

EQM

English decorated bell metal mortars

by C. A. Peal

There is much research work to be done on the dating of decorated bell metal mortars says the author who, in the first of two articles, puts forward a scheme based on shape and the decoration for ascertaining the origin of these and other mortars. He seeks information, comment and suggestions from readers

PART 1

Decorated mortars were made both in the bell-foundry and at the churchyard from surplus metal when casting bells. These mortars are sturdy and intriguing by-gones of great collectability, and so far have not been given their due study. Research and analytical thought applied to their dating is long overdue, and time is running out, because prices of such antiques almost preclude the formation of amateur research collections.

It is unfortunate that up to about ten years ago when specimens abounded, curiosity was rare. Dates were ascribed loosely but with an air of authority, and were accepted and perpetuated. Dates and initials on castings were usually individual dies pressed into the clay moulds, with or without further decoration.

Let us not sit unquestioning on our mortars, let us get together and pool information. Collectors with dated specimens are in the best position to produce satisfactory cross-referenced dating, both by the forms and by any directly associated emblems. Many mortars bear several emblems, and these will cross-refer to other emblems and to other forms. I propose a scheme of collecting the information building up first and second generation references, some of which will lead back providing checks. Already I have gone a considerable way in this direction.

Starting from early in this century there have been several published articles, many in the *Chemist & Druggist*, but they are almost entirely descriptive of individual mortars, and there appears to have been no effort to classify types or give reasons for datings. I find that little progress is to be gained from them, despite the excellence of the reproductions.

In the course of collecting I have acquired old and obscure magazine articles, personal catalogues of two famous collectors, correspondence and photographs, all of which provides useful records. I have also "met" several of the actual illustrated mortars in museums, and private collections. As I progress I wonder now how big is this Cinderella subject.

Other media have been turned in varying degrees, such as oak carvings on furniture, leadwork; plasterwork, book corners and bosses, buckles, needlework and pewterers' touch marks. Little of direct help with mortars transpires, but one progresses hoping that surely from somewhere something will emerge. At present my datings are loose, largely uncertain, tolerant, and open to correction on evidence.

Unknown to each other, on the one hand Dr J. Crellin and Miss D. Hutton of the Wellcome Foundation ("Comminution and English Bell Metal Mortars",

Medical History, Vol XVII No. 3, July 1973), and I on the other, at the same time were preparing material for publication in greater depth. A little of the work was parallel, and this was largely in agreement. My current efforts are on forms, and particularly the association of all the various emblems and motifs leading to significance and dating. I have based the work primarily around my own collection, with attention wherever possible to other private collections, museums both major and provincial, shops and sale rooms.

There are many points which need a feed-back of information, particularly on the significances of several emblems. Although mortars are now considered predominantly pharmaceutical, they were originally largely confined to household use in the still room. Agreed that mortars were an important and costly item of equipment in the pharmacy in the 17th century, so their distinctive shape was readily adopted as the symbol of the trade. However, no matter the habitat, history or uses, we want here to find out more about mortars as we see them.

I am primarily concerned with those under 5½in high, because the forms very largely conform to types, and bear emblems and motifs not usually found on larger mortars.

So first, definitions. FORM, is the side elevation of the outline of the body. DECORATION, includes date, initials, founders' marks, merchants' marks, heraldic etc emblems (such as crowned rose, monarch's head etc), and motifs (including geometric designs, and to a lesser extent, bands of decoration). We seek primarily what is datable, and what can cross-refer this dating to other forms, and emblems.

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Fig. 1 Charles I arms, Commonwealth arms, form 7 (see p 826) and two examples with the Charles II bust, the latter form 10. Obviously dating is tight.



