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The Robinson Collection – Clay Tobacco Pipes from Willaston, Cheshire

David A. Higgins

Introduction

Dennis Robinson (19 January 1929 - 24 October 1990) lived in the North West of England at Willaston, near Nantwich, in Cheshire (Fig. 1), and was one of the grandsons of ‘Clogger’ Robinson who ran a well-known Nantwich clog and shoemaking firm. He did not join the family business but served with the Merchant Navy and then with the Royal Signals until he retired following an accident. He then went on to set up and run a successful driving school for over 30 years. Dennis always had an interest in local history and, between 1975 and 1990, he often walked near his home where he collected a wide range of archaeological material (Fig. 2) from the fields that straddle the parishes of Willaston and Rope. The fields he collected from are located immediately to the east of

Willaston itself and were principally the two large fields lying to the north and south of the road running between Willaston and Rope Hall. The most striking element of his collection is the very large number of clay tobacco pipe bowls that were present in these fields.

During the late 1980s the author was in contact with Dennis to record the marked pipes that he had found and to encourage him to undertake research into his collection, as a result of which he went on to produce a booklet on his finds (Robinson 1990). By the late 1980s, Dennis had already given a representative collection of his pipes to Nantwich Museum and some others to the Grosvenor Museum in Chester. The collection at Nantwich Museum comprises some 72 bowls and two stems, with 63 of the bowls being finds from the local fields. The Grosvenor Museum collection is slightly larger and includes 114 pipes with stamped marks on them. Despite this, in 1989, Dennis still had 1,535 pipes with makers’ marks on them in his possession, mostly dating from the mid-seventeenth to early eighteenth century. The author numbered these and made impressions of the marks for the national catalogue of clay tobacco pipe stamps that he is compiling, a copy of



Figure 1: Location map showing Willaston and other places mentioned in the text.



Figure 2: Some of the range of other archaeological artefact types collected from the fields and now in the National Pipe Archive with the pipes. 1. A silver Venetian soldino of Doge Agostino Barbarigo (1486-1501); 2. A pierced brass gaming token based on a George III spade half guinea; 3. A cast copper alloy crotonal bell, probably of seventeenth- or eighteenth-century date; 4. A Midlands Purple Ware jar or cistern rim with applied and thumbled strip made in the Midlands or North West, late fifteenth century to early seventeenth century; 5. Fragment from the neck of a German 'bartmann' bottle with applied and moulded face mask, probably from Frechen, seventeenth century; 6. A Staffordshire type slipware dish with trailed slip decoration, Staffordshire or Midlands, mid- to late-seventeenth century. Photo: Author.

which is held in the National Pipe Archive at the University of Liverpool. These marks are impressed as cast numbers 162.1 to 192.36 in the catalogue. The Grosvenor Museum examples were later added as casts 248.18 to 251.4. The author also prepared a typed summary/discussion and illustrations of the collection, a copy of which was also deposited with the National Pipe Archive (Higgins 1989; LIVNP 1997.22.40).

Dennis continued to collect material from the fields after the 1989 record was made but sadly passed away about a year later in October 1990. In the intervening few months, Dennis had collected a further 108 stamped pipes, which the author later numbered 1536-1643 and impressed for the stamp catalogue as casts 251.5 to 253.27, but which are not included in the following analysis. In total, Dennis had collected some 1,800 stamped pipes from just a few fields near his home. After he died his widow, Jean, kindly donated the whole of his remaining fieldwalking collection to the National Pipe Archive at the University of Liverpool, where it forms one of the most important collections of early stamped pipes from anywhere in the country (Accession Number LIVNP 1998.19). The following analysis of the Robinson Collection is based on the 1,535 marked pipes that Dennis had in his possession in 1989.

The particular significance of this collection is that it includes a very high percentage of marked pipes dating from the mid-seventeenth to early eighteenth century and that these clearly represent a range of domestic waste rather than kiln debris from one specific manufactory. This allows a detailed analysis of the way pipes were being traded across the region between about 1660 and 1730 and highlights the relative importance of different manufacturers and production centres. It also includes some locally very abundant types that must represent as yet unidentified makers, at least one of which was probably working in the nearby town of Nantwich, which lies about 2 miles west of Willaston.

Including the plain pieces, Dennis must have collected somewhere between 2,000 and 3,000 pipe bowl fragments from the local fields, which represents an extraordinarily high concentration of material for the area examined. Similar concentrations of seventeenth-century material have only been recorded from two other locations nationally, i.e., from fields near Beverley in Yorkshire (Rayner Collection) and fields near Diss in Norfolk (Woollard Collection), both of which are now also in the National Pipe Archive (Accession Numbers LIVNP 2016.03 and LIVNP 2016.05). The reason for these particularly dense scatters of material is unclear, but all three groups are characterised by a wide range of different types suggesting that they are domestic in origin. While the use of the fields for events such as annual fairs has been suggested, it may simply be that these were intensively used arable areas across which 'night soil' from the neighbouring towns was habitually spread to fertilise the land.

The Robinson Collection

When the collection was first examined in July 1989 it contained 1,535 stamped heels or bowls, of which about 1,420 examples were legible. There were a further 346 unmarked bowls, which gives a sample size of at least 1,881 pipes in all (there were also a considerable number of body fragments from pipe bowls, which were not counted). In these figures there is a slight bias towards marked pieces, since any fragment with a mark was included in the count of marked bowls while only relatively complete bowls could be recorded as definitely unmarked and thus included in the count of 346 unmarked examples.

There were 45 unmarked heels amongst the bowls fragments that were not included in the above count because they were too fragmentary to see if there had originally been a mark on the bowl itself. Pipes with just a stamp on the back of the bowl facing the smoker and no heel mark are rather rare in this collection and so it is likely that most of these 45 heels represent completely unmarked pipes as well. But, even if these had been included, there would still have been less than 400 plain bowls compared with over 1,500 marked ones, showing that about 80% of all the bowls collected were marked.

Another factor that influenced the ratio of marked pieces is the fact that there were 133 unmarked bowls that were either Chester forms of c1690-1720 (Fig. 3), which were never marked (although they may well have had decorated stems, e.g., Fig. 4), or pieces of later date that are not comparable with the earlier stamped bowls. When just the local styles of seventeenth or early eighteenth-century bowls are considered, and the Chester 'imports' excluded, then only about 268 out of 1,803 examples were probably unmarked (around 15%), showing that an even



Figure 3: Unmarked Chester bowl forms of c1690-1720.
Photo: Author.



Figure 4: A Chester pipe stem of c1760-1790 with roll-stamped decoration. Photo: Author.

higher percentage of these early pipes (around 85%) did have makers' stamps on them. This is one of the highest percentages of early marked pipes from any region of the country and means that the majority of the pipes can potentially be identified to their individual manufacturers and/or places of origin.

In order to assess the range and number of production centres and makers represented, the pipes were initially sorted according to the marks on them and then subdivided, as far as possible, into individual die types. Each of the stamped pipes was allocated a unique reference number which was inked onto the pipe. These run from 1 to 1,535 and have also been used as the suffix for the pipe archive's group accession number. The marked pipes were then bagged as either individual die types or small groups with similar initials. The unmarked bowls have likewise been sorted into general types by form and date and bagged together, but they have not been individually numbered.

There are a few early pieces which may date to c1610-45 but these are rare compared with the bulk of the pipes, which range from c1645-1720 in date. After c1720 very few pipes are represented in the collection. The diversity of material present rules out any possibility of it being kiln waste. As noted above, possible explanations for this concentration of material include a period of intensive manuring using waste from nearby Nantwich, or, perhaps, the presence of some sort of annual fair on the fields near the village.

The makers' marks

Around 90 different names or sets of initials were found stamped on the pipes, which underlines the extraordinary scale and complexity of trade links across the region during this period. In several cases it is likely that more than one maker with the same set of initials is represented,

which makes it hard to be sure of exactly how many individual workshops were finding a market in this one place. Despite this, many of the marks can be attributed to specific pipemakers or production centres from the surrounding region.

In order to study the regional trade patterns represented by the pipes, the various marks occurring at Willaston marks have been listed and, so far as possible, attributed to a particular production centre or maker. Details of all the identifiable name or initial marks, together with detailed die drawings for about a half of them, are given in Appendix 1. This is followed by a catalogue showing a representative range of bowl form drawings in Appendix 2.

An estimate of the number of different dies represented by each different set of initials or name is also given in Appendix 1. This shows that approximately 250 different die types are represented in the collection. Around half of these marks have already been classified and drawn for the National Clay Tobacco Pipe Stamp Catalogue that the author is compiling. Where matches have been found, the unique die number is recorded, followed by the number of examples found at Willaston (in brackets). The classified marks (122 examples) are then illustrated in alphabetical order at the end of the Appendix, together with their unique die number.

The marks themselves have also been broadly categorised in Appendix 1 according to the shape of the die, with six broad types being represented: circular (C), crescent-shaped (Cr), heart-shaped (H), heart/shield hybrids (H/S), shield-shaped (Sh) and square/rectangular types (Sq). Circular marks are by far the most common, comprising nearly 86% of the total, followed by square or rectangular marks (6%), heart-shaped marks (5%) and then heart/shield-shaped marks (3%). The other two categories represent less than 1% each.

This broad classification does not, however, provide a true reflection of the pipes actually made in the Willaston area as opposed to having just been used there. All the heart/shield hybrids and shield-shaped marks as well as just over a third of the heart-shaped marks can be attributed to just one maker, Henry Bradley of Benthall (see below). Benthall adjoins Broseley in mid-Shropshire and is one of the most distant supply sources for pipes to Willaston. Almost all the other heart-shaped marks can also be attributed Broseley area makers, showing that these three types of mark are typical of mid-Shropshire products (and, with the heart/shield types, of just one maker), but not of other supply sources nearer to Willaston. The more local centres were almost exclusively using circular marks, with a small number of square types appearing towards the end of the seventeenth century.

Another characteristic shared by almost all the pipes is that the marks are in relief. The only incuse example is marked IOHN/IAMES, for one of the Broseley area makers. This early full-name mark is very unusual since it not only

has incuse lettering, which is probably unique amongst early Broseley area products, but the lettering also reads backwards (from right to left) across the mark. A relief version of this mark is also known (Atkinson notebook in the National Pipe Archive: LIVNP 2012.06.222, p141), but in this instance the lettering reads the correct way (left to right) but with some of the lettering retrograde. Perhaps the engraver, not used to making full name marks, cut a die that read the right way when impressed but with some of the letters coming out reversed by mistake. In order to try and correct this, the pipemaker might then have made a clay copy directly from the die and tried using that, which resulted in the individual letters reading the right way around, but in reverse sequence. The impressed letters made from this direct copy of the original die would also have been incuse, thus explaining this unique example of an early incuse mark from the region.

In total the study group comprised 1,535 marked pipes but 45 just had symbol marks on, which are not included in the following discussion, and 123 were illegible, so that they could not be allocated to a specific maker. This leaves a total of 1,367 legible name or initial marks that are included in the following analysis. In some instances, the maker is not known but the pipe can usually be attributed to a particular production area based on the style of the bowl form or mark. 'Local' styles refer to pipes that cannot be attributed to a particular place or maker, but which exhibit characteristics indicating they are likely to have been made within about 20 or 30 miles of Willaston. Only 62 of the legible pieces (around 4% of the total) could not be attributed to a specific maker or production centre, which is a very small element of the assemblage of a whole. This means that the following results can be taken as reliable indication of the trading patterns for pipes during the period c1650-1720 (and, in turn, the distances over which other goods are likely to have been traded).

