

Concepts and Possibilities in Pewter Casting

By HE Clare de Lacy

So you've made your first pewter cast piece, probably in a two piece, unregistered mold, and you're wondering- "What's next?" There are a variety of different cast pieces you can make with pewter and soapstone and this handout will help act as a reference for the possible directions you can go for your next project. Included are book references you can use for examples and inspiration, and also as a starting point to submit your future work to A&S should you wish to.

The Most Common- Pilgrim Badges and Livery Badges

Two of the most commonly found types of extant pewter pieces were Pilgrim Badges; those that represent a religious figure or place and were sometimes used as medieval "souvenirs", and Household or Livery Badges; which represented one's affiliation or support of another person or group of people. These are some of the easiest to research, document, and in often cases replicate/recreate.

- Often uses a two piece mold, sometimes three piece due to openwork complexity
- Not required to register unless you design on the front and back
- Many examples, commonly found extant pieces, and easily documentable
- Can be made in many shapes other than simply round

Pilgrim Badge Examples:



Arnulf (Arnold) of Oudenburg



St Leonard Noblat



Tau Cross (St Anthony/St Francis Cross)



St Hubert Winged Stag

(All above referenced from Kunera)

Livery Badge Examples:



Yorkist Star



Heraldic Crown



Heraldic Strawberry Leaves



Winged Boar, Richard III



London Pewterers Guild

(Referenced from Mitchner)

Rings and Brooches

Still using a 2 piece mold, large open circles can be made into brooches, with a pin carved and poured separately and attached afterwards. Rings are carved flat with long arms and rounded to finish.

- When done in pewter like this, brooches were often used as jewelry rather than to hold large cloaks or other heavy fabrics together
- Some examples had words inscribed on them or jewels mounted

Examples of Brooches & Rings:



(Referenced from Mitchner, Egan & BAH Casting Guild)

Three Piece Molds: Openwork and Integral Pin Backs

Design opportunities become more diverse when you move from a 2 piece mold to a 3 piece mold. The third dimension in the mold allows for the pewter to flow first down and then spread out across the mold, filling in the carving and leaving spaces for openings. A spru can become a pin back or a belt stud easily.

- Molds must be registered to do this- so every time the mold is closed, it fits back exactly as it did before. Proper mold preparation is key
- Fluid dynamics matters- molten metal still doesn't flow against gravity
- Carving on the back of the mold can add channels for better pewter flow and opportunities for additional design

Examples of Openwork and Pin Back pieces:

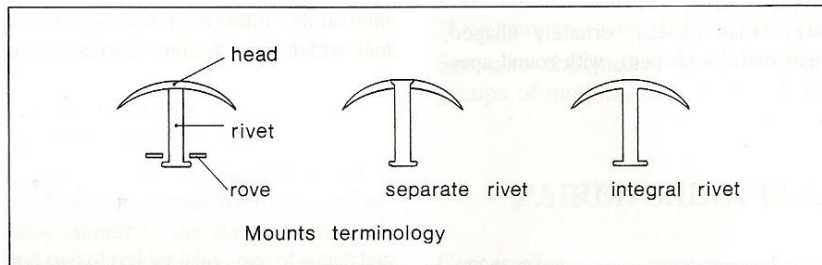


(Referenced from BAH Casting Guild)

Belt Mounts

Belts were highly decorated in period times, and pewter was used as it is easily mass produced and inexpensive. Belt mounts are similar to integral pin backs in that the spru doubles as a shank. Belt mounts are placed into holes made in the belt, topped with washers called roves and trimmed off and hammered down to secure. Belt mounts can also be made flat in a 2 piece mold, with a hold drilled into them to mount onto a belt with a rivet instead.

- Variety of styles and shapes
- Openwork is applicable here since they use a 3 piece mold
- Pieces made in 2 piece molds work also when used with rivets and roves which can also be cast
- Belt mounts were mounted on more than just leather belts- cloth belts, purses and horse harness are just a few among other uses



(Referenced from Egan)

Examples of Belt Mounts:

- 64** Belt fragment with wheel-shaped mounts; pewter
Belt 370 x 14 x 2 mm, mount 13 mm across, attached with two small spikes
Utrecht, Steenweg (HEMA), cesspit, c.1400
Erfgoed gemeente Utrecht, 1976-12-23/A60
Photo: H. Lågers



- 61** Flower-shaped mounts; pewter
Arnhemuiden, harbour, dump layer, 1425-1525
Archeologische Werkgroep, Arnhemuiden
Photo: B. Janson