Form	1	2	3	4	5	6	7	8	9	10	11
	1600 ± 20(6) (Q. Eliz. and base bands)	1630 ± 25(4) (tear drop)	1635 ± 30(8) (Q. Eliz., and date 1665)	1640 ± 20(9) (oak furniture)	1640 ± 20(5) (Norwich Arms)	1650 ± 30(6) (Acanthus)	1655 ± 10(10) (Commonwealth Arms)	1665 ± 15(9) (Commonwealth Arms and Chas. II bust)	1665 ± 10(10) (Crowned rose and Commonwealth Arms)	1675 ± 10(9) (Charles II bust, and tulips)	Later 18th c. Brass (Conventional Band)
Charles II bust, 1665 5(10) ba, bb								×		×	
Convent. band, 2nd half 18th c. (10) c.											×
Rose crowned, 1665 ± 10(10) da, db*							×	×	×		
Rose crowned, larger, 1600 ± 20(6) dc	?										
Fleur de lys, Bell metal, 1655 ± 15(8) ea								×			
Fleur de lys, Brass, 1st half 18th c. eb†	?										
Fleur de lys, crowned, B-m, 1655 ± 15(9) faa, fab*							×	×			
Lion passant, 1600 ± 20(8) g	×										
Lion rampant, 1665 ± 10(8) h							×		×		
Dragons head, 1655 ± 15(8) i								×			
Stags head, 1645 ± 25(9) j‡								×			
Griffon with key, 1665 ± 15(9) k								×	×		
Unicorn 'rampant', 1655 ± 15(8) l								×			
Commonwealth Arms, 1655 ± 5(10) m							×	×	×		
London Arms, 1655 ± 15(9) n								×			
Double-headed Eagle, 1655 ± 15(8) o								×			
Oakleaves, 1655 ± 15(8) q								×			
Crowned rosette, 1695 ± 5(9) r										×	
Lions faces, 1600 ± 20(8) s	×										
Q. Elizabeth, (1-lug), 1600 ± 10(8) t	×										
Norwich Arms, (1-lug), 1600 ± 10(8) u	×										
Mask (large), 1640 ± 20(8) v					×						
Diamond, 1640 ± 20(9) w				×							
Never-end symbol, 1640 ± 20(9) x				×							
Acanthus, 1670 ± 50(5) y*						×					
Rosette Medium, 1650 ± 30(8) a1			×			×					
Rosettes-2 diff. small, 1650 ± 30(7) a2						×					
Motif in rectangle with border, 1645 ± 35(8) a3		×	×			×					
Motif in rectangle no border, 1650 ± 30(6) a11		×									
Acorn, 1650 ± 30(7) a4						×					
Rosette, large, 1640 ± 20(8) a5			×								
Face in tear drop ?QE, 1650 ± 30(3) a6						×					
Rose crowned, small, 1655 ± 15(9) a7								×			
Shield "horned", 1630 ± 25(6) a8		×				×					
Crucifixion, 1640 ± 20(6) a9a, b			×								
Q. Eliz. (probably), 1630 ± 30(5) a10			×								
Hare (or stag) in teardrop, 1630 ± 25(7) a12		×									
Composite, (small rose, f. de l., 2 cherubs), 1650 ± 30(6) a13						×					
Mask (small), 1650 ± 30(8) a14			×			×					
Dragon rampant, dated 1655 (F3) a15			×								
Oakleaf, 1650 ± 5(8) a16						×					

Footnote: *And on brass mortar
†Form not numbered
‡Similar to form 5, carved lip, squatter



Forms. The "outlines" referred to in table and text.

Fig 3. Four mortars of form 6 showing a range of emblems and motifs. Note acanthus upside down. See the low relief motif with blobs referred to in Part II. On right, see the irretrievable damage caused by foolish cleaning. 1650 ± 30 (6)

The alloys can and do give helpful dating evidence, and in one case this places an emblem 200 to 300 years later than first sight suggests. Very roughly I take bell metal to run to c.1700, thereafter tailing off in favour of brass. Bell metal gives a warm, slightly red-brown impression, and has dark brown oxide: brass is brittle, with a cold yellow appearance with a blacker oxide — but colours can vary according to contingent factors. Dates in the table are quoted with a ± span, followed by a figure in parenthesis, which is a rough degree of certainty, up to ten.

To encourage mortars to admit their age, let us look first at some broad groups of emblems, starting with those which give us the best dating leads. They are:— Dated or datable inscriptions, monarchs, "conventional bands", rose crowned, *fleur de lys*, *fleur de lys* crowned, heraldic animals, waist bands other than "conventional", other unclassified emblems and motifs.



Fig 2. "Conventional band". Made in all sizes. Note pedestal base. Form II, brass, latter 18th century, long span

Dated mortars

Many dated mortars survive, but are not now readily available in shops. I have usually left them for those with deeper pockets, after noting details. Some bear the *rose crowned*, and these give dates for the forms on which they appear, and from which we can build at least some of the spans. Some bear a date and maker's name; in the absence of any other record of his dates his working could be taken as probably up to 30 years before, or after, that date (NOT ±). Given a mortar date of,