The most distant example from the north is probably a crescent shaped IB bowl stamp that comes from Rainford, some 40 miles north-north-west of Willaston (Fig. 1). As a single stray find, the Rainford bowl is interesting in that it shows that marked pipes from this important production centre were occasionally reaching as far south as Willaston, in the same way as an isolated find from Welshampton in Shropshire (Higgins 2018). However, it is only by seeing this example within the context of this large assemblage, where it represents just 0.065% of the marked pipes, that its rarity can be fully appreciated. In other words, this example is very much the exception rather than the rule – a stray find that does not reflect the normal pattern of pipes being traded to, and used in, the Willaston area.

There are five examples of a similar Rainford style of crescent shaped bowl stamp reading GA, but these have been identified as probably coming from Warrington, which is only about 25 miles to the north (Higgins 2008a, 133). The closer proximity of this source accounts for the larger number found, although it is still a rare style in the Willaston collection. A small number of marked pipes from Chester, some 23 miles to the west-north-

west, are also present, for example an Edward Evans bowl stamp (Fig. 5) and two AL heel marks, which were produced by Alexander Lanckton. These show that slightly larger numbers of pipes were coming from around 25 miles away to the north and west-north-west, but these production centres combined were still contributing less than 1% of the marked pipes in use (with the caveat that the 133 unmarked Chester bowls of c1690-1720 represent a marked change in supply at the end of the study period).

The Rainford style spur bowls with their crescent shaped marks from Warrington are very different to the pipe types that were otherwise being favoured locally, which are almost exclusively heel types. The stylistic differences of bowl form and mark type reinforce the numeric distinction, suggesting that there was quite a marked cultural distinction in the pipes being used to the north and the south of the river Mersey.



Figure 5: A pipe stamped with the mark of Edward Evans, who was recorded as a pipemaker at Chester when he baptised a daughter in 1646 (the die detail is at twice life size). Photo: Author.

A rather larger number of pipes from Newcastle-under-Lyme in Staffordshire were found, Newcastle being about 13 miles to the east-south-east (Fig. 1). The most prolific marks from there are the CR marks of Charles Riggs of which there are 111 examples, representing about 8% of the legible marks (e.g., Fig. 16.5). Other marks can be attributed to the Newcastle makers with varying degrees of certainty (*cf* Barker 1985). These are IB for Joseph Ball (20 examples), RB and TB for Randle and Thomas Baddeley (86 examples), WC for William Cottrell (4 examples) and TF for Thomas Fox (11 examples; e.g., Fig. 16.4). This gives a total of 232 probable Newcastle imports, representing about 17% of the legible marks recovered.

From further south in Staffordshire a small number of pipes were probably made in or near Stafford itself. These are the pipes marked CB (5 examples) and IG (2 examples), which have been found in some numbers

during excavations in Stafford itself, but which are rarely encountered elsewhere in the region, suggesting that the makers worked in Stafford itself. Stafford is about 27 miles south-east of Willaston and, like the pipes from the north-west, marked pipes from this area only make up around 1% of all those found.

In contrast, most of the imported pipes appear to have come from the Much Wenlock / Broseley area of Shropshire about 40 miles to the south (*cf* Higgins 1987a). The most prolific marks are those attributed to Henry Bradley of Benthall (68 examples), Morris Deacon (118 examples) and Richard Legg (around 50 examples). Other marks with more than one possible Broseley area maker are IH (135 examples), GH (53 examples) and II (49 examples). In all there were 368 marks that are likely to be from the Broseley area, as well as a further 68 from adjoining Benthall and 31 from nearby Much Wenlock. As well as the Broseley area pipes, there are 36 examples of WE marks, which can probably be attributed to the two William Evans' of Wellington in Shropshire, some 31 miles to the south (e.g., Fig. 17.22). Similar WE marks have been found in the Wellington area, although it is possible that some of the Willaston finds could alternatively have been made by William Edgerley of Burlton, near Wem.

In total there are 503 marks that can be attributed to the mid-Shropshire pipemakers. This represents 37% of the legible pipes from the Willaston group, making this by far the most important source of pipes. It can also be seen that these marks do not represent large 'one-off' individual shipments, but regular trade over time, as evidenced by

the range of different marks that occurs for each maker, for example Morris Deacon (Figs 6, 17.18, 17.23 and 17.24).

One interesting point to note is that some of the Broseley area makers were clearly finding a regular market in the Willaston area, while other well-known makers from that area are barely represented at all. Excavations in Birmingham, for example, produced 124 seventeenth-century stamped pipes of which nearly a third (37 examples) were marked either MB or Michael Brown for the Much Wenlock maker of that name (Higgins 2009, 198). In contrast, only a single Michael Brown pipe is present in the Willaston group. Conversely, the Birmingham group did not produce any HB pipes and only a single example of an MD pipe, which were the two most common mid-Shropshire types found at Willaston, with a total of 186 pipes attributable to these two makers (13.6% of the marked pipes as a whole). This makes it clear that pipes from the mid-Shropshire workshops were not being randomly distributed, but that each workshop must have had its own specific trading network through which its products were traded.

It is also important to note that the mid-Shropshire makers, despite being more than three times as far away, had a substantially larger share of the Willaston area market than the Newcastle makers. The Broseley / Much Wenlock area makers traded extensively across the Midlands and down the Severn Valley to South Wales (Higgins 1987a), but this is the furthest north that a substantial concentration of their products has been observed. There must have been regular trips between the two places to transport the pipes,



Figure 6: Three examples of Morris Deacon pipes from Broseley, showing different bowl styles and mark types that reflect regular trade to the Nantwich area over a period of time (the die details are at twice life size). Photo: Author.

and it is likely that less durable goods would have been carried on the return journey that cannot be seen in the archaeological record. The pipes can be taken as a marker of the trade routes along which other goods would have been carried, as well as news and information linking the residents of the two places.

The remaining Willaston pipes, nearly 60% of the total, proved less easy to place. Many of the marks have been previously recorded but their origins and makers remain uncertain, such as the 23 pipes marked HP (e.g., Figs 16.1-2), examples of which have also been found in Stafford and Keele (Oswald 1991). There are also a number of previously unrecorded marks. Some of these pipes may have come from the production centres already mentioned, but it is likely that many of them were made by local makers who have not yet been traced in documentary sources. The only known pipemaker in Nantwich itself is Thomas Newans, who is recorded as such in the parish register when his son, Joseph, was baptised on 1 December 1705. No further trace of him has been found in Nantwich, but a Thomas Newans of Aston (near Wem; no occupation given) was buried at Wem on 2 June 1716, perhaps the same person. If so, it is possible that Newans worked as one of the north Shropshire pipemakers clustered around Wem and that he was only in Nantwich for a brief period. Thomas Newans almost certainly produced the 36 pipes marked TN (e.g., Figs 17.28-29), although, somewhat surprisingly (being the closest documented maker if he worked in Nantwich), these only represent only just over 2.6% of the whole assemblage.

Other marks which are particularly common in this collection were probably also produced in, or near, Nantwich. The most striking example is the series of RG marks of which there are 304 examples in a variety of different die types, representing just over 22% of all the identifiable marks. This mark has been recorded at various other places in the north-west, but never in such concentrations and, from the very large numbers found here, they seem almost certain to represent an as yet unrecorded Nantwich maker. The most common version of the RG mark has a dotted border (various dies) and was almost always applied twice to the pipe; once to the back of the bowl facing the smoker and once on the base of the heel (Figs 7 and 16.7-9). Examples of this mark has been found from as far away as Buckley in Flintshire (Higgins 1983, Fig. 2.23) and at Tai Penamnen in Snowdonia, where four RG pipes were recovered (Davey 2016, Fig. 19), showing that the maker achieved a considerable distribution (Tai Penamnen being some 70 miles west of Nantwich). Davey attributes this mark to an unidentified Chester maker, even though only two examples are actually recorded from the city itself (Rutter and Davey 1980, 114; Higgins 2008b Fig. 5.6.1.13) and the mark has previously been noted as probably belonging to a Nantwich area maker (Higgins 1989; Higgins 2008b, 261). The RG maker clearly achieved a considerable market area and the distribution of his pipes suggests wide ranging network of trade contacts extending out from the Nantwich area.



Figure 7: The RG maker probably worked locally and most often used a mark with a dotted border, which was usually applied twice – once on the back of the bowl facing the smoker and once on the heel. Photo: Author.

A number of the RG marks also include an axe or hatchet device underneath the letters, for example Figures 16.10-11. This distinctive device also occurs with other initials. There are 31 examples where a hatchet is associated with the initials RG, seven with the initials GH (e.g., Fig. 17.30) and 99 with the initials IH (Fig. 8.3). The use of this symbol is not known from anywhere else in the country and so appears to be specifically associated with pipemakers in this region. The most likely explanation is that these relate to individuals connected with the Hatchett family, with the symbol being a play on the surname. Jeremiah Hatchett is documented as a pipemaker from a full name IERE/HATC/HETT mark found at Buckley in North Wales (Higgins 1983, Fig. 3.29) and IH marks associated with the hatchet symbol are the most common form of IH mark from Willaston. Jeremiah Hatchett has not been recorded as a pipemaker from documentary sources, but he may well have been working in the Burlton area, near Wem in Shropshire, some 25 miles to the south-west of Willaston. The reason for thinking this is that the Wem area (including Burlton and Loppington) appears to have been a significant pipemaking area during the later seventeenth and early eighteenth centuries. Pipes marked AH and IH, both sets of initials being associated with a hatchet symbol, have been found in that area and local parish registers record an Arthur Hatchett in Burlton during the 1660s and 1670s, while a Jeremiah Hatchett took an apprentice there in 1693. There is also a 'Hatchetts Farm' at Burlton, so that this unusual surname seems to be particularly associated with the area, where pipemakers are known to have worked.

Other makers from the Wem area who are probably represented at Willaston include two makers from



Figure 8: Local bowl forms, all of which have the maker's initials accompanied by an unusual hatchet motif: RG c1670-1690 (1); GH c1680-1720 (2) and IH c1680-1710 (3). Die details at twice life size. Photo: Author:

Loppington. The first of these is John Dickin, who is recorded as a pipemaker in 1702 when he was left a legacy of £10 (Shropshire Records and Research, D3651/B/37/1/4). The name is common in the area, with several different individuals represented, but this may be the John Dickin, born in 1681, who married Elizabeth Smith in August 1702 and went on to baptise at least four children with her at Loppington between 1703 and 1714. A total of 54 examples of ID marks were recovered (e.g., Figs 17.26-27), three of which are particularly interesting since they have the additional initials RW on the mark (Figs 9 and 17.27). This suggests a pipemaking partnership, perhaps with a member of the Woodall family (see below). This four-letter mark is extremely unusual and is one of only a handful of known examples from the British Isles.

