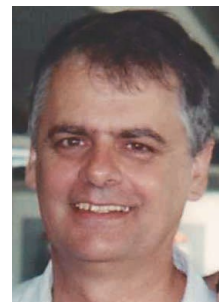


SMALL CHANGE

PART II “Plasticine Numismatics” by Jon Saxton



In last month's article I presented a summary of my research into the small silver coinage of Australia. At the end of the article I promised that I would discuss the small number of 1922 threepences which appear to be overdates of a 1921 threepence (fig. 1). That these were indeed overdates was accepted without question until the release of the Royal Australian Mint's sixth annual report for 1969-70. The RAM report said that mint officials had long held the belief that the apparent overdate was the result of “spalling”, a form of die fracture caused by pressure. The relevant portion of the report is presented in the sidebar.

An editorial comment in the *Australian Coin Review* of June 1971 quoted from the Mint document, saying “It is beyond the bounds of credibility that the expert die-makers in the Royal Mint would produce such a monstrosity as a tool with one figure cut on top of an existing figure.” *ACR* took issue with this, pointing out that one has only to peruse a catalogue of British coins to see many examples of overdates produced by the same Royal Mint which protested so strongly and went on to argue that despite the RAM's report, the matter is really not decided.

I scanned my Seaby's catalogue¹ for the years 1816 to 1923 covering the reigns of George III, George IV, William IV, Victoria, Edward VI and George V. 1816 was a good starting point because in 1812 the Royal Mint had moved from the Tower of London to Tower Hill, marking the beginning of the pre-modern era of British coinage. The only overdate I could find mentioned was the 1848/6 shilling. However, Bresset² lists more than two dozen overdates for that period as well as some similar varieties. While this seems



Figure 1: A 1922/1 overdate threepence. Fewer than 1000 of these exist.

to support the *ACR* viewpoint, it really does not. The overdates to which the editor refers occurred in an era when the aesthetic sacrifice of overdating to deploy unused dies was economically justifiable. By the end of the second decade of the 20th century, the reducing machine and hobbing press had transformed die production to the extent that dating was a routine matter of adding one or two digits to a partially-dated master die and overdating was unnecessary.

The RAM report said that the Melbourne Mint had no need to engage in a re-dating exercise because it received 1922-dated tools early in that year. That appears to be correct because Melbourne pressed five pairs of 1922 dies on 31st January 1922. Indeed, these were threepence obverse and reverse coining dies.

To support its case, the Royal Australian Mint made high-grade photographs of 1921, 1922 and 1922/1 threepences and produced a composite photo of a 1922/1 threepence showing the outline of the 1 in the position it occupies on the 1921 coin. The composite photo is reproduced in figure 2. From that picture it appears that if the threepence is indeed an overdate then we should expect to see the top of the 1 poking out of the top of the 2. We do not see such a protrusion on the actual coins and its absence would seem to lend weight to the RAM's case.

So it seems that the glamour coin of the threepences, the long-cherished 1922/1 overdate, has been reduced from the status of spectacular variety to mere error.

While the facts seem to support the RAM's argument, the evidence is not exactly overwhelming and there are some other issues to consider.

Firstly, the wording of the explanation offered by the RAM just doesn't make sense. Any build-up of metal on the die would have produced an incuse feature on coins struck from the die, not a raised one.

Secondly, in early January 1922 the Melbourne Mint had made seven pairs of 1921-dated threepence dies, three on 4th January and four more a few days later (the date in the die book³ is illegible). With the arrival of new 1922-dated dies a couple of weeks later, these dies were technically obsolete within days of their pressing. Thirdly, the Melbourne Mint was actively experimenting and building its expertise in all aspects of tool production. It would certainly be aware that it was going to be re-dating dies, perhaps as early as 1923, and it doesn't stretch the imagination very far to speculate that someone at the Melbourne Mint hand-punched a 2 onto a 1921 threepence die, perhaps as an experiment to see if the freshly-made dies could be deployed with the new date.

Officially sanctioned re-dating didn't begin until late 1923 in preparation for striking coins for 1924 because the Royal

The alleged 'over-dated' 1922 threepence (so long the interest of collectors of unusual items of coinage) was investigated and the opinion previously strongly held by the Mint's officials was confirmed. This opinion maintained that the so-called 'over-date' was merely the product of a faulty die the surface of which had become impaired by spalling, resulting in a build-up of metal on the table of the fourth digit of the die of a limited number of coins.

The sequence of events which must be involved in production of an 'over-date' is interesting to consider. As 1924 was the first year in which the Melbourne Branch of the Royal Mint altered the date on a matrix from a master punch it follows that any die for an alleged 'over-dated' 1922 coin must have been made by the Royal Mint, London. It is beyond the bounds of credibility that the expert die-makers in the Royal Mint would produce such a monstrosity as a tool with one figure cut on top of an existing figure. And it is still more unacceptable that the highly-qualified supervising officers in London would pass such work or that the tool would be accepted by the Melbourne Branch officials after it arrived from London.