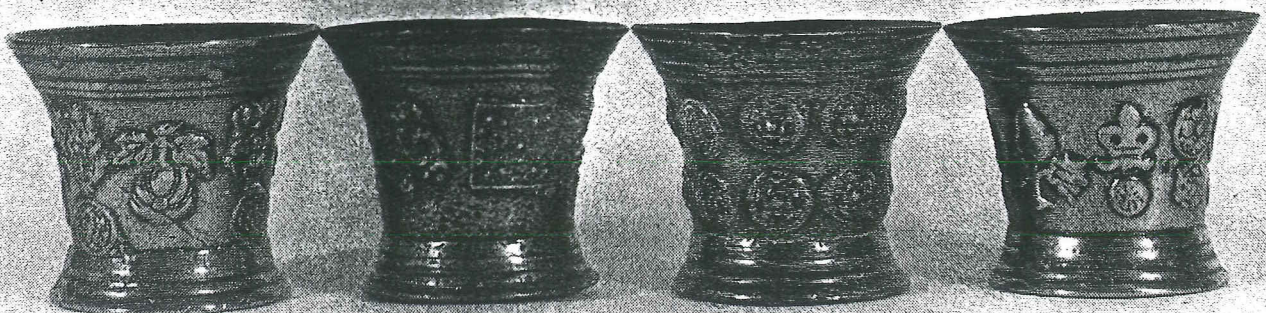




Fig. 4. Heraldic animals. Dragons head, and Griffon with key, form 9, 1655 ± 15 (8)



Fig. 5. Two varieties of rose crowned on forms 8, 9. Form 8 was host to at least 15 emblems. 1665 ± 10 (10)

for example, 1660, then his span might be 1630-60, or 1660-90; or more likely 30 years centred somewhere between. Two wide-apart dates for one maker, form or emblem, could be taken as the span. The rose crowned is almost the only emblem to be accompanied by dates. It is palpably a royal emblem, and so it was likely in vogue because of the Restoration, and is c1660-85. Dates found on such mortars confirm this. We will see later that many other forms and emblems were in use at

the same time. This rose crowned appears on forms 8, 9, and very occasionally on form 7. A larger type of rose crowned appears to be very early 17th century, and may have been similarly inspired by an accession — James I.

Monarchs

There appear to be only three: — Charles I Arms (1625-49); Commonwealth Arms (1649-60); Charles II bust (1660-85).

The detail of Charles I Arms is almost

Fig 6. Fleur de Lys. (a) On bell metal. One similar bears date 1667. The crude cleaning by grinding has destroyed exact identification of form type. (b, & c) Two varieties of this neat emblem on brass. 18th century



invariably poor. I have only seen one really clearly cast out of, I suppose, upwards of a couple of dozen. Admittedly it calls for a clean die and accurate casting, but some I have seen show coarse file-marks. I wonder if they were intentionally defaced by order during the Commonwealth? Certainly no one would have cast them after Charles' death, so we have the date of the one form on which they appear. But I have not seen any other emblem on the form on which it appears! Similarly the Commonwealth Arms must be confined to 1649-60, but more helpfully than the last, they appear on forms 7, 8, 9. Charles II bust, obviously of great general appeal, is often wrecked by heavy-handed dealers, thinking to glamourise by brightness, achieving maximum damage in minimum time. It appears on forms 8, 9, 10. So forms 8 and 9 were used both before and after 1660.

"Conventional band"

Is a waist band of shell, foliage and grapes etc always in brass. It is included here (a) because it can be dated loosely but with certainty; and (b) to prove English provenance. For centuries there had been waist decoration of tracery, the bands being less horticultural in detail. The later ones are the most common decorated mortar style, and the brass body shows the fine lines of machine tidying up. They run in all sizes, obviously late 18th century, and are so proved by large ones bearing "J. Beardmore fecit 1768". The point of English provenance is made because in some quarters, and by some Dutch dealers they are ascribed to Holland. Dutch forms are completely different. It is notable that 18th century decorated mortars *except those with emblems* are made with pedestal accommodation — which includes the "Conventional Band". Plain 18th century ones appear never to have this; presumably only prestige — and very large — mortars were used on pedestals, and were decorated to warrant exalted position. Some larger, earlier mortars too, have the pedestal base.

The illustrations are of a few of the forms and emblems mentioned in the text of both Part I and Part II. Examples might possibly be seen in shops and sale rooms, but probably in reserve collections of museums, in private collections — and more likely still — in many a pharmacy.

(To be concluded)

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PART 2

In Part I (*C&D*, June 29, p 825), I dealt with the problems of trying to date decorated mortars by their datable emblems, and cross-referring them by the forms on which they appear back to other forms, hence to other emblems. Consideration was given to four of the most easily datable emblems: Rose crowned, and three "monarchs". In doing so we have gained considerable evidence on the four forms bearing them, and by inference, all the other emblems borne on these forms. Now we come to less easily dated emblems.