The second probable Loppington maker to be represented at Willaston is Laurence Woodall or Woodwall, who is known to have been a pipemaker from full name marks (e.g., Fig. 17.25). No reference actually describing Laurence Woodall as a pipemaker has yet been found, but the Christian name Laurence was uncommon at this period and so it may well be significant that two individuals, variously named Laurence Woodall or Woodwall, are recorded in the Loppington parish registers (no occupation given). Laurence Woodall/Woodwall and wife Mary baptised the following children at Loppington: -

- 1682 Anne, baptised on 12 February 1681/2 (and buried 7 July 1695).
- 1684 William, baptised on 11 May 1684.
- 1686 Dorothy, baptised on 14 February 1685/6

(and buried 7 October 1686).

- 1687 Lawrence, baptised on 2 October 1687 (and buried 13 December 1687).
- 1689 Mary, baptised on 24 February 1688/9.
- 1691 Lawrence, baptised on 19 April 1691.
- 1693 Dorothy, baptised on 23 April 1693.
- 1695 Elizabeth, baptised on 14 April 1695 (and buried on 31 May 1695).
- 1699 John, baptised on 21 April 1699.

Lawrence's wife Mary died in 1711 and was buried on 18 May but the family clearly carried on in the area, since another couple, Laurence and Margaret Woodall (probably the son Lawrence baptised in 1691), baptised various children of their own at Loppington in the early eighteenth century: -

- 1713 Margaret, baptised on 25 October 1713.
- 1715 William, baptised on 10 July 1715.
- 1718 Lawrence, baptised on 31 August 1718.
- 1721 Peter, baptised on 29 January 1721.
- 1724 John, baptised on 1 March 1723/4.

Lawrance Woodhall (*sic*) 'of the brown heath' (now Brownheath) was buried at Loppington on 29 October 1729, but this could have been either the father or the son of this name. It seems likely that these two individuals came from a pipemaking family and that they produced the marked pipes. Lawrence senior had a wife called Mary and they had at least nine children with baptisms between 1682 and 1699. Their son (Lawrence junior) married Margaret and had at least five children, baptised between 1713 and 1724.



Figure 9: *A local bowl form of c1680-1720 with an unusual ID/RW mark, perhaps representing a partnership. The die detail is at twice life size. Photo: Author.*

These dates fit well with those of the marked pipes, which range from c1680-1730 in style, examples of which have been found from as far away as Tai Penammen in Snowdonia (Davey 2016, Figs 42-43). There are two different full name marks and five LW initial marks (with three different dies represented) in the Willaston collection.

Another possible maker from the Loppington area is represented by the four MW pipes found at Willaston, all of which were stamped using different dies. Davey (2016, 82) notes five examples of MW pipes from Tai Penammen in Snowdonia and speculates that these were made by an otherwise unknown earlier member of the Ward family from Oswestry, but this seems unlikely on four counts. First, the Charles Ward documented as a pipemaker in Oswestry was probably the individual of this name baptised at Loppington in 1660 who baptised his own children there in 1684 and 1692 before moving to Oswestry, where he is recorded between 1696 and his death in 1725 (parish register entries, with a wife Mary in both places). If so, any earlier family would be in the Loppington area, not at Oswestry. Second, a search of the seventeenth-century Oswestry area parish registers does not produce any individuals named Ward with the Christian name initial M who could have been the pipemaker (Charles's wife Mary was probably already in her 60s when he passed away and died just over three years later herself, making it unlikely that she could have been responsible for so many MW pipes). Third, MW marks are present at both Willaston and at Tai Penammen, which shows they both fall within a common distribution area for this maker. While pipes marked Charles Ward or CW and attributed to the Oswestry maker of that name have been found at Tai Penammen, none of these CW marks have been found amongst the very large assemblage from Willaston. This indicates that the Oswestry pipes made by Ward had a different distribution pattern and were not reaching as

far Willaston, which is about 32 miles to the north-west, and beyond the cluster of pipemakers working in the Wem area of north Shropshire, who were themselves already supplying the Willaston area. Conversely, MW pipes have been found at both Willaston and Tai Penammen, as well as at Buckley in North Wales (Higgins 1983, Fig. 2.27), suggesting that they originate from a maker supplying all these areas. Finally, only Oswestry was considered as a source for the MW pipes, even though there are various other pipemaking families with the surname initial W in both the Broseley and Wem areas, both of which were also supplying Tai Penammen with pipes. Given the finds of other MW marks at both Willaston and Buckley, a north Shropshire origin seems more likely, perhaps a member of the Ward, Wilkinson or Woodall families who were working in the Loppington area.

Other initials match known makers from the Wem area, for example, there are about a further 30 examples of IH marks without a hatchet symbol that could have been made by Jeremiah Hatchett, who probably worked in the Burlton area, while the 35 examples of CH marks could be Charles Higgons, recorded as a pipemaker at Wem in 1681 and the 20 examples of RV marks could have been made by Richard Vaughan, recorded as a pipemaker at Wem in 1703. Likewise, some of the WE and RR marks could belong to William Edgerley of Burlton, who took Ralph Ralphs apprentice in 1683. If the 35 examples of ID marks are from John Dickin of Loppington and the marks with a hatchet symbol were also being produced in this region, then the Burlton / Loppington / Wem area was clearly an important supply source for Nantwich. Taken together, this cluster of likely north Shropshire pipemakers provided some 16% of the Willaston pipes, which is comparable with Newcastle-under-Lyme, despite being nearly twice as far away (around 21 miles as opposed to 13; see Fig. 1).

Bowl forms

The bowl forms represented in the Willaston collection are also of interest. The earliest heel forms are small types based on London models but they exhibit a variety of local adaptations. The most common mark on these early pipes is HP (Figs 16.1- 2), parallels for which have been found in Stafford and at Keele (Oswald 1991). From around the middle of the seventeenth century the heel bowls become a little more upright with a longer and, often, more slender form, for example, Figure 16.3. The Broseley Type 2 form (Higgins 1987a) is the most common type from c1660-80 and many of the Newcastle and other presumably local products are stylistically similar (Figs 16.4-5 & 16.7- 9). Similar Shropshire influence is seen in the large heeled Broseley type 3 pipes of c1670-90 (Fig. 17.18), which were also incorporated into local designs. From about 1680 a larger bowl form with a large round heel becomes the most common design. Although this shares common elements with the mid-Shropshire pipes, the form is not common there and most of these are thought to belong to local makers (e.g., Figs 17.26-30). Alongside these forms the distinctive tailed Broseley Type 5 form is found (Fig. 17.25), both as actual imports from Shropshire and as local copies of that style. The actual Broseley area

products are usually distinguished by better quality forms and finish and the use of high-quality lettering for the full name marks (e.g., Fig. 10). This tailed-heel form is not, however, as common as might be expected given the large numbers that were exported to the south and east of Broseley (Higgins 1987a) and suggests that the share of the market held by makers from this area was dropping by the end of the seventeenth century.



Figure 10: A Broseley area pipe stamp of c1680-1730 used by Andrew Bradley, showing the distinctive tailed heel and high-quality lettering used at this centre.
Photo: Author.

This decline may well have been caused by a sudden influx of Chester products from the late seventeenth century onwards. Up until c1690 there are only a very few Chester pipes represented in the collection. After that date the elegant, thinner walled heel forms characteristic of that centre appear. These would have often had decorated stems and a wide range of bowl forms is present. They generally have rather flared heels and examples with large, small and keyhole-shaped bases are all represented. In all 66 examples dating from c1690-1720 were identified, as well as a further seven examples of eighteenth-century Chester pipes with smaller, straight sided heels. It is notable how the number of post 1720 pipes drops significantly in the assemblage as a whole.

Spur pipes are much rarer than the heel forms but likewise occur for all periods. There are a very few examples from the first half of the seventeenth century. Shropshire

makers did not adopt spur forms until about 1690 so all examples before this date must have come from other areas. There are a few mid seventeenth-century South Lancashire style spur pipes, such as the GA and IB pipes mentioned above. A few unmarked South Lancashire style pipes of late seventeenth-century to early eighteenth-century date are also present. There are also a number of Staffordshire examples present, for example some of the pipes made by the Riggs family are spur types. At the end of the seventeenth century Chester also introduced tall spur forms alongside the heel pipes and 41 of these were identified from the period c1690-1720 (e.g., Fig. 3). It is interesting that none of the late seventeenth-century Broseley spur forms have been found suggesting, once again, that Chester had captured a significant share of the market from the mid-Shropshire area makers at this period. As with the heel forms, there are very few eighteenth-century spur pipes present, showing a change in the deposition of pipes across these fields. There is one Broseley type spur pipe, a further two possible examples from that centre, and one of uncertain origin. A total of only ten fragments of nineteenth-century date were identified and two of these fit together. This underlines the striking absence of material after about 1720.

Summary and conclusions

This group provides an excellent sample of the pipes circulating in the Nantwich/Willaston area prior to c1720. The earliest pipes are based on London styles (even though they may well have been produced in the region) and are predominantly heel forms. Heel forms remain dominant until the end of the seventeenth century, generally being marked on the base of the heel and sometimes on the back of the bowl facing the smoker as well. During this period about 85% of all the pipes are stamped, typically using circular marks with relief lettering, which allows the supply sources for the Nantwich area to be examined with great precision (Fig. 11). A few pipes were imported from Rainford and Chester but the majority either came from Staffordshire or Shropshire or were locally produced. Pipes from the mid-Shropshire industry centred on the Broseley / Much Wenlock area were some of the most numerous imports, despite coming from the furthest away. One important observation is that pipes were not purchased randomly from the mid-Shropshire makers, but that particular makers from this area traded to Willaston, while others traded elsewhere, for example, to Birmingham.

North Shropshire finds from the Wem area are also very well represented and this area captured an equal share of the market for 'imported' pipes with Newcastle-under-Lyme, even though that centre was only half the distance away. Only a comparatively small part of the market, perhaps around 25%, was met by pipemakers thought to have been working in or near Nantwich itself. From the mid seventeenth century onwards, the bowl forms show stylistic elements drawn from the Shropshire industry although local variations were also able to develop. Bowls with a large round flared heel, but no tail, are particularly characteristic of the late seventeenth-century products,

