a 1952 dated and mintedmarked punch from the reverse A master die provided by London would have required that three tools be fabricated at Perth. Here, the 1951 dated reverse A mas-

ter die from London would first be used to produce a punch from which the last date numeral would be removed to make a de-dated "195-" master punch (tool #1). This would have been an especially attractive option for the Perth Mint since this initial tool itself could be directly used to make individual working dies by adding a final date numeral and mintmark to each die. By the same process, this tool could be used to make a fully dated and mintmarked reverse A master die (tool #2), which could in turn be used to produce a dated master punch (tool #3). This would allow efficient production of larger numbers of dies. In the case of reverse D tools, one additional step (four tools) would be required since a master punch (and not a die) was supplied by London. Here, the 1951 dated reverse D master punch from London would first be used to make a 1951 dated reverse D master die (tool #4), followed by a series of steps like those above to create tools #5-7, the final result being a fully dated reverse D master punch.

Careful numismatic study and analysis of a substantial reference collection of 1952 Perth pennies⁶ indicates that four different types of dated and mintmarked dies or punches were prepared. Two of these were individual working dies made from a de-dated reverse A punch (such as tool #1, above), with the rest of the earliest group of 24 reverse dies (two batches of 12) apparently made from a single dated and mintmarked reverse A punch. The remaining balance of 300 total dies are of the reverse D type,⁶ prepared from another dated and mintmarked punch. In the absence of direct information on die tools and working die production, one can only make projections. None the less, a consistent picture can be developed based on careful numis-

matic observations, and the following (speculative) order of production put forward.⁶ These can be classified by mintmark position and distinctive date numeral variants as shown in Figure 2. The "wedge base 2" and "pointed serif 2, leans right" varieties appear to be from individual working dies and thus are likely to have been produced first. Here, the observed doublings on the "wedge base 2" suggests that there were problems with alignment of the punch during die fabrication. While the "pointed serif 2, leans right" shows no sign of this, the final date numeral is significantly misaligned. All the other reverse A coins seem to have been produced from a single "pointed serif 2" dated punch where the numerals are reasonably well aligned, but these exhibit observable differences between specimens at the end of the tail of the numeral 2 near the base, apparently all due to minor die or punch damage on various working dies. The most important of these is from major die damage at the serif on the 2, leading to the so called "square serif 2" variety. Whether such variations, which should have been immediately obvious on the struck coins, contributed to the Perth Mint's dissatisfaction with this date configuration is not presently known, but a new dated punch of the reverse D type was soon prepared to replace it. This final reverse with a "broad 2" date numeral type was used for most of the coinage, with coins were struck from these dies until June 15, 1953. The most important variant on reverse D coins is from a few doubled reverse dies which display an apparent "broad, thick 2" date numeral.⁶

The 1953 dated Australian coinage was significantly delayed by a lack of tools for the new Elizabeth II obverse. In fact, the original obverse master dies for Australian pence and halfpence were not prepared at

the Royal Mint in London until May and June of 1953, respectively. Instructions were sent from the Commonwealth Treasury in April that on receipt of the new dies to “immediately commence production of coins bearing the new obverse and discontinue using George VI dies”.² Before the new dies arrived, the Perth Mint prepared a 1953 dated and mintmarked punch of the reverse D type which was used to produce two batches of 1953 dated penny reverse dies in May. Numismatic analysis indicates that this same reverse punch was used for all 1953 Perth Mint penny dies.

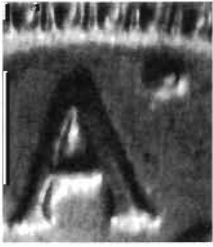
On receipt of the new tools from London, there was controversy about the relief of the new obverse dies compared to those of earlier reigns. In particular it was felt that “the appearance of the new obverse was not very good” despite efforts to ensure that the dies were well made.² London’s supply of new kangaroo reverse master tools for the penny in 3/8 relief, instead of the previous 1/2 relief³ to mate with the new obverse was also not well taken in Australia. While those sent to Melbourne were used to prepare a few trial dies resulting in the rare “long 5, different 3” Melbourne Mint pennies of 1953, no evidence of any use of the analogous tools sent to Perth was found during previous research.³ Newly available correspondence from Perth Mint files² now clears up this minor numismatic mystery concerning whether these tools were used at Perth. This begins with a 2 July 1953 telegram from W. C. Thomas, First Assistant Secretary of the Department of the Treasury (Canberra) to the Deputy Master of the Perth Mint “DO NOT USE NEW REVERSE TOOLS WRITING”, followed immediately by his letter of 3 July. Here, he states that they did not order any new reverse tools and were concerned “that alteration of the reverse will

result in a less clear representation of the kangaroo”. The instructions were to “put the new reverse tools away for the time being”. A July 7th reply from the Perth Mint states “the reverse penny tools received on the 26th June have been put away unused”.²

