

Some Insights into Medieval Die Production and Die Life

Part 2 - Die cutting

By

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In 1910, Shirley Fox R.B.A. wrote a short paper entitled '*Die-Making in the Twelfth Century*' BNJ vol VI 1909 pp 191-6.

In this paper he states that to make a Short Cross obverse die required some 12 separate punches including 2 upright punches, 3 crescent punches and 3 pellet punches. Having recreated this experiment numerous times I have found that these 8 punches can be replaced by 3 individual punches - a line punch, a crescent punch and a dot punch. It is on punching into the die face using different pressures that the varied die elements can be created. So in actuality only 7 punches need to be used. The earlier dies such as the pre conquest Saxon and Viking dies can be created by just a few simple punches. The later dies, 1279 onwards, start to utilise more complex punches, such as single punches for certain letters for example C, D and E rather than creating the letter out of multiple elements.

For the purpose of this paper I will outline the cutting of a Viking Reverse Die based upon the Sievert Coins of York.



Sievert penny
EMC SCBI no 1002.0490

Note letter S two punches crescent and wedge entered twice, Letter R three punches line and crescent punches entered once and wedge punch entered three times (the tail of the R and to make the serifs on the upright). Crosslet ends to the central cross line punch entered twice and wedge punch entered four times. Small diamond shaped punch used to create outer and inner circles. Other letters using line, wedge and crescent punches. The dot punch used for pellet trefoils in field and possibly a long straight punch (or shorter letter upright entered multiple times) for the obverse central cross.

So the punches needed to create this die number 5 or 6.

Owing to the loss of the original images of the die cutting in Sweden (as outlined in part one) I have recreated the reverse die from the original host coin with the original reverse legend rather than the design with the GRVNAL legend that was used for the die trials.

Preparing the die faces.

The die platform faces are smoothed with a fine file (sometimes leaving striations on the die platform). Using a compass the die is quartered and marked with 4 light dots as can be seen on the lead trial plate from the Coppergate excavations.

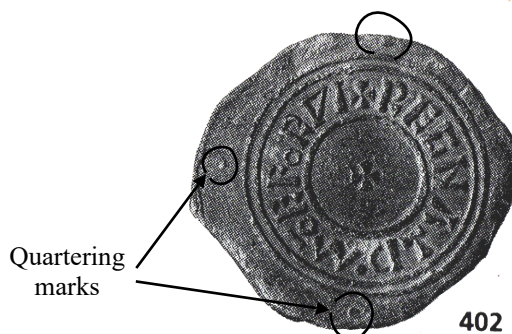
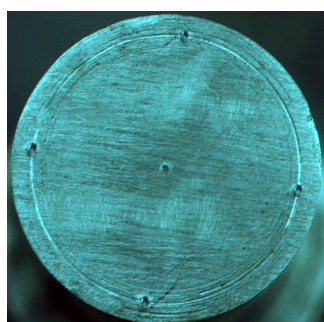


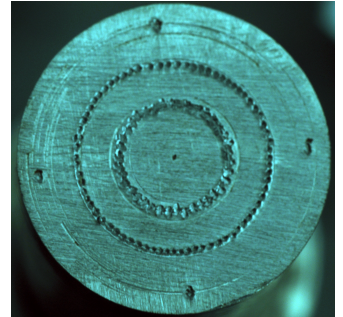
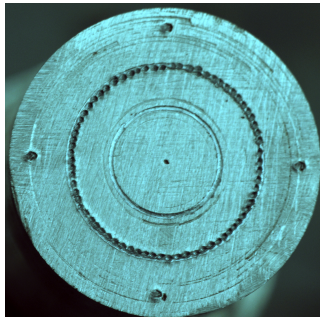
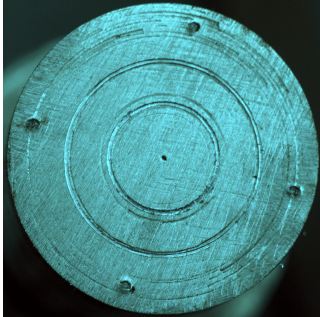
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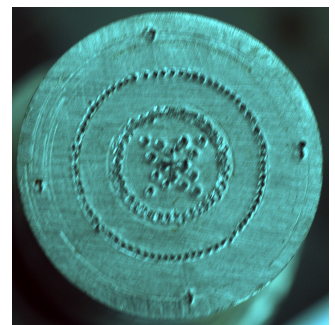
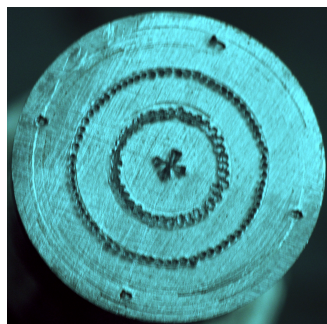
Laying out the die design.

Using the locating dots two scribe lines are drawn on the dies to find the centre, Using the centre the outer and inner circles are scribed onto the die and the outer and inner circle dots are entered.



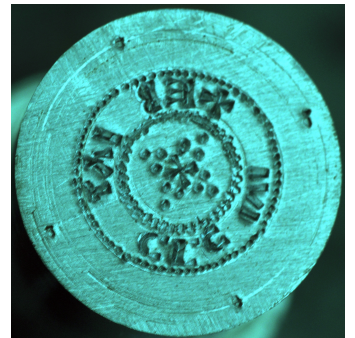
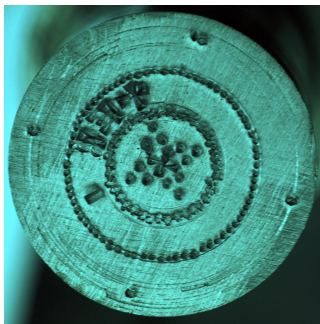
Entering the design.

The cross and pellets of the central design are entered in using the centre dot found from the quartering marks



Entering the legend.

The lettering for the legend is punched in between the inner and outer circles. The entire die design was created using just 6 punches. A dot punch (for the quartering marks, outer circle and pellet trefoils in the field), a small diamond shaped punch (for the inner circle), a small straight line punch (for the letter upright), a wedge punch for the serifs of the uprights and elements of the letters C and E, a small crescent punch for the curves on the letter B and a large curved punch for the back of the letter C.



Finally the die is refaced with a light file to smooth out the die surface and is ready for use, total die cutting time including photography 45 minutes.



Trial strikes in silver and pewter and host coin design.

In part 3 I will outline die wear and coin striking mechanics.