Fleur de lys

This is certainly as common as the rose crowned, and only exceeded by the "conventional band". The emblems are neat, small, and have three normal variations on brass mortars. I assume brass to have been used for mortars from roughly 1700. Larger, more spread out *fleurs* occur much more rarely on bell metal of approximately the second quarter of the 17th century. Never, I think, is the *fleur de lys* on brass accompanied by a date; and seldom indeed on bell metal. So far emblems have been more or less self-explanatory — but why was the *fleur de lys* so ubiquitous through the 17th and 18th centuries? For long it had been used decoratively — but in previous centuries England had laid claim to France; and also the English had admiration for their culture. In the 17th century they were neither friendly with, nor claiming, France. Less so still in the 18th, although the *fleur de lys* did still appear on the Royal Arms until 1801. Why was there not a switch to a Hanseatic horse, for instance? It is true that the *fleur de lys* was the emblem of various trade etc organisations, but this is an extremely unlikely association. Was it after all only a pretty design? The prevalence of other "heraldic" emblems which we will discuss later obviously suggests significances.

In searching other media the pewter makers' touch marks show three points. The *fleur de lys* was used by some pewterers as a device from the 16th century to the beginning of the 18th, often combined with other decoration, perhaps implying the culture and sophistication of France. It appears to have been used more commonly in the West Country. Thirdly, one John French uses it as a punning device. Another surnamed French uses it and pounds his point home by adding "French Armes". This all hints of heraldic allusion, and a leaning towards France.

The *crowned fleur de lys* follows naturally, and is even less readily understood. Is it political, claiming the throne of France? It appears solo only, and only

on bell metal (almost exclusively), which puzzles me a little, because on a four poster valance in Blickling Hall it is exactly portrayed as on mortars, accompanied by rose, thistle and harp, each crowned. The valance bears George II Arms — say 1730. A mortar similarly bears *fleur de lys*, harp, and rose, each crowned, (also acanthus and lion's face). Comparable dating is indicated by its being in brass — and we will meet this same example below, when an earlier dating is more likely. But first, another interesting specimen in bell metal bears a *fleur de lys* crowned flanked by a rose crowned on one side, and thistle crowned on the other, all in a continuous thin line, plus two roses and date 1667. It is certainly British. Its fellow, but dated 1671, is in the Wellcome Museum. Why on earth is the place of honour given to the Emblem of France — at any date? And why boost France when we never see a mortar with either harp or thistle crowned as the sole emblem? We've got problems!

The *fleurs de lys* crowned appears on two forms datable as 1655±10 (9), and 1665±15 (9), and in the thin line treatment mentioned above, as 1667 and 1671. Omitting the Commonwealth period, we can date it as 1660-75. Possibly the brass mortar bearing English, Scottish, Irish and French emblems is earlier than expected of brass. All would then be compatible.



Fig 7. One sector of brass mortar showing thistle crowned, fleur de lys crowned and acanthus. Also bears rose, and harp, both crowned, and lion's face. Dates of 1655, and 1730 could be acceptable for the style. Of the mortar being in brass . . . ?

Heraldic animals

How and why have these been adopted from heraldry? Are they no more than attractive, historical designs — meaningless but prestigious? They include lion

passant, lion rampant, dragons head, stag's head, griffon with key, unicorn, etc. Are these gate-crashing a family crest? More likely that the purveying die-maker had a one track mind, and no artistic creativity. On the other hand, there is one very strong but obscure clue. It is the unicorn, which is passant, and showing the ground under the hooves. In all the specimens I have seen the unicorn is cast tilted to about 60°. Without doubt this is to convert it to "rampant" — and therefore it has a significance more heraldic than decorative. In case one thinks of it acting as stand-in for the Hanseatic horse of the Georges (1714+), we have otherwise dated the form 8 on which it appears as 1665±15, (for *inter alia* it bears Commonwealth Arms — also oak leaves, of probably 1650) and it seems too much to add one emblem's use 35 years later.

These animal emblems appear on five forms — 5, 7, 8, 9, 10. Most appear on two only, one of which is likely to be the heavy lop-sided two-handled form 8 just mentioned. This form is prevalent and establishes itself as such a useful club for emblems all of the same age.

Miss Hutton suggests that this form is "post the great fire", because of quantity, and of London, because one bears London Arms. We have seen that at least some are "pre-Fire", since they bear Commonwealth Arms. Quantity is more likely to indicate strongly London provenance: appearance of London Arms does not. I have three bearing City of Norwich Arms, and the forms concerned, 1 and 5, are widely distributed, (and include one very common emblem). The rareness of both London Arms, and Norwich, and the wide distribution negate this "proof" of provenance. But why bear a city Arms at all? A local government pharmacy? Of course not. Perhaps just big, prosperous cities.