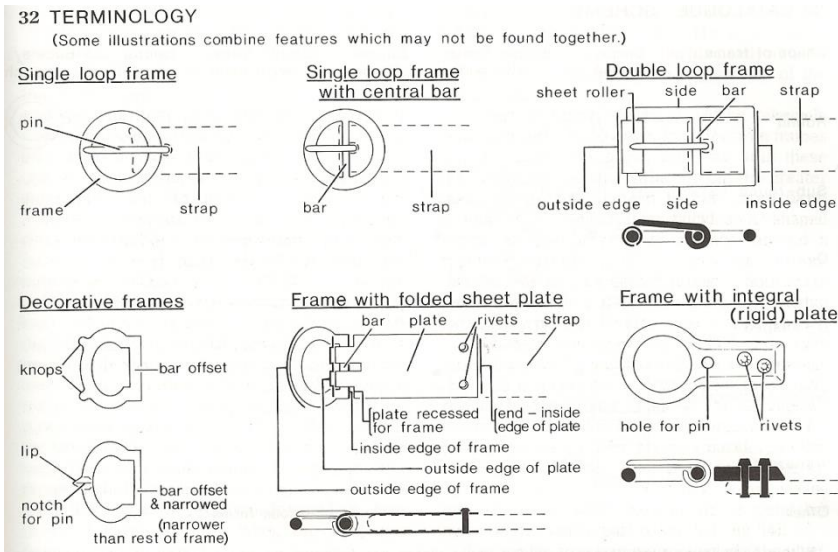


(Referenced from Willemsen/Ernst, BAH Casting Guild)

Buckles

Buckles in period were found in many places and used in a variety of items, from belts to garters to purse closures to horse harness and more. Most were made of heavier metals than pewter, but examples have been found. Stone molds have also been found for both pewter and bronze casting of buckles. There are as many different types of ways to make a buckle as there are designs for buckles, but here are two examples to help categorize common buckles

- 1) **Simple Buckles**- These can be a single circular or oval frame that a belt attaches to, with or without a pin in the center to secure the belt in one place. Double loops can be made to hold down the remaining belt. Buckles can be secured by the belt being sewn to itself or having a metal plate riveted to hold the buckle in place. Pins are cast separately and bent around bar.



(Referenced from Egan, BAH Casting Guild)

- 2) **Hollow Center Buckles**- Buckles that have carved frames with attached plates which are hollow so a leather or fabric belt can be inserted into it. Rivets are then placed through the buckle plate and belt and secured on the back. A spacer is placed in the mold before pouring to keep the hollow space, and we have used wetted wood successfully for this.



Strap Ends

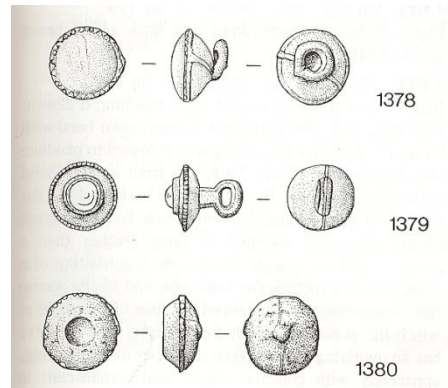
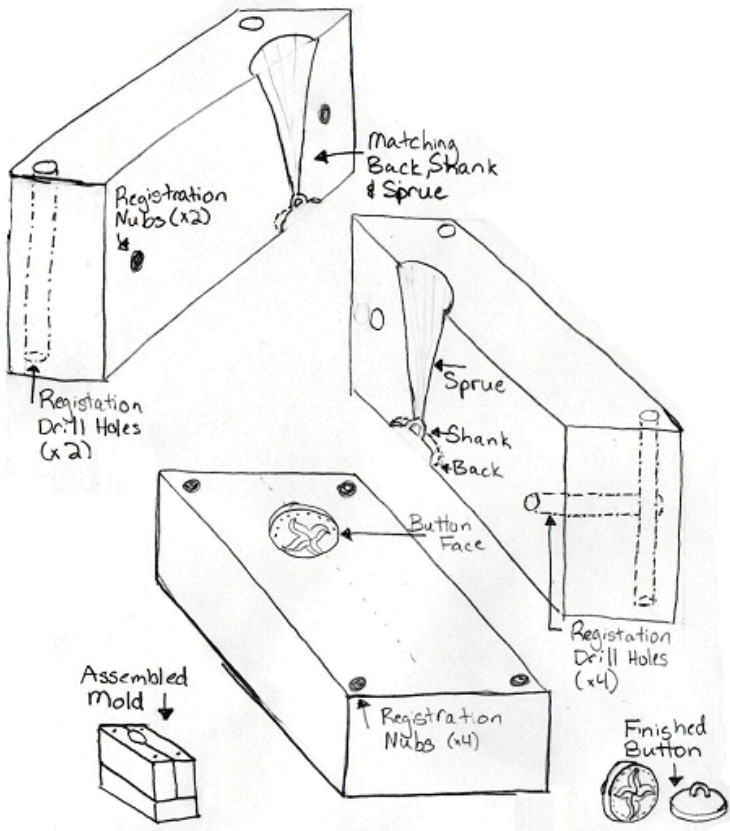
Strap ends can be made similar to belt mounts with an integral rivet, resembling more of an elaborate belt mount on the end of a belt, or with a hollow center that encloses the end of the belt. Hollow centers can either use wooden spacers in the mold or be a composite of three cast pieces, with a pewter cast spacer where all three pieces are then soldered together and then riveted over the end of the belt.



