A 14th Century Ring Brooch

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1 Introduction

Figure 1: The completed brooch

This engraved silver ring brooch is based on several extant examples from 14th century England. It was produced using medieval style methods and tools.

2 Discussion

This project is the author's first brooch. He has some experience engraving, though primarily on steel, not silver.

2.1 Extant Ring Brooches

The primary inspiration for this brooch is an extant silver ring brooch in the Museum of London, shown in Figure 2.

2.2 The Inscription

The original brooch had the inscription: "IE2U2 NAZARENV2", where the "2"s are reversed "S"s. To determine what an appropriate inscription would be, a brief study of extant engraved ring brooches was made, the results of which are shown in Table 1.
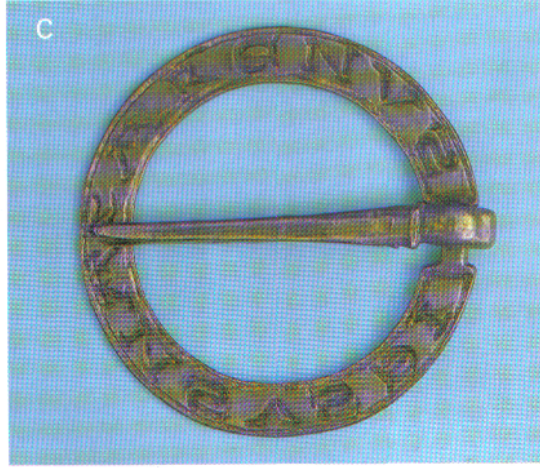
From this information several things are evident:

Figure 2: Museum of London item BWB83, 14th century silver ring brooch [1, pl. 6]

Table 1: Extant Brooches from the Portable Antiquities Scheme [2]

Object Number	Inscription	Notes
LIN-778242	CI LA MON VIERE A LA ALI	late 13th 14th century silver
GLO-49BC94	AMI : AMES AMIE : AVE	silver-gilt
NARC-066233	. . . e d e c i t	silver
LIN-34B1D4	[IESU N]AZARE	incomplete, gilt silver
BH-0513E7	AMOR . VINCIT . OMNIA	silver
DENO-89A6F4	X H O V E R T L M	Nonsense inscription, cast copper
SF-9FF011	A E D E M E I M	silver, incomplete
NLM-FDB8B5	AMOR VNICIT OMNA	silver
CORN-2300D4	+INRINRINRINRINR	IESUS NAZARENUS REX IUDAEORUM, gilt copper alloy
SUSS-D89C60	X: OF: FOVRLE	miniature, silver
SF-C0D7A2	none	made from sheet, silver
SF-990661	unclear	geometric shapes on one half, silver
PAS-676FF6	IASPAR MELCHIOR BAVLTAZA	names of the three magi, silver-gilt

1. Many inscriptions are religious in nature.

2. Some inscriptions appear to be non-sensical.

3. Some inscriptions appear to be friendly or romantic in nature.

Given this wide variety, the author decided to make his own inscription. The brooch reads "MONETARIUS CAIDIS" for "Moneyer from Caid" (since the author is a moneyer, among other things).

Figure 3: Portable Antiquities Scheme item SF-C0D7A2, medieval silver ring brooch [2]

Also of note is item SF-C0D7A2 from Table 1, which is shown in Figure 3. Item SF-C0D7A2 was made in a very similar fashion to this brooch; it appears to have been cut from a sheet. Given the deformation, it seems likely that it was cut from sheet with a punch or chisel.

2.3   Process

To create this brooch, a piece of sheet silver was first secured to a piece of wood, as shown in Figure 4(a). Then, reference geometry was laid out with a compass, as shown in Figure 4(b). Once the reference geometry was available, the layout lines were engraved with a square graver as shown in Figure 4(c). This provided a border to contain the inscription, which was then engraved with a round graver, as shown in Figure 4(d). Once the inscription was complete, the border beads were punched, as shown in Figure 4(e). Then, the brooch was cut from the sheet with a chisel, as shown in Figures 4(g) and 4(h). After removal from the sheet, the brooch body was finished with needle files, and flattened with a soft hammer against an anvil.