Amongst the "heraldic" emblems one should include the curious squatting figure playing a musical instrument. He appears to be in 15th century dress, but it is borne on brass mortars of about 1740. Davison referred to it as "Egyptian", but provenance is clinched by the associated British ducal coronet with beast issuing, which I have on one, and an acorn on another.

Under "heraldic" are included "pictorial", tailing off to motifs:— Lion's face, mask, oak leaves, acorn, man playing instrument. Designs:— Diamond, "endless symbol", shield, and others, and on to motifs (geometric designs in both high, and low, relief). Surprisingly one topic, that of religion, is missing. I know of two motifs only, bearing similar but different crucifixions, on form 3 1635±30 (8). This may be symbolic of Charles I. I wonder if there is any superstitious merit in any of the emblems mentioned?



Fig 8. Fleur de Lys crowned. This shows the uncertainty of matching emblems even on good examples. Appears on same forms as Commonwealth Arms 1655 ± 15.

Motifs

For want of a better term "motifs" cover rosettes of at least three different sizes and design, masks, acanthus (sometimes cast upside down), and tracery patterns. Unfortunately space does not allow adequate illustration of all the fascinating emblems and motifs. There are 50 or so, on 11 forms.

While some motifs are in high relief, designed specifically for the job, four or five in low relief make me wonder if they have been borrowed directly from some other art form such as buckles, book clasps, book corners or chapter ends. Some blobs in the casting (eg most noticeably on stag's head) were probably the attaching studs of the buckle.

Forms

Forms appear to provide our best control system. No doubt wider experience could cause some movement on the sequence ladder. Points to note in the form are:— general outline, the flare of the lip, bands or ribs on neck and base, flare of base. Allowances must be made for poor casting, sometimes actual twins have weak, and strong details respectively. It may turn out to be important that most emblems, usually appear as "solos"; most motifs usually appear in the company of emblems or motifs, and vary their partners.

Two forms, each suckling several emblems, are given long spans, of 60 years

each. Strong evidence concerning one or two emblems could narrow dating considerably, of three or four — radically, so the value of only a little research help is evident. The only emblem anomalies are first, acanthus on a bell metal mortar of form 6 (1620-80), and also on a brass mortar dated as first third 18th century. The die seems to be identical despite a cleaning vandal's work on the brass specimen. Perhaps the emblem was an old hang-over. There is no reason why metal dies should not have been good for use for a long time, but in the 17th century styles in metals changed rapidly. The Georgian period decelerated style changes.

The other anomaly, the dating of crowned *fleur de lys*, has been touched on. It is well dated by form as 1640-70; by the Blickling valance as 1730; and it appears on the very same mortar mentioned in the last paragraph, which is probably very significant. *Perhaps* some emblems had a much longer run than expected. Most of the trouble would be removed if that particular mortar in brass, was c.1670. But still we would be stuck with the valance to be explained. So, when *did* brass mortars *begin*?

It may be interesting to give a short list of emblems in my impression of increasing scarcity. "Conventional bands"; *fleur de lys*; rose crowned; *fleur de lys* crowned; Charles II bust; Charles I arms. More scarce are:— Stag's head, griffon with key and unicorn. The remainder seem to me to be rare. But it seems very likely that

Charles II bust and Charles I Arms, both being very attractive, even romantic, may be preserved widespread and kept by owners far more than other styles, and so may actually be much less scarce than my experience indicates.

List of forms

Forms are numbered in my present suggested dating sequence, many overlap. We can assume that all of an exact form are of a period, whether made by one or more founders. In other media a form is a fashion, and presumably so with mortar forms. So let us work from a reasoned sequence, and check back wherever possible. Just as with forms, identical emblems indicate similar dates (we hope), but neither proves a single founder. A die could be passed around local founders, but surely it is much more likely that there was a system of distribution of a die-makers pattern. (This might weaken some identification of bells!) Unfortunately, four factors preclude the certainty of two emblems being identical. A die may become worn in use; the mould may have been a little sloppy; the casting may not have flowed true and complete; the cast emblem may have been detracted by rough use, corrosion, or ruthless vandalistic cleaning.

Once more, any answers to queries, comments or suggestions will be welcomed. It is intended later to produce a book on the whole wide subject, including large mortars [letters c/o the Editor].

Fig 9. Heraldic animals. (a) Unicorn positioned steeper than the usual approx. 60°. (b, & c) Stag's head, clearly showing the blobs of the original-purpose attachment. Form 8,5 1645 ± 25 (9).