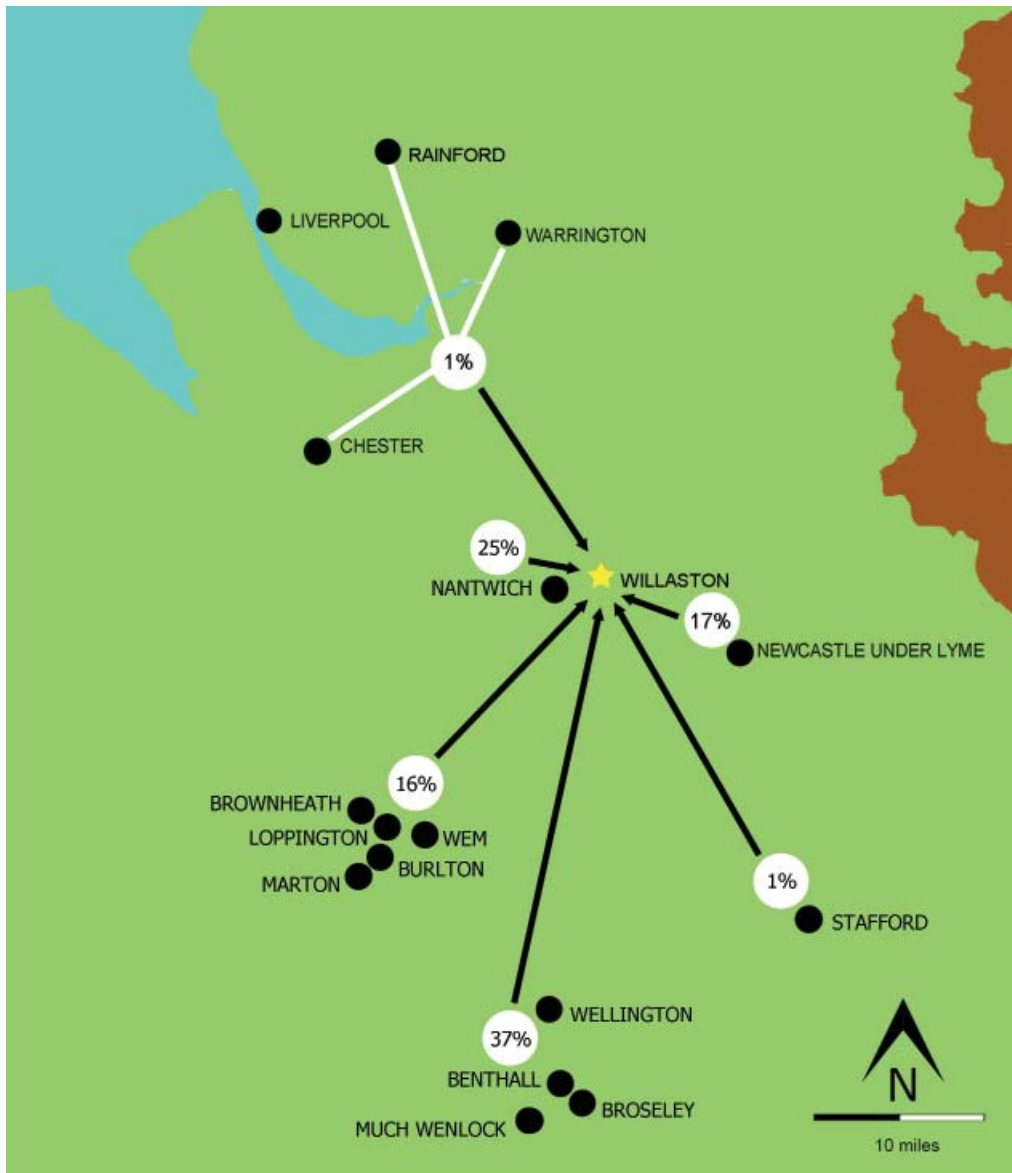


Figure 11: Map showing the percentages of pipes identified as having come from surrounding production centres.

as is the use of the unusual hatchet motif on the marks. From the late seventeenth century, a change in the trade pattern appears with declining numbers of imports from Shropshire and Staffordshire and an influx of the new Chester forms, which were not usually marked by the individual makers. There is also a move towards square or rectangular marks, rather than the circular ones that had been favoured previously.

This study has demonstrated that the seventeenth-century pipes found at Willaston were drawn from up to 40 miles away in any direction, but that the volume of trade in any direction varied from place to place and changed over time. Even when one centre was dominant, such as the Broseley area industry of mid-Shropshire, not all manufacturers from there traded equally in any given direction. This shows that the pipe trade was very much based on direct contact with the individual manufacturers, rather than operating

corporately. It can also be seen that different styles of pipe (as witnessed by the distinctive Broseley bowl forms and mark types) were able to hold a place in (and form a part of) the Willaston area market, despite more locally available products being available (for example, the RG pipes that were almost certainly made in Nantwich). In the other direction, RG pipes have been found from as far as 70 miles away, showing that there were trade contacts extending out from the Willaston area deep into North Wales. These overlapping patterns as evidenced by the pipes show that traders coming to the local markets in Nantwich would have regularly carried goods over a 40 to 70-mile radius. The distribution patterns of the various marks not only reveal the routes that this trade took, but also the fact that up to 90 pipemakers across this broad region were able to support themselves by taking part in it. Far from operating in isolation for local needs, it can now be seen that the pipemakers in rural villages across

Shropshire were able to tap into broader trade networks, such as that centred on the market town of Nantwich.

The Robinson collection still has a lot of potential for further work. Records of the marks previously deposited with the Grosvenor Museum, Chester, and Nantwich Museum could be amalgamated with the full collection held at the National Pipe Archive to generate a database of the total numbers of marks originally collected. A more detailed analysis of these could then be undertaken to identify all the different die types represented and allocate them specific die numbers for the national catalogue, since only around half the marks are currently fully indexed and drawn. Broader regional studies could also be carried out to explore the web of trade networks that was operating across this region in more detail. All the pipes at this period are likely to have been carried by pack horse or on foot by hawkers and reflect regular individual trips from places as far as 40 miles away to bring pipes to Willaston. Conversely, Nantwich products have been found as far as 70 miles away in north-west Wales. The movement of pipes into Wales is currently poorly understood and a comprehensive survey of that area is long overdue, particularly since it is likely to reveal some of furthest trading links that can be traced from the Willaston area. This movement of goods across the countryside would also have provided a conduit for news and other information, while the remains of the pipes themselves act as markers in lieu of the many other classes of goods that would also have been carried, but which do not survive in the archaeological record.

Appendix 1: List of makers' marks

The various marks occurring at Willaston marks have been listed in this Appendix and, so far as possible, attributed to a particular production centre or maker. The marks have been listed in alphabetical order by surname initial and

then Christian name initial, and the general date range for the associated bowl forms given. Each group of marks has then been broadly classified by shape (C = circular; Cr = crescent shaped; H = heart shaped; HS = heart/shield shaped hybrid; Sh = shield shaped; Sq = square or rectangular), followed by the total number of marks with the given name or initials. Note that some sets of initials may have been shared by more than one maker so that more than one source or maker may be represented. For this reason, a preliminary assessment of the number of individual die types represented is then given ('Types'). Further detailed study is required to define exactly how many dies are represented in each group, but this number gives an indication of the approximate number.

A start has also been made on the detailed indexing the marks using the die numbers from the national catalogue of pipe stamps that the author is compiling, a copy of which is held in the National Pipe Archive at the University of Liverpool. A 'die number' is the unique identifier allocated to a specific stamp used for marking pipes and is only allocated after a type specimen had been described and drawn. Other examples impressed using the same die can then be listed by simply referring to this die number. Where specific die types have been identified for any given name or set of initials, the die number is given in a separate column followed by the number of examples in brackets. All the illustrated die types are shown in the same alphabetical order at the end of this appendix (Figs 12-15).

The possible origin of each mark group is then given before any general comments. The term 'local' styles refer to pipes that cannot be attributed to a particular place or maker, but which exhibit characteristics indicating they are likely to have been made within 20 or 30 miles of Willaston, rather than having been imported from further afield.

Mark	Date	C	Cr	H	HS	Sh	Sq	Tot	Types	Dies	Possible Origin	Comments
GA	1640-1680		5					5	1	1982 (5)	Warrington	Rainford style crescent-shaped bowl stamps, all of which were made using the same die (distinguished by a small 'spike' in the border, third left from centre).
ANDR BRAD LEY	1680-1730						1	1	3	1294 (1)	Broseley area	Broseley Type 5 tailed heel with mark of Andrew Bradley.
CB	1650-1690	5						5	1	993 (3); 995 (2)	Stafford?	Two different die types represented, one bordered one without. Occurs on either heel or bowl (sometimes both). Several parallels as well as other CB mark types from Stafford, where this maker may well have worked.
EB	1640-1670	1						1	1		Local	Quite a simple bordered mark on a pipe with a soft, slightly pinkish fabric.

Mark	Date	C	Cr	H	HS	Sh	Sq	Tot	Types	Dies	Possible Origin	Comments
HB	1660-1690	1		21	42	2	1	67	16	141 (2); 144 (1); 145 (3); 147 (3); 148 (8); 149 (2); 157 (3); 158 (2); 161 (3); 182 (2); 190 (1); 191 (1); 203 (7); 206 (7);	Benthall	All but one are some of the numerous different die types used by Henry Bradley of Benthall (near Broseley), Shropshire. His kiln site was probably at 11 Lodge Lane, Benthall, where a kiln tip, including the larger part of a muffle structure, was excavated by the author in 1984 (Higgins 1987a, 190-248). The kiln waste produced nearly 100 different die types that were being used by Bradley, and others are known from finds made elsewhere. The very large number of different dies in use suggests that Bradley operated one of the largest workshops in the Broseley area at this period. The large number of examples from Willaston supports this suggestion and shows that Bradley was marketing his pipes over a considerable distance. The one exception is a circular mark with a double border containing ligatured initials, which is likely to be a Rainford area product.
Hen Bradley	1660-1690			1				1	1	137 (1)	Benthall	A Henry Bradley mark from Benthall (see HB above).
IB	1650-1730	25	1					26	6	239 (1)	Local / Newcastle-under-Lyme / South Lancs	At least half a dozen die types representing a variety of sources/die types/styles. One is a Rainford area spur type with bowl stamp and another heel stamp with a double border is probably also Rainford. Four are local copies of Broseley style tailed heels (two different die types) but the majority are local bowl styles similar to those illustrated by Barker (1985, Figs 66-69), two of which are stamped on both bowl and heel. These can be attributed to Joseph Ball of Newcastle-under-Lyme, who is recorded as a pipemaker from at least 1674 until his death in 1681 (Barker 1985, 247).
MICH BROWN	1670-1710						1	1	1	2018 (1)	Much Wenlock	Probably made by the Michael Brown who appears in the Much Wenlock registers between 1681 and 1706.
RB	1660-1710	29					1	30	8	252 (1); 978 (1); 984 (6); 985 (2)	Newcastle-under-Lyme	About eight different dies, many of which applied to both heel and bowl, some with gauntlet motif. Some bowl forms copy Broseley styles. Probably all by Randle Baddeley Sr of Newcastle-under-Lyme, who married in 1686 and died in 1720 (Barker 1985, 246).
TB	1660-1690	56						56	11	989 (17); 991 (18); 1287 (8)	Newcastle-under-Lyme	About eleven different dies, a few of which applied to both heel and bowl. Sometimes the mark is inverted on the heel. Probably all Thomas Baddeley Sr of Newcastle-under-Lyme, who married in 1667 and died in 1690 (Barker 1985, 246).
TC	1660-1690	3						3	1	1264 (3)	Broseley area?	Broseley Type 2 bowls with a simple mark, the C being much smaller than the T.