A graver, or burin, is a brittle hard steel tool used to cut away tiny slivers of metal. Gravers come in several shapes and sizes, as shown in Figure 6(a). Two types of gravers were used for this project: a square graver and a round graver. The square graver was used to cut lines for reference geometry, such as the groove that carries the border beading. The round graver was used to do the majority of the inscription work. Theophilus discusses the making, hardening, and use of square, flat, and round gravers [4, p. 91]. Biringuccio mentions them as well [5, p. 363].

Punchwork is the art of displacing metal with hardened punches (artful denting). A punch is a small rod of hardened steel with a shaped end. When the punch is placed on the die and struck by a hammer, it leaves a "crater" or "dent" in

(a) Sheet silver secured to a block of wood

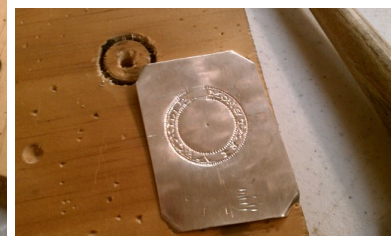(b) Scribing guidelines with a compass.

(c) Layout lines engraved.

(d) Engraving the inscription.

(e) Punching border beading.

(f) Completed punching and engraving.

(g) Cutting out the brooch with a chisel, interior.

(h) Cutting out the brooch with a chisel, exterior.
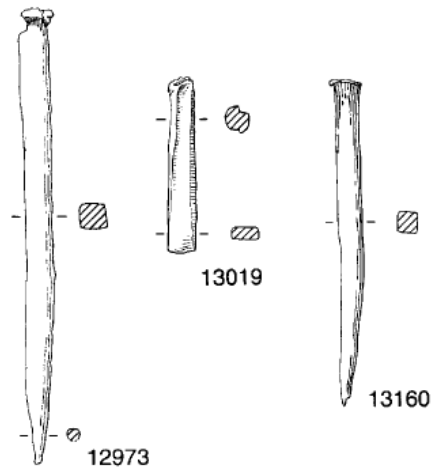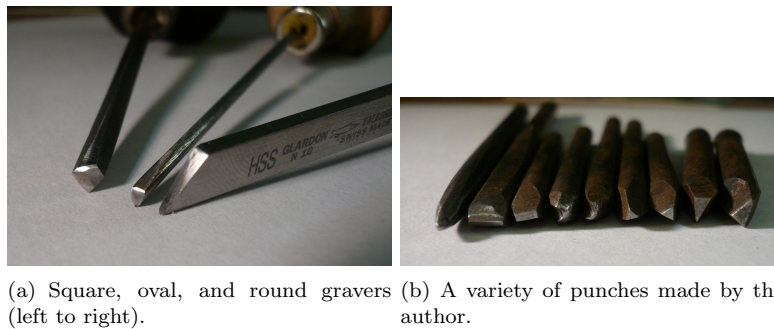
Figure 4: Making the Brooch

Figure 5: Round, rectangular, and square punches from medieval York [3, p. 2721]

(a) Square, oval, and round gravers (left to right).

(b) A variety of punches made by the author.

Figure 6: Engraving and Punching tools

the face of the die in its shape. Punches must be harder than the die material to do this effectively, or else they will deform when used. The author prefers "music wire", also sold as "piano wire", which is essentially a simple spring steel. It can be easily hardened with a simple plumber's propane torch. A variety of punches made by the author are shown in Figure 6(b), and there are some extant punches from medieval York, as shown in Figure 5. Theophilus discusses the making of punches in a variety of shapes, including some which are hardened [4, p. 92, 149]. Biringuccio also mentions steel punches [5, p. 376].

The shaping of the pin was done in multiple stages. First, a piece of round sterling silver wire was cut to length. Then it was given a rectangular cross-section by flattening it with a hammer against an anvil, as shown in Figure 7(a). After annealing, the pin was work-hardened with some light hammering [6], bent around the horn of a mini-anvil (Figure 7(b)), sharpened, and secured to the brooch.

Once the pin and brooch body were complete, the finished brooch was polished and cleaned.

(a) Brooch pin hammered flat   (b) Bending the pin on an anvil.

Figure 7: Making the Pin

References

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