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The 1925 Shilling

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This article documents an investigation into the Australian shillings of the nineteen-twenties. It started as a study of the 1925 shilling alone but its scope quickly became broader when the historical context of the 1925 coin was examined. It shows that the 1925 shilling is probably a genuine overdate, albeit one of a rather unusual type. It also shows that the 1928 shilling is a possible overdate.

Australian shillings of the nineteen-twenties tell an interesting story and offer detailed insight into the operations of the Melbourne mint during its first years of forward-dating master tools.

Background

Since the mid nineteen-sixties it has been a matter of faith among collectors of Australian predecimal coinage that the 1925 shilling is an overdated 1923 shilling. All 1925 shillings have what looks to be part of a 3 sticking out to the left of the upright segment of the date numeral 5 (Fig. 1). First reported in the November 1964 issue of the *Australian Coin Review*, this shilling was initially described as a variety, but that description was later corrected when it became obvious the protrusion was visible on all 1925 shillings. If anyone had found a 1925 shilling without a trace of the 3 then that would have been the variety; none has yet been found. The timing of the discovery



Figure 1. The curved tail resembling part of a 3 protruding from the upper part of the 5 led to the belief that the 1925 shilling is an overdate of the 1923 shilling.

was such that the coin was not reported by Dean¹ but writing later, Clarke² describes the date anomaly as a die fault as do Myatt and Hanley³, while McDonald⁴ considers it to be the product of a re-engraved die. As far as I am aware nobody has yet conducted a thorough investigation of the 1925 shilling to determine whether it really is an overdate, how the overdate (or date anomaly) was produced and why it occurs only on the 1925 shilling.

Investigating the 1925 Australian shilling from here in New York presents a few problems. I conduct most of my research by scrutinising coins under a microscope but I do not have ready access to large numbers of coins and the only relevant



2a.



2b.

Figure 2. A 1922 shilling with the complete trefoil device, compared to a 1924 shilling showing the truncated trefoil which originated from the modified Melbourne Hub 192.

mint records I have seen are those kept at the Royal Australian Mint. My investigations are necessarily limited and there are likely to be facts of which I am not aware. There is, however, enough information available to undertake a thorough enough study from which to draw some meaningful conclusions.

Die origins

The story begins around the end of 1922 when the Melbourne mint received a batch of new dies and hubs from the Royal Mint in London. We know these probably arrived in late 1922 or early 1923 because the 2/- and 6d London hubs were used to press working dies on 9 February 1923.⁵ No shillings were minted in 1923 but on 16 April that year a shilling reverse hub was pressed from the London matrix. That hub would have been dated 1923 but it was not used to press any 1923 working dies. Preparation for 1924 started in about November 1923; around that time the final digit (3) was ground off yielding a modified hub known as *Melbourne Hub 192* which was used

to make a reverse master die to which the final 4 was added. This derivative tool was known as *Melbourne Master Die 1924* and used to create a working hub, *Melbourne Hub 1924*. Thus by 1 January 1924 the die workshop at the Melbourne mint had the following shilling reverse tools available:

London Matrix 1923,
 London Hub 1923,
 Melbourne Hub 192 (from London Matrix 1923),
 Melbourne Master Die 1924 (from Melbourne Hub 192),
 Melbourne Hub 1924 (from Melbourne Master Die 1924).

A slip of the grinder

Now during the preparation of Melbourne Hub 192 something seems to have happened which yields an important clue as to the subsequent use of the shilling master tools throughout the twenties. It appears that the person responsible for grinding away the 3 was slightly over-zealous and took off a bit of the trefoil ornament to the right of the date. That this happened can be seen

Die date	Reverse working dies	for Melbourne	for Sydney
1923	0	0	0
1924	21	11	10
1925	40	25	15
1926	45	45	0
1927	30	30	0

Table. The working dies columns show only the reverse dies; these are listed according to the year on the die and not the year of pressing. 1927 represents a half-year.

clearly by comparing a 1924 shilling with an earlier dated one (Fig. 2). All shillings from 1924 to 1928 inclusive show this partially ground-off ornament although the 1928 coin is different from the others in ways discussed later in this article. Figure 3 illustrates the coins dated 1924-1927.