Mark	Date	C	Cr	H	HS	Sh	Sq	Tot	Types	Dies	Possible Origin	Comments
WC	1650-1690	4						4	1	261 (4)	Newcastle-under-Lyme	Small marks stamped on bowl. Probably William Cottrell of Newcastle, married 1655; son Wm bap 1675; dead by 1721 (Barker 1985, 247-8). All the same mark (Higgins Die 261), another example of which has been recorded from Sandbach in Cheshire (Higgins 1987b, Fig. 2.4).
ID	1670-1710	29					10	39	6		Loppington	About six different dies. Probably all John Dickin of Loppington (a pipemaker of this name recorded in 1702 and the name common locally).
ID / RW	1670-1710	3						3	1		Loppington?	Very unusual four letter mark - possibly a partnership with John Dickin of Loppington (fl. 1702). RW represents an otherwise unknown maker.
MD	1660-1710	106		5				111	17	265 (12); 267 (4); 268 (55); 269 (3); 936 (2); 1084 (8)	Broseley	At least 15 different die types on a mix of forms (but mostly bulbous Broseley Type 3). Probably Morris Deacon of Broseley.
MARS DECON	1670-1690	1						1	1		Broseley	Morris Deacon of Broseley on a hybrid Broseley Type 3/11 form.
MORRIS DeCON	1670-1710						6	6	2	71 (5)	Broseley	Morris Deacon of Broseley on variants of a Broseley Type 3b form.
SAM DEKIN	1670-1700	2						2	1		Much Wenlock	Two examples of an early full name mark on Broseley Type 3 bowls, which can be attributed to one of the Samuel Deacons of Much Wenlock (it is likely that at least three makers of this name worked there during the later seventeenth and early eighteenth centuries).
EDWARD EVANS	1650-1690	1						1	1	612 (1)	Chester	Edward Evans is recorded as a Chester pipemaker from 1646-1690.
TE	1650-1680	1						1	1		Much Wenlock?	Broseley Type 2v bowl form. Perhaps Thomas Edwards, alias Harper, of Much Wenlock who died in 1668.
WE	1650-1690	18					18	36	9	564 (9); 1113 (1); 1164 (13)	Wellington	Probably nine die types (at least four circular and four square) on a mix of Broseley Type 2 and 3 forms. Most are probably William Evans of Wellington, but William Edgerley of Burlton is also a possibility.

Mark	Date	C	Cr	H	HS	Sh	Sq	Tot	Types	Dies	Possible Origin	Comments
TF	1660-1680	11						11	3	1297 (3); 1298 (7)	Newcastle-under-Lyme	Local versions of a Broseley Type 2 form. One example has retrograde lettering; the other ten examples have very similar dies to one another and nine occur as bowl marks only. Probably Thomas Fox of Newcastle-under-Lyme, recorded from 1657 until his death in 1691 (Barker 1985, 248).
FG	1670-1690	5						5	1		Local	A local copy of a Broseley Type 3v form. The mark has two fleur-de-lis between the initials; perhaps more than one die.
IG	1620-1650	2						2	1	298 (2)	Stafford?	A local heel form, one example of which has milled stem decoration. Several examples of this mark (and other similar ones) are known from Stafford, where this maker may well have worked, with one example from as far south as Coventry, suggesting a wide distribution for this early maker.
RG	1650-1690	304						304	11	309 (226); 1992 (2)	Nantwich?	By far the most common mark with at least 11 different die types. The most common bowls are local copies of Broseley Type 2, almost always stamped on heel and bowl using a mark with a beaded border. Slightly later Type 3 types of c1670-90 often have a hatchet symbol with the initials. Unknown maker but the very large numbers suggest he worked locally, perhaps in Nantwich itself.
CH	1670-1690	35						35	4	317 (3)	Wem?	Four die types that occur on large, round-heeled forms, generally burnished and similar to the ID and WE types. Possibly Charles Higgons of Wem.
GH	1640-1720	24		29				53	5	316 (1); 320 (28); 1392 (5)	Broseley and Local	A range of different bowl forms and styles of mark suggesting a number of different origins/makers. Some early forms of c1640-60 (Broseley Type 1B) have a round mark with dotted border (5), and the same style of mark also occurs on Broseley Type 3 bowls of c1670-90 (13). The most numerous are heart-shaped marks (29 examples; at least two dies) on Broseley Type 2 bowls of c1660-80. Finally, at least two round die types were used on local bowl forms of c1680-1720 with a hatchet symbol below the letters. The Broseley styles (46 examples) are probably George Hartshorne or George Hughes; the local maker (7 examples) is unidentified (? a member of the Hatchet family).

Mark	Date	C	Cr	H	HS	Sh	Sq	Tot	Types	Dies	Possible Origin	Comments
IH	1660-1720	134		1				135	15	323 (1); 327 (1); 330 (34); 332 (1); 573 (19); 986 (8)	Broseley area and Burlton area	One heart-shaped mark on a Broseley Type 2 of c1660-80 and then at least 14 different circular dies on a variety of bowl forms ranging from c1670-1720. Around 35 of these are probably Broseley area products, mainly on Type 3 bowls, that could have been made by various makers (James or John Hartshorne of Broseley; John or Joseph Hughes of Much Wenlock). The majority, however (around 100), are local forms of c1670-1720 with a hatchet motif underneath (at least 7 dies), which are presumed to be products of Jeremiah Hatchett from the Burlton area. Most are round-heel types but a few occur on Broseley Type 5 copies. IH marks with the hatchet symbol are known locally from Beeston Castle, Cheshire, and Harecastle Farm, Staffordshire, as well as an outlier from Cutler Street in London.
IAMS HART	1670-1690	3						3	1	1326 (3)	Broseley	Broseley Type 3 bowls with an abbreviated mark attributed to one of the many James Hartshornes' in the Broseley area.
IOHN HART	1670-1690	12						12	2	982 (3); 1048 (9)	Broseley	Broseley Type 3 bowls with an abbreviated mark attributed to one of the many John Hartshornes' in the Broseley area.
IOHN HARTS HORNE	1680-1720						1	1	1	572 (1)	Broseley	Broseley Type 5 bowls with a full name mark for one of the many John Hartshornes' in the Broseley area.
IOHN HVG HES	1680-1720						1	1	1	1039 (1)	Broseley	Broseley Type 5 bowls with a full name mark for John Hughes of Broseley (made a burgess of Much Wenlock in 1715).
SH	1680-1710	3						3	1		Local	A local heel form; fleur-de-lys above and below the initials. Perhaps Samuel Higginson of Marton (recorded in 1685).
SAM HVGH	1670-1690						1	1	1	1117 (1)	Much Wenlock	A variant of a Broseley Type 1c bowl. Probably made by Samuel Hughes of Much Wenlock who was working c1690-1729(<i>ob</i>).
THOM HVG HES	1680-1710						1	1	1		Much Wenlock	A Broseley Type 5 bowl, probably made by Thomas Hughes of Broseley who was working c1682-1735(<i>ob</i>).
THO HVG HES	1680-1710						1	1	1	2130 (1)	Much Wenlock	A Broseley Type 5 bowl, probably made by Thomas Hughes of Broseley who was working c1682-1735(<i>ob</i>).
WH	1660-1680	5						5	1	352 (5)	Broseley area	Broseley Type 2 bowls, attributed to either William Harper or William Hughes.
WILL HARPER	1680-1730						1	1	1	353 (1)	Broseley area	Broseley Type 5 bowl made by William Harper, who probably worked in the Broseley area.
EI	1680-1710	3						3	1		Local	Local heel forms marked EI (unidentified maker).
II	1650-1700	49						49	6	1148 (9)	Broseley area	A range of different bowl forms and at least six different die types suggesting more than one origin/maker. The bowl forms are Broseley Types 2, 3 and 5, some of which appear to be local copies. Most of the bowls date from c1670-1700 and could be products of either John James or John Jones of Broseley, but it is possible that a few could represent unidentified local makers.

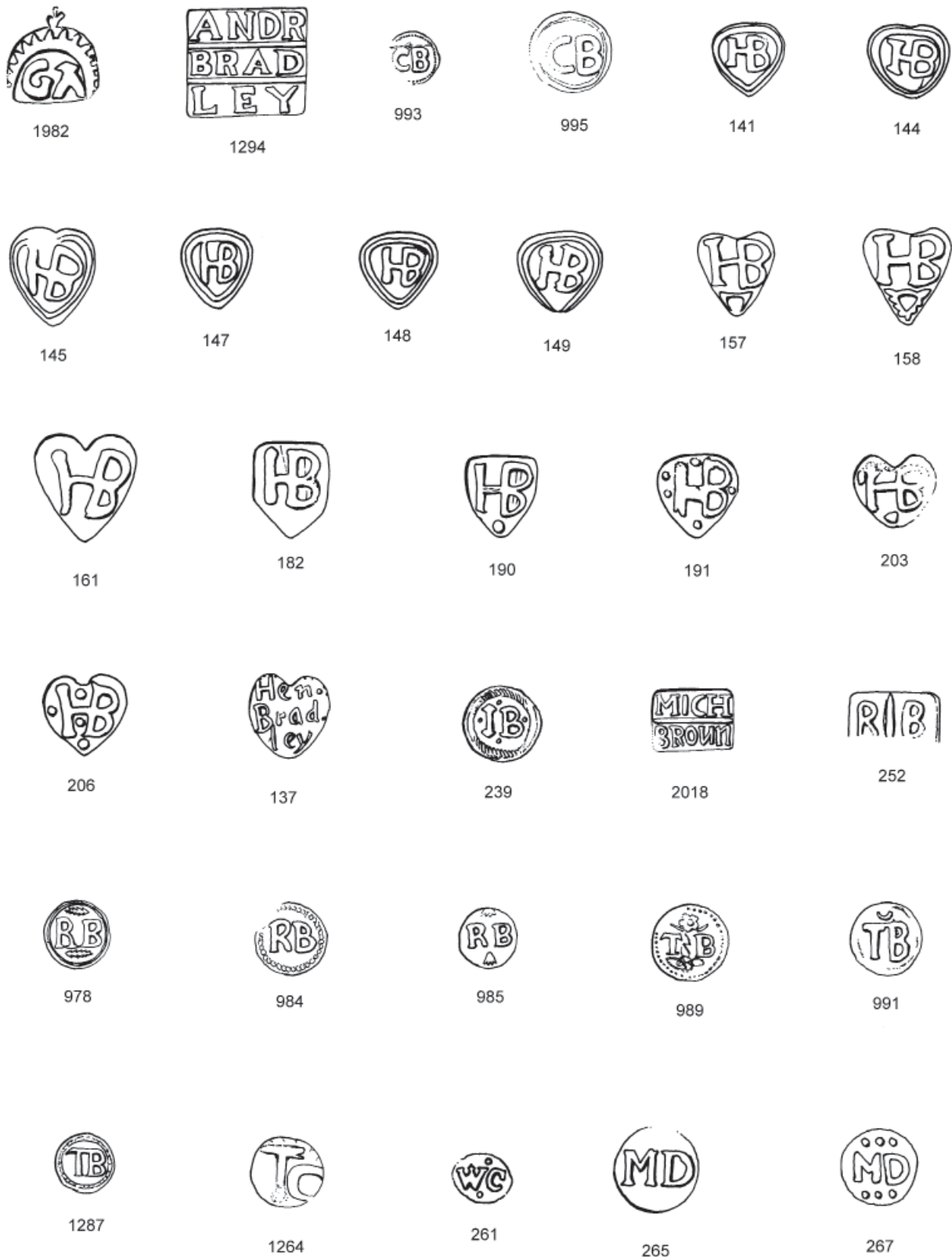
Mark	Date	C	Cr	H	HS	Sh	Sq	Tot	Types	Dies	Possible Origin	Comments
IOHN IAMES	1670-1690	1						1	1		Broseley	Broseley Type 3v bowl made by John James. This early full-name mark is very unusual since it has incuse lettering, which is probably unique amongst early Broseley area products. It is also very unusual in that the lettering reads backwards, but the characters appear the right way round. Relief examples of this mark, reading the correct way round but with some of the letters reversed, are also known (<i>cf</i> Atkinson notebook in the National Pipe Archive: LIVNP 2012.06.222 p141). This suggests that an original die and a clay copy made directly from it were both being used to mark pipes.
IOHN IAMES	1680-1720						1	1	1		Broseley	Broseley Type 5 bowl made by John James.
MI	1670-1690	2						2	1		Broseley area?	Broseley Type 3 bowls with the initials of an unidentified maker, possibly Mark James (see below).
MARC IAMS	1670-1690	3						3	1		Broseley area?	Broseley Type 3 bowls with the abbreviated name of an unidentified maker, presumably Mark James. This name cannot be found in the online indexes of Broseley area parish registers, but these are not always complete. Probably the same maker as the MI marks (see above).
Tho Iones	1670-1690	2						2	1	1051 (2)	Broseley area?	Broseley Type 3b bowls made by Thomas Jones, who is not yet identified from documentary sources but probably worked in the Broseley area.
Toms? Ione	1670-1690	1						1	1		Broseley area?	Broseley Type 3b bowl made by Thomas Jones, who is not yet identified from documentary sources but probably worked in the Broseley area.
LeG	1660-1680			1			2	3	2	901 (2)	Broseley	Broseley Type 2 bowls; made by a member of the Legg family.
AL	1650-1670	2						2	2	584 (1); 1027 (1)	Chester	Two pipes made by Alexander Lanckton of Chester, who was probably working c1650-70 (probably born 1632 and died 1670: IGI).
BeN LeGG	1680-1720						1	1	1	1313 (1)	Broseley	A Broseley Type 5 bowl, made by Benjamin Legg, who probably worked in Broseley, where there were several individuals with this name.
IL	1670-1700	1		1			2	4	4		Local?	Four different die types that occur on large, round-heeled forms that look as though they are local copies of Broseley Type 3 styles, rather than being actual imports from Shropshire.
IOHN LeGG	1670-1720						3	3	1	1 (3)	Broseley	Broseley Type 5 bowls made by John Legg (several makers of this name in Broseley).
RL	1650-1680	53					1	54	7	386 (19); 391 (8)	Broseley / Much Wenlock	At least 50 and probably 53 circular RL marks, with at least six different dies represented, ranging from c1650-80. Also one square mark of c1670-90 on a Broseley Type 5d bowl. These marks are usually attributed to one of the Richard Legg's of Broseley, but some/all could be Richard Lammas or Lomas of Much Wenlock.