(References from BAH Casting Guild)

Buttons

Commonly found cast in either pewter or bronze, there are many examples of buttons with integral posts for attaching to clothing. They can be flat faced, rounded face or rounded face and back. Shanks can be close to the back or extended outward, which affects how the button sits on clothing and through button holes. A three piece mold is required for this, and we've always said if you can make a button, you can make anything!



(Referenced from HE Giliana, BAH Casting Guild, Egan)

Ampullae

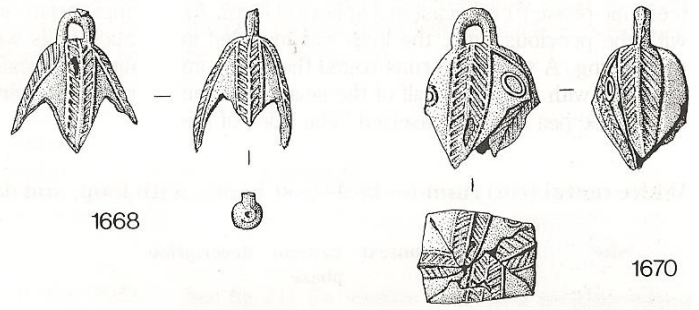
Used as both pilgrim relics and religious devices used during the "Blessing of the Fields" ceremonies in the Spring, Ampullae were small cast vessels used to carry holy water. They are made using a 2 piece mold where the molten metal is poured in, and before much of it can solidify, its poured back out leaving a hollow ampullae. Many had heraldic and religious designs carved on the sides. We have had the best luck with these pieces by using 99.8% Tin rather than our common Pewter alloy, which contains 98% Tin, .5% Copper and 1.5% Bismuth.



(Referenced from Mitchener)

Bells

Bells were worn often in period on belts and clothing, and were cast in Tin and Pewter much like a button. The top had an integral loop with four radiating petals which were clamped closed after pouring, enclosing a metal pea for sound. Three piece molds are used for these types of bells.



(References from BAH Casting Guild, Egan)

Cased Mirrors

Done with a large two piece mold, mirrors are the same piece front and back with hinges that connect. The inside of the piece has a beveled edge for a mirror to be epoxied into. The mold hinges are left open by placing a dowel into the mold during pouring to make the hinge opening. We have found that gluing a soft fabric to the opposite inside of the mirror helps protect the mirror from being broken.

(References from Egan)



The Profane

Many extant badges exist that portray various naughty images, and experts don't know the exact reason they were made or worn. Possibilities include references to fertility celebrations, celebrations of Carnival-like festivities or even social statements towards being "anti-courtly". While the true reasons may never be known, they make fantastic conversational pieces that are completely period.



(References from BAH Casting Guild, Rotterdam 12)

References:

A short history of The Worshipful Company of Pewterers of London and a catalogue of pewterware in its possession. The Worshipful Company of Pewterers of London. 1968.

Biringuccio, Vannoccio. The Pirotechnia of Vannoccio Biringuccio. Dover Publications. Mineola, New York. 2005. ISBN 0-486-44643-3.

Classic 16th Century treatise on metals and metallurgy. Short sections on lead and tin ore.

Blick, Sarah. Beyond Pilgrim Souvenirs and Secular Badges. Essays in honour of Brian Spencer. Oxbow Books. Oxford. 2007. ISBN 978-1-84217-235-3.

Mostly background info and essays on Brian Spencer's research

Descatoire, Christine. Treasures of the Black Death. The Wallace Collection. London. 2009. ISBN 978-0-9000785-95-5.