In its investigation in the Mint's laboratory photographs of good 1921 and 1922 coins were enlarged and the negatives were superimposed; this revealed many discrepancies which failed to support the concept of an 'over-date'. Photographs of the figures of an 'over-dated' coin and the result of the superimposition are reproduced in the illustration.



Figure 2: Composite photograph produced by the Royal Australian Mint to support its claim that the 1922/1 threepence was the result of a die fault.

Mint sent fully-dated 1923 tools to Melbourne in late 1922 but this does not diminish the plausibility of the conjecture. If it still seems too far-fetched then there is yet another possibility, namely that an annealed 1921 threepence reverse die was over-hubbed with a 1922 punch. This could have happened by accident or by design. Either way, the original die would need to have been one of those without a mint mark, almost certainly one of those January 1922 dies.

Whether hand-punched or over-hubbed, support for the overdate hypothesis comes from the Royal Australian Mint's own photographs of the coin. Referring to figure 2 one can see that the underlying 1 is thinner than that on the 1921 coin in exactly the way one would expect if a 2 were punched over a 1. The metal displaced by the 2-punch has to go somewhere and into the valley of the 1 is a logical and convenient place. Furthermore, the upper portion of the 1 flanked by two segments of the 2 are thinner than the lower portion with part of the 2 on just one side.

I wondered if it would be possible to test the overdate hypothesis. Of course I do not have access to a coining press or to die-making materials, nor do I have the expertise to use them. Nevertheless I decided to perform a little experiment and set out to obtain some substitute materials. Plaster of Paris was easy enough to obtain at my local hardware shop but I also wanted plasticine. That was harder. It wasn't that plasticine is rare in New York, it is just that nobody has ever heard of it. Eventually I learned that here it is known as "Modeling Clay" and with that information I quickly obtained what I wanted from the local toy shop.

Back home I made high-resolution mirror-image prints of a 1921 and a 1922 threepence, cut out the final digits from each and made pinprick outlines on two lumps of plasticine. I dug out the digits using a crude tool hammered from a piece of copper wire. Then with the aid of a couple of toilet roll tubes I made plaster casts of my plasticine dies, creating a 1-punch and a 2-punch. Once they were dry I used them to impress a plasticine tablet. On my third attempt I managed to get the 2 punch lined up to in such a way as to produce an "overdate die" showing a strong resemblance to the final digit(s) on the 1922/1 threepence. Finally I made a plaster cast of the result.

The tools and intermediate stages are shown in figure 3 and the final cast is shown in figure 4. Compare this with



Figure 4: The end product of the plasticine experiment resembles the last digit of the date in figure 1.



Figure 3: Plasticine numismatics. Note the paper pieces at each side. These were used to trace the outlines of the numbers on the plasticine "dies" at the top. The plaster "hubs" were used to press the composite "die" and the "coin" was made from the result.

the RAM's picture shown earlier (fig. 2) and the resemblance will be apparent.

My talents at sculpture fall way short of those who made the punches used to insert dates on dies and there are probably substantial differences in the nature of the plastic flow of metal in the coining press under the impact of the dies compared with that of plasticine in my hand-pressed example. Nevertheless it illustrates that a 2 punch could have been applied over a 1921 die in such a way as to leave only the stem of the 1 showing.

This finding highlights a false assumption in the 1969/70 RAM report, namely that the position of the 2 on the overdate threepence had to be identical to that on a 1922 threepence. That would be true if and only if the alleged overdate were applied to a 1921 die using a 1922 hub. It is certainly not the case if the 2 were applied using a hand punch.

I can agree with the RAM report that the Royal Mint is not to blame for the die which produced the alleged 1922/1 overdate. I do find it extraordinarily difficult to believe that a die fault would occur in such a way as to so accurately portray a 1 underneath the 2, to the point of leaving a gap between the stem of the 1 and the loop of the 2. I am about 95% convinced that the 1922/1 threepence is a genuine overdate of the same type that occurred so many times in the 19th Century, albeit an anachronistic one.

I invited comment from the Royal Australian Mint on this article prior to its publication. I received a very courteous reply explaining that the Mint has no further information to offer.

1. Seaby's Standard Catalogue Parts 1 and 2 (British Coins), 10th edition, B. A. Seaby Ltd, London, 1971
2. K. E. Bresset, A Guide Book of English Coins (5th edition), Whitman, Racine, 1967
3. Dies and Hubs, Handwritten records of the the Melbourne Mint die workshop, 1922-1927, currently held by the Royal Australian Mint, Canberra