Mark	Date	C	Cr	H	HS	Sh	Sq	Tot	Types	Dies	Possible Origin	Comments
RoB Lam	1660-1690	2						2	1	394 (2)	Much Wenlock	Broseley Type 2v bowls with an abbreviated mark for Robert Lammas/Lummas of Much Wenlock who married in 1650 and baptised children until at least 1667. See also Robert Lomas.
RICH LeG	1660-1690	2					1	3	2	1080 (1)	Broseley	Two circular marks on Broseley Type 3 bowls and a square mark on a Broseley Type 5 bowl. All attributed to one of the several Richard Legg's of Broseley, the first firmly documented from 1713-35, but earlier ones likely to have worked there.
RoBert LoMas	1650-1680			2				2	1		Much Wenlock	Probably Broseley Type 14b bowls with a mixed case mark for Robert Lammas/Lummas of Much Wenlock who married in 1650 and baptised children until at least 1667. See also RoB/Lam marks.
SaM LeGG	1670-1700						2	2	1		Broseley	Type 5b bowls made by Samuel Legg, who is presumed to have been a Broseley maker (several later individuals of this name worked there).
TL	1660-1690	2						2	1		Local?	Two examples on the same mould type, which appears to be a local form.
THO MAS LeGG	1680-1730						2	2	1	1252 (2)	Broseley	Two examples on Broseley Type 5 forms. Several individuals of this name recorded in the Broseley area.
IM	1650-1680	2						2	1		Local?	Two examples on local variants of a Broseley Type 2 form. Maker unknown.
RM	1680-1710	3						3	1	400 (3)	Much Wenlock or local?	Looks like a local heel form with a round flared heel, perhaps Randle Morris (<i>q.v.</i>), who may have had connections with both Wem and Much Wenlock. Circular mark with a fleur-de-lys above and below the initials (similar to TN marks, <i>q.v.</i>)
RANDLE MORRIS	1670-1700						1	1	1	401 (1)	Much Wenlock?	Perhaps the Randle Morris (<i>sic</i>) baptised in Wem in 1638, who may have been the same person who baptised his own son Randle at Much Wenlock in 1673.
TN	1680-1710	36						36	2		Nantwich	Local form with a large flared round heel that can be attributed to the pipemaker Thomas Newans, who baptised a son at Nantwich in 1705. At least three different die types, all circular and with a fleur-de-lys above and below the initials (similar to RM marks, <i>q.v.</i>).
DANL OVERTON	1670-1700						1	1	1	73 (1)	Much Wenlock	Broseley Type 3v bowl with milled stem decoration. The online parish registers for Shropshire only list this name at Much Wenlock, where at least two individuals (presumably father and son) are recorded between 1684 and 1724.
HP	1620-1660	21						21	6	413 (8)	Local	A distinctive group of early bowls with at least five or six different circular die types represented, some of which have a dotted border. The mark is sometimes applied to both the base of the heel and the back of the bowl (at least 7 examples). The fabric is typically hard fired and often with a pinkish or yellowish tint, indicating local production. Examples have been found in Stafford, suggesting the maker worked in the Staffordshire/Cheshire border area. See also the heart-shaped HP marks.

Mark	Date	C	Cr	H	HS	Sh	Sq	Tot	Types	Dies	Possible Origin	Comments
HP	1660-1690			2				2	1		Broseley area?	Two Broseley Type 2v pipes of c1660-90 with a distinctive heart-shaped mark. These bowls are of a very different style and slightly later date to the circular HP marks (<i>q.v.</i>), and so are thought to represent a different maker.
OLIVER PRICE	1680-1720						3	3	3	924 (1)	Broseley	Broseley Type 5e bowls. Made by Oliver Price of Broseley, who married in 1684 and was baptising children there until at least 1694.
ROBART POOL	1680-1730						3	3	1	429 (1)	Local	Broseley Type 5 bowls with a typical Broseley style mark. This maker is well known from his marked pipes, which are most commonly found in the north Shropshire / south Cheshire / north-west Staffordshire area, where he is likely to have worked.
CR	1640-1680	111						111	9	433 (1); 434 (38); 971 (3); 973 (2); 974 (51); 975 (9); 1156 (2)	Newcastle-under-Lyme	These are predominantly heel forms (only six are definitely spur types) and some examples are stamped on both the bowl and heel. There are at least nine different die types represented. Made by either Charles Riggs Sr (<i>f</i> 1647/8 - 1675/6 (<i>ob</i>)) or Jr (<i>f</i> 1673-1681 (<i>ob</i>)).
IR	1670-1700	3						3	2	1162 (2)	Local / Much Wenlock?	Two different die types, one with stars above and below the letters and the other with fleur-de-lys above and below. Occur on round heel types with a large flared heel, that look local in style, but could possibly be products from John Roberts of Much Wenlock.
IOHN ROBERTS	1680-1720						1	1	1	598 (1)	Much Wenlock	Broseley type 5 bowl made by John Roberts (1652-1736), who worked as a pipemaker in Much Wenlock from c1675-1730. His kiln was excavated in 2006/7 adjacent to the modern 16 High Street.
RR	1670-1700	4						4	2	1331 (2); 1612 (2)	Local?	Two different die types, one of which has the initials flanking a pair of crossed arrows, on local looking heel forms of c1670-1700. Possible makers include Richard Roberts of Much Wenlock (working c1675-1716) or, perhaps more likely, Richard Ralphs of Burlton (<i>f</i> 1683).
TR	1670-1690	2						2	1	972 (2)	Broseley area	Two Broseley Type 3 bowls. Possibly Thomas Roberts or Thomas Roden of Broseley.
WR	1670-1700	3						3	1	1617 (3)	Wem	Three examples, all of the same die, occurring on a local heel form. The only known maker in the area with these initials is William Russell, who married in Wem and baptised a child there in 1691 and 1692 respectively, but then is recorded in Wrexham from at least 1695-1713. He was dead by 1721.
ES	1660-1690	1						1	1	446 (1)	Broseley area?	Broseley Type 2v bowl. Unknown maker.
GS	1670-1690	1						1	1	967 (1)	Much Wenlock	Broseley Type 3v bowl. Probably made by George Smith in Much Wenlock, who married in 1679 and died in 1720.

Mark	Date	C	Cr	H	HS	Sh	Sq	Tot	Types	Dies	Possible Origin	Comments
GeORG SMITH	1670-1710						3	3	2	447 (1); 1619 (2)	Much Wenlock	Two Broseley Type 3v bowls and one Type 5, with different die types on each form. Probably made by George Smith in Much Wenlock, who married in 1679 and died in 1720.
IS	1660-1690	2					2	4	2	448 (1); 1623 (2)	Broseley area?	Round marks occur on Broseley Type 2 bowls of c1660-80 and square ones on Type 3 bowls of c1670-1690. Parallels occur from the Broseley area, but another possibility is John Stock... (q.v.).
John Stock...	1660-1690	2						2	2	1621 (1); 1622 (1)	Broseley area?	Two different dies, one on a Broseley Type 2 bowls of c1660-80 and one on a Type 3 bowl of c1670-1690. Neither mark is very clear, and there seem to be two further letters at the end of the surname, perhaps Stocker or Stocken. This is an early full name mark in a Broseley/Much Wenlock area style representing a previously unrecorded mark and maker. Various individuals with the surname Stocker, Stocken, Stockin, etc., are found across the county at this period. From the style of the pipe and mark this could be a Broseley area maker (e.g., the John Stockins Sr who was buried at Much Wenlock on 25 March 1701/2), although the name also occurs in the north of the county, nearer to Willaston (a John Stocken was married at Whitchurch on 19 April 1664 and a John and Hannah Stocken baptised a son John at Wem on 10 March 1710). See also the IS marks of the same period.
RS	1670-1730	3						3	2	70 (2); 1624 (1)	Much Wenlock	One Broseley Type 3 example of c1670-1690 and two on Type 5 bowls of c1680-1730, perhaps representing two different makers. There are three known Much Wenlock makers with these initials: Richard Sir (c1660-1730); Richard Shaw (c1680-1734) and Richard Smith (c1700-60). A Richard Sir pipe is also present in this collection.
RICHARD SVR	1680-1730						1	1	1	1625 (1)	Much Wenlock	A Broseley Type 5 bowl. There are numerous references to the Sir family in Much Wenlock, where there were several family members named Richard, including one who was in the guardianship of the pipemaker Griffith Powell in 1659 and appraised his Will in 1673, when he was using the alias Powell.
TS	1670-1700	2						2	1	1626 (2)	Wem?	Mark occurs on a round flared heel. Probably Thomas Smith of Wem, who was probably pipemaking around 1680-1720.
WS	1650-1680	1						1	1		Much Wenlock	Bowl mark with quite crude lettering. Several similar die types known from the Broseley area, which can be attributed to William Savage (I) of Much Wenlock, who was probably working from c1655 until his death in 1686.
EDW TAYLOR	1690-1730						1	1	1	85 (1)	Much Wenlock	Broseley Type 5 bowl that can be attributed to the Edward Taylor who worked at Much Wenlock (a maker of the same name was working at Broseley at a slightly later date).