Observations and records

No working dies for the 1923 shilling were ever prepared so the idea that the 1925 shilling was the result of re-engraving unused 1923 dated dies can be dismissed. Working die production for the period January 1923 to June 1927 is given in the Table above.

The Table shows that no dies dated 1926 were sent to Sydney, a fact confirmed by the Sydney die records.⁶ This means that coin catalogues listing 1926 shillings as minted in Sydney are incorrect. All 416,000 shillings struck at the Sydney mint in 1926 were dated 1925.

The 1924 shilling shows no trace of an underlying 3, suggesting that this digit was completely removed from Melbourne Hub 192. A curved ridge visible to the upper left of the 4 on some high-grade 1924 shillings (Fig. 3a) looks like it could be a trace of the original 3, but the straight

ridge intersecting this curve suggests otherwise. It is difficult to imagine what sort of mechanism could leave these marks during the process of removing the final 3; it is more likely they are polishing marks. I have only three specimens of this coin, two of which were obviously struck from the same working die. As more coins would be needed for a meaningful survey I am unable to comment on the frequency of occurrence of this residue but information received from other sources^{7,8} suggests that the observed configuration is not at all rare. In any case, two working dies are sufficient for making some other inferences.

The left elbow of the 4 shows that the numeral punch shifted slightly between hammer blows and the blob to the left of the elbow appears to be a product of the punching operation. Each of these features appears on the specimens from both working dies and so must have been present on Melbourne Master Die 1924.

The 1925 shilling reverse master die was prepared from Melbourne Hub 192 on 10 October 1924 and on the 13th the first six working dies were pressed from Melbourne Hub 1925, which therefore had to have been made in the intervening days.



3a.



3b.



3c.



3d.

Figure 3. These four date details provide evidence that the truncated trefoil was propagated to all shillings from 1924 to 1927; the 1928 example is shown in Figure 8.

The 1926 master die was prepared from Melbourne Hub 192 on 15 October 1925 and the 1927 master die was prepared on 11 October 1926. The die records are not as detailed for 1927 and do not mention Melbourne Hub 192 but an examination of 1927 shillings indicates that that tool was indeed the one used (see Fig. 3d).

It is worth mentioning that some 1926 shillings have near the top left of the 6 a slightly raised area which seems to correspond to part of a 3 (see Fig. 4). This coin was reported in the December 1964 issue of the *Australian Coin Review* and pictured the following month. I doubt that this coin can be construed as an overdate, however, as this raised area only occurs on a few 1926 shillings and is probably

confined to a single working die. The shape of the raised area is quite different from the ridge on the 1924 shillings described earlier. Microscopic examination of one of these coins suggests that the mark was caused by rust on the die. This conjecture is supported by the heavy die-polishing marks around the area.

Preliminary deductions

Having established a number of facts, we are now in a position to make some preliminary analyses. From the die records we know that Melbourne Hub 192 was made from a fully-dated 1923 shilling reverse matrix and the final digit was ground off. From observation and from the

die records we know that in each year from 1924 to 1927 all shilling reverse tools were prepared from Melbourne Hub 192. Also from observation, we know that with the exception of the 1925 shilling there is no detectable trace of the original 3.

We are led to conclude that on 1925 shillings the mark which looks like a segment of a 3 cannot have come from Melbourne Hub 192. However, we know that the feature appears on all 1925 shillings so it must have been present on all working dies for that year. It follows that it was present on Melbourne (working) Hub 1925. In turn, the mark must have been present on Melbourne Master Die 1925 because altering a die or hub is always done by indenting or removing metal, never by building it up on the surface.

This logic seems fairly straightforward, yet it leads us to an apparent contradiction. There is no trace of a 3 on Melbourne Hub 192 but there is a substantial trace on Melbourne Master Die 1925 which was pressed from that hub. How can this be? One possibility is that Melbourne Master Die 1925 was accidentally marked during preparation and that the mark just happened to resemble the curved segment of a 3 and happened to be in exactly the right place to appear as though there had originally been an underlying 3. That seems wildly improbable but there may be a precedent for this notion. The Royal Australian Mint would have us believe that exactly the same thing happened in 1922⁹, when a threepenny reverse die became damaged in such a way as to make it look as though there was originally a 1 under the final 2. This matter has been discussed independently.¹⁰

The contrary hypothesis is that the mark

on the 1925



Figure 4. Micrograph of a 1925 shilling made with contrast-enhancing illumination. The curved smudge appears to be the product of a rusty die, rather than evidence of overdating as previously thought.

shilling is indeed part of a 3; the problem then is to figure out how it got there.

