# An Unusual Counterfeit 'Silver' Shilling of 1818 Gary Oddie

The shilling shown below was recently loaned to me for analysis.



Fig. 1. The 1818 shilling under investigation.

At a first glance it appears to be a normal, quite worn and dirty shilling of 1818. This had been spotted as part of a die study of 1818 shillings. The parameters for identifying the different dies are the relative positions of the last two digits of the date and any other design elements that have been 'touched up', e.g. re-engraved or reentered letters and date digits. The unusual feature making it stand out was that the tops of the 1's in the date sloped, whereas all other 1818 shillings in the die study had flat-topped 1's.

For comparison, here is a normal 1818 shilling.



Fig. 2. A normal 1818 shilling.

And close-ups of the dates.



Fig. 3. The 1818 shilling under investigation.



Fig. 4. A normal 1818 shilling.

Figure 4 shows the genuine coin to be the 'high 8' variety and the 1's of the date are flat-topped and have both been double entered. Comparing the two portraits, the laurel wreath in figure 1 has three even leaves above the forehead and the tie at the back of the head has a single loop, whereas in figure 2 the upper laurel leaf is shorter than the two below it, and the tie has a double bow. The date digits in figure 3 are quite irregular with rough edges suggesting the dies used to strike the coin were hand engraved and the tops of the 1's slope. There are also raised marks in the fields below the bust and around the date digits. This is all suggesting a counterfeit coin. The most obvious difference on the reverse is that the incuse WWP initials on the lower left garniture of the shield are only present on the genuine coin.

A series of measurements have been carried out on both the counterfeit and the genuine 1818 shilling.

## **Physical Analysis**

Parameter	Counterfeit	Genuine
Diameter	23.97 mm	23.71 mm
Weight	5.315 g	5.643 g
Displaced Water	0.566 g	0.537 g
Density	9.390 g/cm <sup>3</sup>	10.508 g/cm <sup>3</sup>
XRF Analysis	Ag 67.3%	Ag 94.3%
	Cu 30.7%	Cu 4.7%
	Si 0.6%	Pb 0.3%
	P 0.3%	Si 0.3%
	Pb 0.2%	Au 0.1%
	Bi 0.2%	P 0.1%
	Au 0.1%	Zn 0.1%
	Zn 0.1%	traces of Bi etc.
	Fe 0.1%,	

**Table 1.** Measurements of the counterfeit and genuine 1818 shillings.

#### Discussion

The density is determined using Archimedes' principle, and assuming a binary Ag/Cu alloy suggests the counterfeit is 28.1% silver (Ag is 10.49 g/cm³ and Cu is 8.96 g/cm³)<sup>(1)</sup>. The large discrepancy between Archimedes' method and the x-ray suggests either (i) the surface has been enriched, (ii) the counterfeit has a base metal core or (iii) the counterfeit contains low density inclusions such as gas bubbles.

Previous studies of the counterfeit shillings of George III 1816-1820 have never uncovered such an alloy. <sup>(2)</sup> The majority are struck in copper or brass, a few are cast in tin and a small number in a Copper-Nickel-Zinc alloy. <sup>(3)</sup> However it is not surprising that the previous studies did not find any base silver pieces, as the criterion used was the 'wrong' colour of the metal and base silver counterfeits were not expected or known at the time.

Working through the GO reference collection of counterfeit 1818 shillings (139 specimens) reveals no die matches.

However, another example and reverse die match have been found as part of Peter Poulsen's study of the counterfeits of this period. (5) First, here is the die pair duplicate.



Fig. 5. Die pair duplicate of the counterfeit in Fig. 1. (Poulsen die references F8020 and F802r).

And this counterfeit is a reverse die match.



Fig. 6. Reverse die match of the counterfeit in Fig. 1. (Poulsen die references F001o and F802r).

The flaking of the metal surface seen in figure 4 doe suggest an inhomogeneous metal or base core (5 o'clock obv and 4 o'clock rev). Both of these pieces look to be made from silver. From the developing die flaws on the reverse the counterfeits were manufactured in the sequence as presented (Fig. 1, Fig. 5 and then Fig. 6).

#### **Conclusions**

This note has presented a contemporary counterfeit shilling of George III dated 1818. The alloy is a base silver and is the first such counterfeit to be published. Die duplicates have been found within another comprehensive ongoing study of the counterfeits of this period.

The piece appears to be struck from hand-engraved dies and is extremely deceptive. It is very likely that many others were made and have blended in with the circulating silver coins that were finally removed from circulation in the silver culls of the 1960s and 1970s.

### **References and Acknowledgements**

- (1) G. Oddie. Determining the Density of a Coin using Archimedes' Principle. BNS Blog 25<sup>th</sup> February 2023. <a href="https://britnumsoc.blog/2023/02/25/determining-the-density-of-a-coin-using-archimedes-principle-gary-oddie/">https://britnumsoc.blog/2023/02/25/determining-the-density-of-a-coin-using-archimedes-principle-gary-oddie/</a>
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- (5) <a href="http://www.steppeulvene.com/index.george\_iii.html">http://www.steppeulvene.com/index.george\_iii.html</a>

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