Some Unusual Coin Measures

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This note will present a gauge for the diameter of a pre-decimal shilling and a group of similar pieces which are also suspected to be diameter gauges for a shilling, sixpence and brass threepence. Any further information regarding these pieces and their use will be gratefully received.

Coin-weights are most commonly met with when a coinage consists of precious metals such as silver and gold. Underweight coins caused by clipping or sweating are immediately detected. Similarly counterfeits made of baser metals and plated are given away by their weight, as volume-for-volume copper is less heavy than silver and silver less heavy than gold. Thus the standard catalogue of British coin-weights has no individual silver coin-weights after the recoinage of 1816/17 when the weights are dominated by those for gold coins and bulk silver coins.⁽¹⁾

However, once the coinage no longer contains precious metal, weights and measures for the coins continue to be required to set up, calibrate and test automatic machines such as slot machines, coin counters and meters for electricity and gas etc.

The following piece would seem to fall into the category of a diameter gauge.

Obv. .937, 1/-

Rev. 6 (or 9)

Details. Steel, 23.78 mm diameter, 1.11 mm thick, 3.650 g, 4.6 mm central hole. Plain edge. 150 %.



A post 1816 shilling should be 23.60 mm and weigh 5.655 g. Note that 0.937 inches is 23.79 mm, so within the accuracy of my measurement. Thus it is not a weight but possibly a diameter gauge, though slightly over-gauge.

The following piece has been in the author's collection for many years. It was acquired without provenance or context.

Obv. I^S_A, appears to have been added using a CNC (Computer Numerical Controlled) mill, signs of circular lathe marks on whole surface.

Rev. Blank, smooth.

Details. Steel, 23.28 mm diameter, 1.64 mm thick, 5.079 g. Slightly raised rim on both sides. Plain edge. 150 %.



This was destined to remain a mystery until the recent appearance of a small wooden box on the well-known online auction website. The box is 112.5×50.5×44.8 mm (w×d×h) and is well made with mortice and tenon joints and with brass hinges and catch. The box is lined with black velvet. Even without seeing the contents, this is typical of the boxes used by engineers to keep precision tools, gauges and flats in. The slots in the lining mean that the contents do not touch each other and do not become damaged.

The box contained seven steel discs marked as follows: 1^SA, 1^SR, 6^DR, 3^DA, 3^DRt, 3^DRd, 3^DRd. Also in the box was a small burgundy cloth bag containing three steel gauges marked as follows: G.L.4. 1/-. W.L.N. 1962, G.L.4. 6D W.L.N. 1962 and G.L.4. 3D W.L.N. 1962.

The box and gauges are shown on the next page (figs. 1 and 2) and the discs are shown afterwards. All images of the contents are shown 150%.



Fig. 1. Wooden box with metal discs and gauges.



Fig.2. Gauges for 1/-, 6^D and 3^D. Note the variation in thickness and curvature of the lower end. 150%.

From the score marks on the surface of the 1/- gauge it would appear that the gauges are located in some device using the small circular nick and swivelled around that point. The seven metal discs are described below.

Obv. I^SA, appears to have been added using a CNC mill.

Rev. Blank, smooth.

Details. Steel, 23.23 mm diameter, 1.62 mm thick, 5.145 g. Slightly raised rim. Plain edge. 150 %.

Obv. **I**^S**R**, appears to have been added using a hand engraving machine. Irregular machine polishing.

Rev. Blank. Irregular machine polishing.

Details. Steel, 23.12 mm diameter, 1.54 mm thick, 4.958 g. No rim. Plain edge. 150 %.

Obv. **6**^D**R**, appears to have been added using a hand engraving machine. Irregular machine turning.

Rev. Blank. Irregular machine polishing.

Details. Steel, 19.00 mm diameter, 1.15 mm thick, 2.504 g. Slight chamfer obverse, deburred reverse rim. Plain edge. 150 %.

Obv. 3^DA, appears to have been added using a CNC mill.

Rev. Blank. Smooth.

Details. Steel, 21.01 mm diameter, 2.10 mm thick, 5.619 g. Slightly raised rim. Plain edge. 150 %.

Obv. 3^DRt, appears to have been added using a CNC mill.

Rev. Blank. Smooth.

Details. Steel, 21.14 mm diameter, 1.78 mm thick, 4.854 g. Very sharp rim. Plain edge. 150 %.

Obv. **3^DRd**, appears to have been added using a CNC mill. Shallower engraving than 3^DA and 3^DRt.

Rev. Blank. Smooth.

Details. Steel, 20.81 mm diameter, 2.10 mm thick, 5.579 g. Very sharp rim. Plain edge. 150 %.

Obv. **3^DRd**, appears to have been added using a CNC mill. Shallower engraving, as last.

Rev. Blank. Smooth.

Details. Steel, 20.81 mm diameter, 2.10 mm thick, 5.611 g. Very sharp rim. Plain edge. 150 %.













It is not obvious why there are two almost identical examples of the $3^{D}Rd$ piece. The slight variation in the diameters and thicknesses with the associated letters A, R, Rd, and Rt may be related to tolerances of some sort.

All of these pieces of metal would seem to be diameter and thickness gauges of some sort, probably made in 1962, relating to shillings, sixpences and threepences. The 3^D must be referring to a brass threepence in 1962 and as this is dodecagonal, the gauges must be an equivalent diameter. The dimensions of the coins are as follows.

Denomination	Diameter	Thickness	Weight
	(mm)	(mm)	(g)
1/-	23.60	1.77	5.655
6d	19.3	1.5	2.83
3d	21.0-21.8	2.5	6.8

Much of the above is speculation and thus if any readers know how or where these items were used, the meaning of the letters A, R, Rd, and Rt and also the labels G.L.4. and W.L.N. 1962, the author would be pleased to hear.

There is also a very good chance that there were once many more of these in existence, including denominations other than 3d, 6d and 1/-, now consigned to junk boxes or the 'mystery' section of collections.

Notes and References

- (1) P. & B.R. Withers. British Coin-Weights. A Corpus of the Coin-Weights made for Use in England, Scotland and Ireland. Galata, 1993.
- (2) eBay item 403298577723 ended 22 Nov, 2021 21:31:57 GMT. With the Description 'WHAT ARE THESE? Vintage 1s, 3d & 6d Coin/TOKEN Prototypes/Dummy Coins Cased.'

Thanks to Paul and Bente Withers for reading and commenting on this note.