Mark	Date	C	Cr	H	HS	Sh	Sq	Tot	Types	Dies	Possible Origin	Comments
RV	1670-1710	19					1	20	4	1627 (1); 1628 (1); 1629 (1); 1630 (17)	Wem?	Three different round dies are represented, with two types occurring on a local style of bowl with a large round flared heel, the third being on a Broseley Type 3 form. There is one example of a square mark on a Broseley Type 5e form. A pipemaker called Richard Vaughan probably worked in Much Wenlock from c1675-1718, but RV marks are rare in that area and a more likely candidate is another pipemaker called Richard Vaughan, who is recorded at Wem in 1703. It seems likely that this maker would have been working in Wem from around 1690 onwards.
IW	1660-1710	2					1	3	2	478 (2); 1631 (1)	unidentified	Two identical round examples on Broseley Type 2a bowls and one square example (inverted) on a Type 3/5 hybrid of c1680-1710. This second type has large rather crudely cut initials. Unidentified maker(s).
LW	1670-1710	4					1	5	3	1635 (2); 1636 (2); 1637 (1)	Loppington	Two different types of round heel mark and a square mark, all of which occur on local bowl forms with a large round heel. These were probably made by one of the Laurence Woodalls', who worked at Brownheath, about a mile west of Loppington.
LAWR WOOD ALL	1680-1710						1	1	1	1633 (1)	Loppington	A local round heel form with a full name Broseley style mark, probably for one of the two Laurence Woodalls' (father and son) who seem to have worked at Brownheath, about a mile west of Loppington from c1680-1730.
LAW WOOD HALL	1680-1730						1	1	1	1634 (1)	Loppington	A Broseley Type 5a bowl form with a full name Broseley style mark, probably for one of the two Laurence Woodalls' (father and son) who seem to have worked at Brownheath, about a mile west of Loppington from c1680-1730.
MW	1680-1710	4						4	4	1632 (1)	Wem area?	Local style bowls with large round heels and four different MW dies used to mark them. One version has fleur-de-lys above and below, which seems to have been a motif particularly used in the Wem area. Maker unknown.
RW	1670-1710											See ID / RW mark above.
WILL WILK ISEN	1670-1700						1	1	1	26 (1)	Much Wenlock	A Broseley Type 5b bowl with a William Wilkinson mark. There were two makers of this name (father and son) working at Much Wenlock from c1690-1750.
WILL WILK SEN	1680-1720						1	1	1		Much Wenlock	A Broseley Type 5 bowl with a William Wilkinson mark. There were two makers of this name (father and son) working at Much Wenlock from c1690-1750.
symbol marks								45	13			41 stamped symbol marks (representing at least 13 different designs) and four milled heels.
illegible								123				Stamped marks that are too poorly impressed or eroded to be identifiable.
TOTAL		1172	6	63	42	2	82	1535	255			

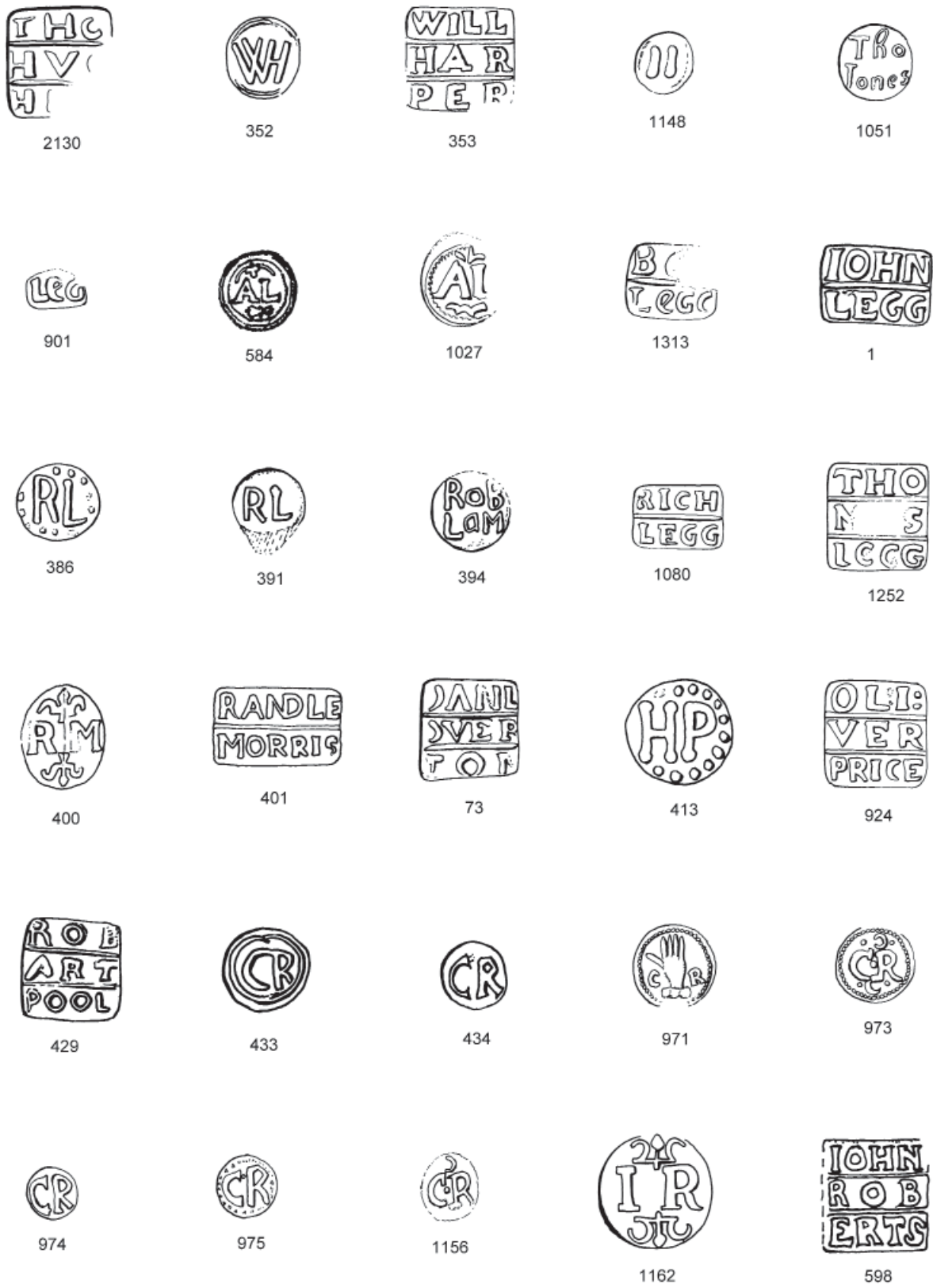


0 5cm

Figure 12: Marks found at Willaston with their National Clay Tobacco Pipe Stamp Catalogue die numbers (GA-MD).
Drawing: Author.



Figure 13: Marks found at Willaston with their National Clay Tobacco Pipe Stamp Catalogue die numbers (MD-SH).
Drawing: Author.



0 5cm

Figure 14: Marks found at Willaston with their National Clay Tobacco Pipe Stamp Catalogue die numbers (TH-IR).
Drawing: Author.



Figure 15: Marks found at Willaston with their National Clay Tobacco Pipe Stamp Catalogue die numbers (RR-WW).
Drawing: Author.

Appendix 2: Catalogue of Drawings

A sample of seventeenth to early eighteenth-century pipes from this collection has been drawn by the author to give an indication of the range of bowl forms and marks that are represented. These are shown in Figures 16-18 and are catalogued below. Each entry starts with the unique reference number in the Robinson Collection for the illustrated example. Details of the makers represented and where the pipes are likely to have been made can be found in Appendix 1.

Figure 16

1. 1159, c1610-50, stamped HP on both the bowl and the heel. Well-made pipe with a good form, fine burnish and hard, fine, yellowish fabric. Stem bore 7/64".
2. 1167, c1640-60, stamped HP, very bulbous form, slightly uneven shape but well finished, not burnished, half milled, stem bore 7/64".
3. 761, c1640-60, stamped GH, fully milled, good burnish, neat, well-made bowl, stem bore 7/64".
4. 410, c1660-80, stamped TF, rather a crude bowl, poorly designed and finished, fully milled, stem bore 7/64".
5. 1287, c1660-80, stamped CR on both bowl and heel, chunky, bulbous form with a slightly flared heel (the largest of the CR bowl forms present), average burnish, fully milled, stem bore 8/64".
6. 1028, c1660-80, stamped LeG. Broseley type bowl, average burnish, probably fully milled originally, stem bore 7/64".
7. 425, c1650-70, stamped RG on both heel and bowl, typical form associated with this particular RG mark, fully milled, traces of burnish, stem bore 7/64".
8. 621, c1660-80, stamped RG on both heel and bowl, typical example of the most common form of RG pipe, fully milled, stem bore 7/64".
9. 617, c1660-80, stamped RG on both heel and bowl, large, chunky form of RG pipe, fully milled, traces of burnish, stem bore 7/64".
10. 691, c1670-90, stamped RG with a hatchet motif on the heel. Unusually small bowl which appears to be a miniature version of the form shown in Figure 1.12. Fully milled, good burnish.
11. 704, c1670-90, stamped RG with a hatchet motif on the heel. Local copy of a Broseley Type 3 pipe, three-quarters milled. Average burnish, stem bore 8/64".
12. 684, c1670-90, stamped RG, well designed form, made of a local fabric, fully milled, good burnish, stem

bore 8/64".

13. 1115, c1670-90, stamped TL, hard fired, creamy coloured local fabric. Rather a heavy, rounded bowl form the front of which has been pushed in slightly while the clay was soft. Three-quarters milled, average burnish, stem bore 7/64".

14. 1110 & 1111, c1650-80, stamped RoBert LaMas, composite drawing of two damaged bowls from the same mould, identified by some distinctive nicks at the stem / tail junction on the left-hand side. Unusual form, being an early version of the tailed heel that was characteristic of later seventeenth century to early eighteenth century Much Wenlock pipes. Abraded surfaces probably burnished originally. Stem bores of 7/64" and 8/64". Probably made by Robert Lamas who was married at Much Wenlock in Shropshire in 1650 and baptised children there until 1667.

15. 1317, c1660-80, stamped Iohn Stock... , fully milled, average burnish, stem bore 7/64".

Figure 17

16. 1420, c1650-80, stamped with a star mark, good, smooth mould surface, fine, hard creamy fabric, fully milled, stem bore 8/64".

17. 1446, c1670-90, single band of milling across the heel. Unusual form with a particularly pronounced bulge to the bowl facing the smoker. Fully milled, soft chalky fabric which was probably not burnished, stem bore 6/64".

18. 323, c1670-90, stamped MD. Broseley style bowl, fully milled, poor burnish, stem bore 8/64".

19. 991, c1650-80, stamped II, fine, smooth, hard fabric, fully milled, not burnished, stem bore 7/64".

20. 998, c1670-1700, stamped II, three-quarters milled, average burnish, stem bore 8/64".