Shilling dies required at least two blows in the hobbing press. A soft blank was given a first strike, forming a partial impression. The steel became work-hardened as a result and the die was removed from the press and annealed (softened) before the second blow. Now suppose the technician fitting the hub to the press for the first blow made a mistake and used London Hub 1923 instead of the partially-dated Melbourne Hub 192. That would yield a partly formed master die with a 3 or part of a 3 in the position where the 5 would eventually appear. Effectively this would be a damaged die but if there wasn't much of the 3 visible then the mint staff may have decided that it was worth going through the annealing process and delivering the

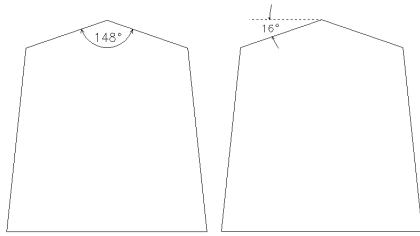


Figure 5. Profiles of die forgings used at the Royal Mint in London. The second example shows the way the cone angle was measured at the Melbourne mint.

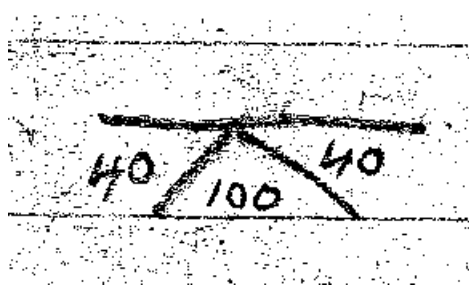


Figure 6. Sketch from the Melbourne Mint Workshop Die Book of a 40° blank. The text accompanying this sketch mentions forgings turned to 10°, 20°, 40° and 60°, and states that the 1924 and 1925 shilling master tools were made from 60° blanks.

second blow with the correct hub.

At first this seems about as unlikely as the die fault explanation, but there are some other tidbits of information in the Workshop Die Book which lend some plausibility to this hypothesis.

Die cone angle

Standard practice for hobbing was to use blanks which were turned to a point rather than left flat. Diagrams illustrating the process at the Royal Mint are provided by Paul Holland¹¹ who quotes Cooper's¹² figure of 148° for the angle of the

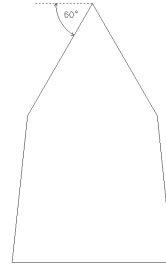


Figure 7. Profile of a die blank machined to a 60° angle.



Figure 8. A 1928 shilling showing traces of the untruncated trefoil, which may have come from the unmodified London Hub 1923.

taper. In the language of the Melbourne mint that would have been a 16° blank because Melbourne measured the angle from the horizontal (see Fig. 5). The reason for using tapered blanks is that it reduces the amount of plastic flow of metal needed to form the design and so enables the design to be rendered sharply with less pressure than would otherwise be necessary.

Now the Melbourne mint was doing a lot of experimenting with forgings in the nineteen-twenties and was trying out various types of steel and different angles



Figure 9. Date area of a 1928 shilling showing outward radial doubling of the date and the lower edge of the scroll.



Figure 10. The secondary image of the 2 is essentially downwards while on the 8 it is to the right and slightly upwards. The two doublings had to have come from different mechanisms.

varying from 10° to 60° (Fig. 6). In 1925 the shilling tools were pressed from a blank turned to a 60° angle (Fig. 7). With such a pointy cone, the first blow would not have rendered the shilling image to its full diameter. If this first blow had been made with the London hub, then just a bit of the top of the 3 might well have been impressed onto the die. Neither the second blow with the correct hub nor the subsequent punching of the final 5 would necessarily have obliterated all traces of the 3.

The above proposition offers an explanation for the way the underdate was introduced onto the only tool that was the genesis of all fully dated 1925 shillings. The whole idea may still seem rather far-fetched but there is a hint that exactly the same thing happened all over again three years later.

Another overdate?