For 1953 dated pennies, some 84 obverse and 60 reverse dies were prepared. It is interesting to note that the Annual Report (Table 3) shows that no obverse tools and only one reverse tool were prepared, suggesting that the obverse master punch sent from London was used directly for die making, along with the possibility that the die used to prepare the 1953 dated and mintmarked reverse punch may not have been retained as a “master tool” and was simply used as an ordinary die for coinage. Confirmation of this will have to await the discovery of more detailed records on die making at the Perth Mint.

The Perth Mint’s somewhat cavalier attitude in directly using master tools from London during the transition period, led to a near die making “disaster” at Perth for the 1953 halfpennies when the obverse master punch sent from London was found to be cracked as the eighth die was being fabricated in mid-July. This episode is described in a letter from Perth to Melbourne dated 14 August, along with the making of another temporary punch from one of the dies to be used until a new master punch could be obtained from London.² The reply from Melbourne a few days later emphasized that “we always take the precaution of making a working master die and punch from the London originals just in case of an unfortunate happening as you experienced”.²

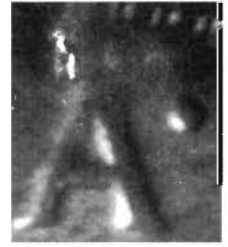
As for the pennies, reverse dies for 1953 halfpennies were made before the obverse dies, as shown in a letter of 7 July 1953 from Perth Mint to the Treasury which stated



(3a)



(3b)



(3c)



(3d)



(3e)



(3f)

Figure 3. Various dot mintmark positions on 1953 Perth halfpennies including (a) doubled dot (in standard position); (b) low dot; and (c-f) in various other positions

“The preparation of a 1953 halfpenny reverse matrix was commenced as soon as your letter was received. From this a reverse punch will be made and the preparation of working dies can then commence.” Later, in striking these coins, Perth found “difficulty in getting the date 1953 up properly as it is opposite the raised neck in the obverse”, requiring extreme pressure to be used in coining operations.² Records show that a large number of working dies were prepared for 1953 Perth Mint halfpence with some 378 obverse and 252 reverse dies being prepared in 1953-54 (Tables 4 and 5). Perhaps due the earlier problem with the obverse master punch, an unusually large total of 11 master tools were prepared at Perth for halfpennies in 1953, including 4

obverse and 7 reverse tools. Numismatic analysis shows at least nine positions of the dot mintmark near the top of the A of AUSTRALIA indicating that a number of dated and mintmarked dies were used. Six of the more interesting variants of these are shown in Figure 3, including a “doubled” dot in the most common position and the “low dot” variety (Figure 3a and 3b, respectively). Due to the large total number of reverse dies employed and the complexity of analysis required, sorting these out in detail is beyond the scope of the present article. None the less, at least one dated and mintmarked punch was used to produce dies for these coins as demonstrated by the double die of Figure 3a, and it is clear that a number of individual working dies were also produced.

SUMMARY

The transition to working die production at the Perth Mint during the years 1951-1953 provides a fascinating area for numismatic study. Newly available records from Perth Mint archives which have long been in storage and unavailable, bring many details of this interesting period to life. Important new insights are provided by study of these records coupled with numismatic observations on coins. For example, it is now clear that all of the 1951 "no dot" halfpenny dies were prepared in Perth in 1952, that 1952 dated penny dies continued to be produced until mid-1953, and that 1953 dated halfpenny dies continued to be made during the first few months of 1954. Perhaps most importantly, these records can help answer the why questions, providing explanations on the reason two different types of penny reverse master tools were provided to Perth in 1951, and why the 1953 dated penny reverse die tools supplied to Perth by London were never used. For the collector and numismatist, developing a better understanding of the events and decisions that have led to a particular coinage adds dimension. During this centennial year of The Perth Mint, its contribution to Australian coinage and rich numismatic heritage deserve to be noted and celebrated.

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