Mostly pieces done in gold, but beautiful pictures and inspiration.

Egan, Geoff. Dress Accessories: c.1150 - c.1450. Stationery Office Books. London. 1996. ISBN 0-11-290444-0.

Best. Book. Ever.

Egan, Geoff. The Medieval Household. Daily Living c. 1150- c. 1450. Office Books. London. 1998. ISBN 0-11-290490-4.

Mostly household goods like plates and vessels, good background info.

Forsyth, Hazel and Geoff Egan. Toys, Trifles & Trinkets. Base-metal Miniatures from London 1200 to 1800. Museum of London. 2005. ISBN 0-906-290-74-0.

Toys and household miniatures in pewter

HE Giliana Attewatyr. Basic Pewter Casting in Soapstone. Handout

Both of her handouts are available online at <http://myweb.cableone.net/amefinch/Giliana/>

HE Giliana Attewatyr. Intermediate Pewter Casting in Soapstone. Handout

H.J.E. van Beuningen & A.M. Koldewij. Heilig en Profaan. 1000 laat-middeleeuwse insignes uit de collectie H.J.E. van Beuningen, Rotterdam Papers 8. Cothen. 1993. ISBN 90-9006769-8.

Learn Dutch. Excellent pictures and at least you can read the dates.

H.J.E. van Beuningen, A.M. Koldewij & D. Kicken, Heilig en Profaan 2. 1200 laatmiddeleeuwse insignes uit openbare en particuliere collecties, Rotterdam Papers 12. Cothen. 2001. ISBN 90-9014881-7.

Learn more Dutch. Great naughty pieces collection.

Harvey, P.D.A. & Andrew McGuinness. A Guide to British Medieval Seals. University of Toronto Press. 1996. ISBN 0-8020-0867-4.

Excellent historical background and pictures of seals.

Hull, Charles & Jack Murrell. The Techniques of Pewtersmithing. B.T. Batsford Ltd, London. 1984. ISBN 0-7134-4751-6.

Short section on medieval pewter casting techniques, but more on modern practices.

Kunera. 27 April 2009. <<http://www.kunera.nl/Kunerapage.aspx>>.

Excellent searchable website for brooches and pilgrim badges, just be sure to hit the "English Translation" button.

Mitchiner, Michael. Medieval Pilgrim and Secular Badges. Sanderstead: Hawkins Publications. 1986. ISBN: 0904173194.

Fantastic book for reference and pilgrim badge examples. Highly recommend.

Ogden, Jack. Ancient Jewellery. University of California Press. 1992. ISBN 0-520-08030-0.

Decent reference

Portable Antiquities Scheme <http://finds.org.uk/database/search/advanced>

Another searchable website with catalogues of recent finds

Read, Brian. Metal Buttons c.900 BC - c. AD 1700. Huish Episcopi, Portcullis Publishing, 2005. ISBN 0-9532450-4-7.

Good Examples of buttons, but many post period and brass.

Scarisbrick, Diana & Marin Henig. Finger Rings. University of Oxford. 2003. ISBN 1-85444-167-1.

Variety of rings early and late period, beautiful pictures

Spencer, Brian. Medieval Pilgrim Badges for Norfolk. Norfolk Museum Service. 1980. ISBN 0-903101-25-4

Excellent references and pictures. All three of his books are wonderful and highly recommended

Spencer, Brian. Pilgrim Souvenirs and Secular Badges (Medieval Finds from Excavations in London) TSO. c1998. ISBN: 0112905749.

Spencer, Brian. Salisbury Museum Medieval Catalogue. Pt.2. Salisbury. Salisbury and South Wiltshire Museum. 1990. ISBN: 0947535128.

Theophilus. On Divers Arts. The formost Medieval Treatise on Painting, Glassmaking and Metalwork. Dover Publications. New York. 1979. ISBN 0-486-23784-2.

Virtual Museum of the Strong Collection. http://talbotsfineaccessories.com/cgi-bin/Strong_Collection.cgi

Whitehead, Ross. Buckles 1250-1800. Greenlight Publishing. 2003. ISBN 1-897738-17.

Large buckle resource with great pictures, but lots of examples post-period

Willemsen, Annemarieke & Marlieke Ernst. Hundreds of Medieval Chic in Metal. ISBN 978-90-8932-111-4

Fabulous new book, has belt mounts specifically with background info, paintings for reference and pictures of molds.

Youngs, Susan. The Work of Angels. British Museum Publications. 1989. ISBN 0-7141-0554-6.

Not pewter, but excellent celtic-period inspiration