21. 999, c1670-1700, stamped II, three-quarters milled, average burnish, stem bore 7/64".

22. 392, c1670-90, stamped WE, three-quarters milled, not burnished, smooth glossy surface, stem bore 7/64".

23. 274, c1670-90, stamped MD, Broseley style bowl, fully milled, average burnish, stem bore 7/64".

24. 265, c1670-90, stamped MORRIS DeCON, Broseley style bowl, three quarters milled, poor burnish, stem bore 7/64".

25. 1354, c1680-1730, inverted LAW/WOOD/[ALL] stamp on a Broseley style bowl but the mark not recorded there. Three-quarters milled, good burnish, rather oval stem section, stem bore 6/64".

26. 233, c1670-1710, stamped ID, fully milled, average burnish, stem bore 6/64".

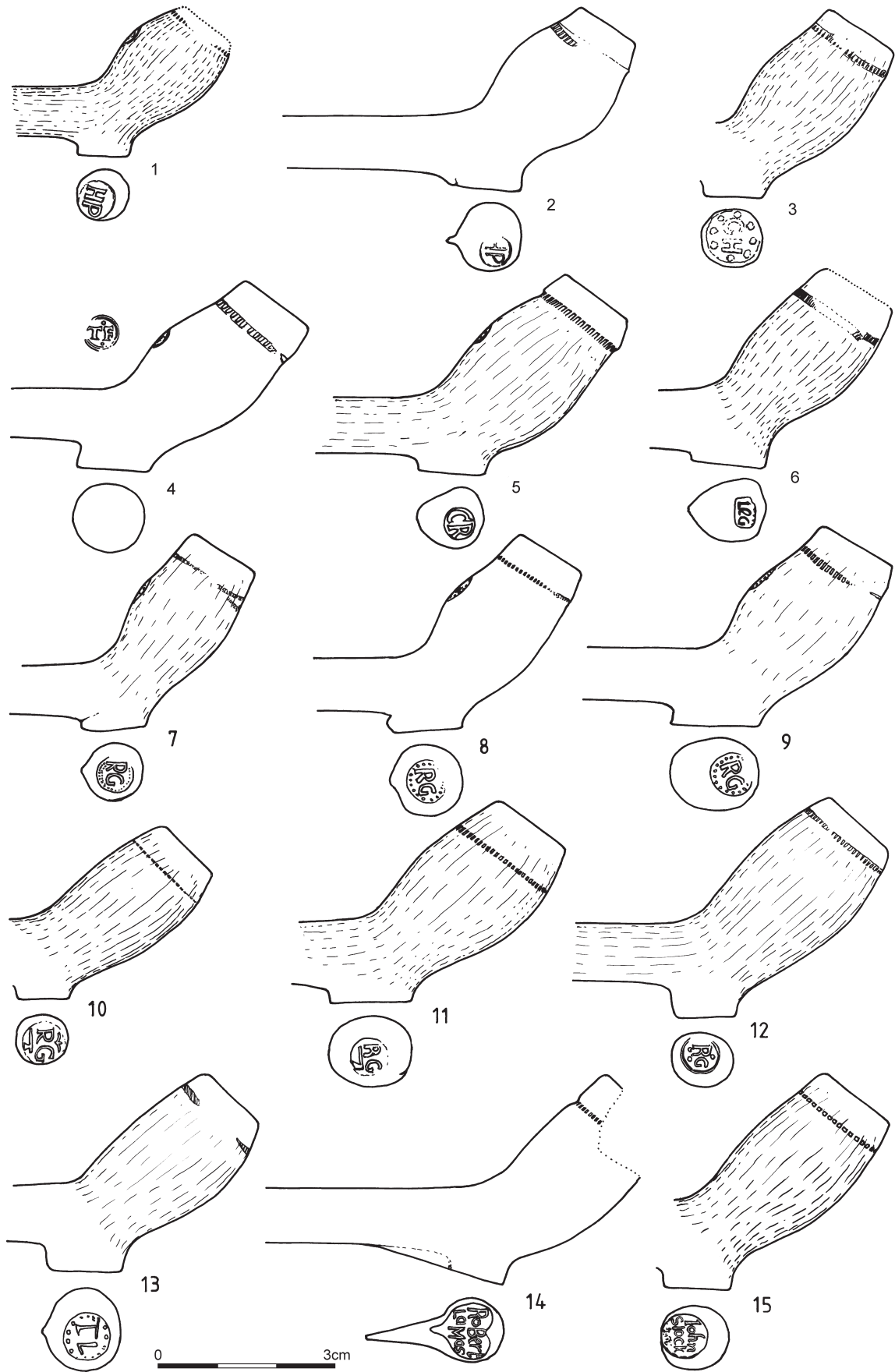


Figure 16: Pipes found at Willaston (Nos 1-15). Drawings: Author.

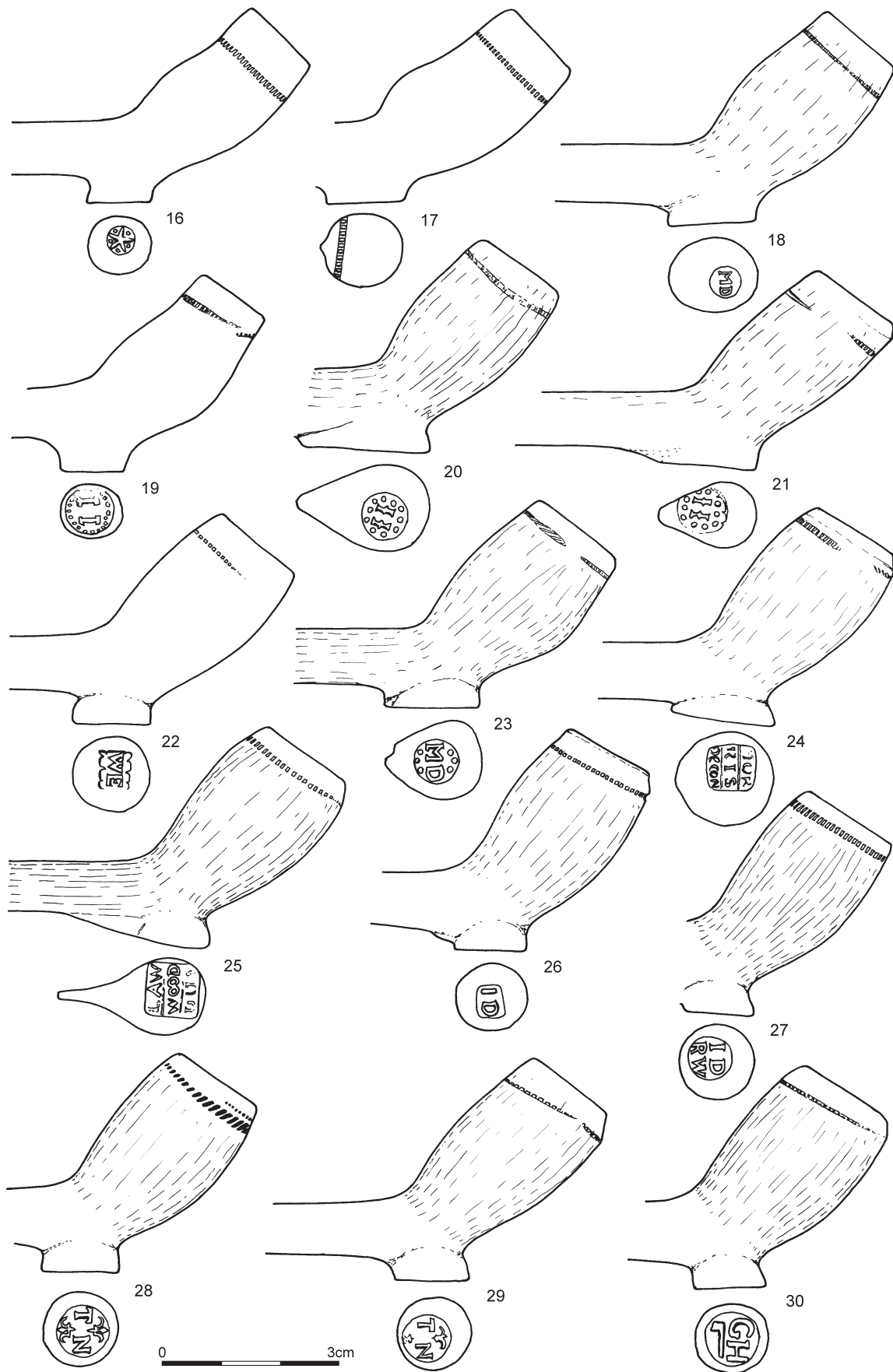


Figure 17: Pipes found at Willaston (Nos 16-30). Drawings: Author.

27. 242, c1670-1710, stamped ID / RW, fully milled, fine burnish, stem bore 7/64”.

28. 1129, c1680-1710, stamped TN, fully milled, average burnish, stem bore 6/64”.

29. 1144, c1680-1710, stamped TN, three-quarters milled, average burnish, stem bore 6/64”.

30. 809, c1680-1720, stamped GH, three-quarters milled, good burnish.

Figure 18

31. 1608, c1660-1680, stamped RoB/LaM, fully milled, good burnish, stem bore 7/64”.

32. 1549, c1670-1710, stamped FC, fully milled, fine burnish, stem bore 6/64”.

33. 1542, c1680-1720, stamped IB, not milled, poor burnish, local fabric, stem bore 6/64”.

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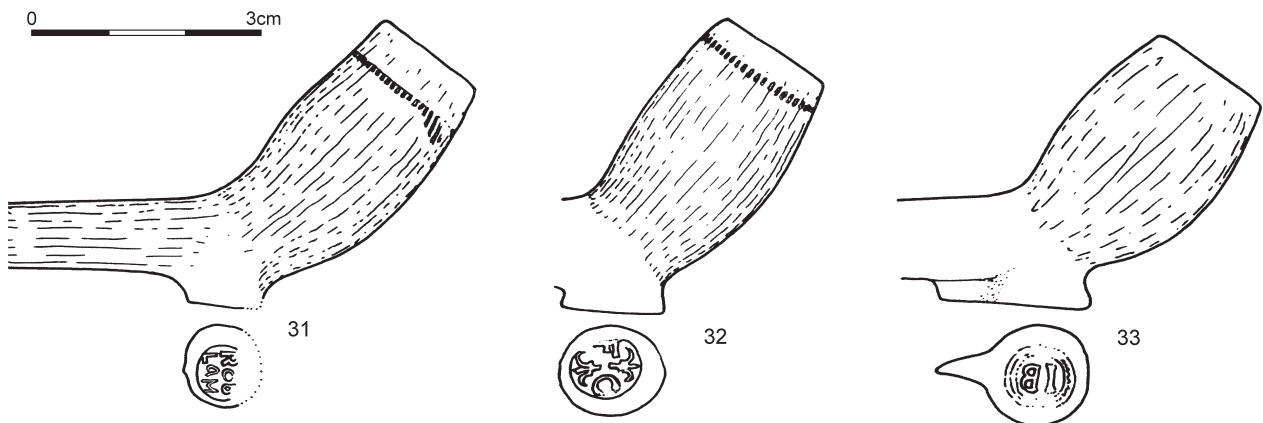


Figure 18: Pipes found at Willaston (Nos 31-33). Drawings: Author.

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