Earlier in this article I stated that the 1928 shilling is similar to the shillings in

the 1924-27 series, but that there are some differences. Those differences suggest that the 1928 shilling may also be an overdate of a 1923 shilling.

There is no trace of an underlying 3 to be seen on the 1928 shilling since the overlay of an 8 would closely match the 3 and obliterate it. A clue comes from the truncated (partly removed) trefoil device to the right of the date (Fig. 8). Its overall form is identical to those on the 1924-27 shillings and clearly it was carried forward from Melbourne Hub 192. However, the 1928 ornament differs from those on the other shillings of the series in that it also shows traces of the untruncated device (the original trefoil before the Melbourne Hub 192 grinding error). Those traces had to have come from some other tool and the only candidate would be London Hub 1923. Some support for this conjecture comes from the doubling of some details noticeable on the reverse of the few 1928 shillings in my collection. This doubling is clearly visible on coins in VF or better condition and occurs on the date (Fig. 9),

the lower edge of the scroll, and the letters ING of SHILLING. The doubling had to have been present on the master die and one possible cause of such doubling is the use of two distinct hubs.

On the 1928 shilling there is doubling visible on all digits of the date. At first that would seem to argue against the two-hub hypothesis in that we would not expect the 8 to be doubled because Melbourne Hub 192 could not have stamped an 8 onto the master die. However, close study of the 8 shows that the displacement of the secondary impression is in a direction about 120° to that of the scroll and the other digits (Fig. 10) and so cannot have been produced in the same way. Furthermore, the doubling of the 8 is clearly not a residue of an underlying 3 and probably occurred during hand-punching.

If both the 1925 and 1928 master dies received their first blow from the 1923 London hub then it is still necessary to explain why the 1928 shilling should show traces of the original, untruncated trefoil ornament to the right of the date while the 1925 shilling does not. The difference almost certainly has to do with the cone angle on the die blank. Although it is not explicitly stated in the die records after 1925, we can safely assume that the mint reverted to using blanks having a blunter cone top, perhaps as shallow as 10°, as was being used for the halfpenny dies. The effect of using a less pointy blank is that the first blow will produce a broader (but weaker) impression. Thus the sharp angle of the 1925 master die blank apparently prevented the first blow from impressing the trefoil decoration here, whereas the shallower 1928 blank allowed it.

Conclusions

The study described above suggests that the 1925 shilling is a genuine overdate caused by pressing the 1925 master die with a 1923 hub and then a 192 hub. The 1924, 1926 and 1927 shillings did not exhibit this feature, simply because the 1923 hub was not used when their master dies were prepared. Furthermore, it seems likely that the 1928 shilling is also an overdate produced in exactly the same way as the 1925, although one in which no trace of the underdate is visible.

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References

1. John Dean, *1965 Australian Coin Varieties Catalogue*, Hawthorn Press, Melbourne, 1964.
2. Robert L Clarke, *The Coins and Tokens of British Oceania*, 5th edn, Malter-Westerfield, San Clemente, 1971.
3. Bill Myatt and Tom Hanley, *Australian Coins, Notes & Medals*, Castle Books, Australia, 1982.
4. Greg McDonald, *The Pocket-book Guide to Australian Coins and Banknotes*, 11th edn, Greg McDonald Publishing, Lavington, NSW, 2003.
5. *Dies and Hubs*. Handwritten records of the Melbourne mint workshops for the period 1922-1927. Currently held at the Royal Australian Mint, Canberra.
6. *Die Account Book*. Handwritten records of the

Sydney mint pertaining to Commonwealth coinage dies for the period 1920-1926. Currently held at the Royal Australian Mint, Canberra.

7. Personal communication with Ian Martin.

8. Personal communication with Klaus Ford.

9. *Royal Australian Mint 6th Annual Report, 1969-1970*, Canberra.

10. Jon Saxton, 'Small Change: Plasticine Numismatics', in *The Australasian Coin and Banknote Magazine*, September 2003.

11. Paul Holland, 'The 1933/2 Overdate Penny', in *Journal of the Numismatic Association of Australia*, number 13, 2002, p.20, fig.1.

12. Denis R Cooper, *The Art and Craft of Coinmaking*, Spink & Son, London, 1988, p.163.

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