

NEWSLETTER **75**



Spring/Summer 2009

SOCIETY FOR CLAY PIPE RESEARCH

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Editorial

by Susie White

Congratulations - and Happy Birthday! The Society has just made it past its quarter century, having been founded in 1983, and will hold its 25th annual conference later this year. We could not have made it without the support of the membership so, if you want us to get to our Golden Anniversary, you need to keep up the good work!

I would like to begin my editorial with a "thank you" to all those members who have contributed to this issue, and thanks also to those members who have sent material that I have not been able to squeeze into this issue - these papers will go towards Newsletter 76, which will be published later in the year.

It is nice to see a wide range of topics covered in this issue and to see that these are not just confined to clay tobacco pipes, but include diverse subjects ranging from concealed weapons in the form of pipes from Japan to tailor's chalks made from pipe clay by White's of Glasgow.

There are three important points to raise with the membership in this issue. The first is to remind you that our 25th annual conference is to be held in Grantham on 19th and 20th September 2009. A booking form is enclosed with this issue and should be returned to Peter Hammond (contact details inside the front cover). Anyone wishing to display material or offer a paper should contact Peter with details.

The second point to raise is that the SCPR Committee are up for re-election at this year's conference. If you wish to take a more active part in the running of the Society and would like to put yourself forward as an officer or committee member, you should send your details to the Chairman, David Higgins by the 10th September (contact details inside the front cover). Any nominations can then be voted on during the business section of the conference proceedings on Saturday 19th September. If no additional nominations are received then it is proposed that the current Committee be re-elected on block for a further 3 year term.

Finally, also included with this mailing is an application form for the Académie Internationale de la Pipe. Following the Academy's very successful meeting in Liverpool in September 2008, it was felt that they should try to increase their membership base. With that in mind it was agreed that all SCPR members should be given the opportunity to apply to join the Academy should they wish to do so. If any of you are interested in making an application to the Academy then you should complete and return the enclosed form (return address is on the form itself).

On behalf of the Committee I would like to thank you for your continued support of the Society and hope to see as many of you as possible in Grantham, in September.

Clay Tobacco Pipes from an Excavation on the Site of the Former Cattle Market, Bury St Edmunds (BSE 252)

by Kieron Heard

Introduction

This report describes the clay tobacco pipes from an excavation on the site of the former Cattle Market, Bury St Edmunds, Suffolk (site code: BSE 252). Suffolk County Council Archaeological Service (SCCAS) excavated the site between December 2006 and March 2007.

Methodology

The pipe bowls have been classified by reference to Adrian Oswald's Simplified General Typology (Oswald 1975, 37) and bowl type numbers are given the prefix OS.

Stem and mouthpiece fragments have been dated approximately according to their thickness and the diameter of the stem bore; generally larger bores suggest a seventeenth-century date and the narrowest bores are found on nineteenth-century pipes. Precise stem bore measurement has not been undertaken.

The pipe fragments have been quantified and recorded on Museum of London clay tobacco pipe record sheets using a system developed by the writer from guidelines proposed by David Higgins (Higgins, 1988). There are 70 record sheets (one per context) and these are stored in the site archive, which is housed in the office of the SCCAS at Shire Hall, Bury St Edmunds. Data from some of the record sheets has been summarised in this report as Table 1.

Three Key Groups of pipes have been selected for detailed analysis and these are described in this report.

All seventeenth-century marked and decorated pipes and a selection of seventeenth-century bowl forms have been drawn for inclusion in this report.

General nature of the material

There are 372 pieces of clay tobacco pipe, in the following proportions: 84 bowl, 278 stem and 10 mouthpiece fragments. Nine pipes have makers' marks and three pipes are decorated. There are no complete pipes and there is no evidence for clay pipe manufacture on the site although one pipe clay object might be a pipe maker's trial piece. There are no obvious imports and it is assumed that all of the pipes were manufactured locally.

Most of the pipes are of mid-late seventeenth century date (1640-1680). Pipes of the early seventeenth century and eighteenth to nineteenth centuries are represented poorly.

Pipes were recovered from 70 contexts, mostly the fills of pits and postholes. Only nine contexts produced more than one bowl fragment and only two contexts produced more than ten bowl fragments. A large proportion of the contexts contained just a single stem fragment.

The pipes are generally very fragmented and abraded. No complete pipes can be identified and the relative proportion of bowl to mouthpiece fragments (more than 8:1) suggests that not all pipe fragments were recovered.

No attempt has been made to statistically analyse or otherwise assess the quality of the clay pipes, although a number of general observations can be made regarding the midlate seventeenth-century pipes that make up the bulk of the assemblage. Generally these pipes are finished poorly. In some cases the heels have been trimmed imperfectly or have been distorted prior to firing. On the later types (OS 6, dated 1660–1680) where milling has been applied it is usually only as a cursory line on the back of the bowl, facing the smoker. Many pipes of this date have no milling at all. Pipes of type OS 5 (1640–1660) tend to have slightly more milling, though rarely applied with care. Few if any of the pipes dated 1640–1680 have been burnished. Many have cut marks resulting from poor attempts at removing surface imperfections prior to firing.

By contrast, a type OS 4 pipe (1600–1640) from context 0755 (one of only two pipes of this date) has been milled fully, burnished and trimmed neatly.

Summary by context

Table 1 provides a date range for the pipes from every context that contained bowl fragments, and summarises the data recorded on the Context Record Sheets.

Key to Table 1

Cxt: Context

B: Number of bowls

S: Number of stem fragments
M: Number of mouthpiece fragments
T: Total number of fragments

T: Total number of fragments
Date: Likely date of context

Marks: Brief description of makers' marks

Pos: Position of mark (H = base of heel; SH = side of heel; X= across the stem)

I/R: Incuse or relief markM/S: Moulded or stamped markDeco: Brief description of decoration

Figure: Figure number

| | | of heel | | of OS 6 bowl | | S 6 bowls | s and three heels | tamp as in 0755 | 5 bowls | | gests post 1800 | | | 0-1680 | | | | | | | OS 6 and OS 7 | OS 6 and OS 7 |
|-------------|-----------|---|---------------|--|----------------------------|--|---|---|--|-----------|--|----------------------|---------------------------|--|-----------------------------|-----------|-----------|-----------|-----------|------------|---|---|
| Comments | OS 6 bowl | OS 4 bowl with rouletted line on base of heel | Heel fragment | Part of Key Group 1. Includes a range of OS 6 bowl | forms and two marked pipes | Part of Key Group 1. Includes three OS 6 bowls | Part of Key Group 1. Two OS 5 bowls and three heels | Part of Key Group 1. Probably same stamp as in 0755 | Part of Key Group 1. Various type OS 5 bowls | OS 5 bowl | OS 13 bowl with untrimmed heel, suggests post 1800 | Marked stem fragment | OS 12 bowl; maker unknown | 15-18, 25 Key group 2. Broad date range of 1600-1680 | Unidentified heel fragments | OS 6 bowl | OS 5 bowl | OS 5 bowl | OS15 bowl | OS 6 bowls | Part of Key Group 3. Includes OS 5, OS 6 and OS 7 | Part of Key Group 3. Includes OS 5, OS 6 and OS 7 |
| Figure | | | | 1-6, 27 | | 7 | 8,9 | 10 | 11-14 | | | | | 15-18, 25 | | | 26 | | | | 19-22 | 23 24 |
| Deco | | | | | | | | | | | | | | Mulberry | | | | | | | Mulberry | Mulborry |
| S/IV | | | | S | Σ | | | S | S | | | S | M | S | | | S | | | | S | t |
| I/R | | | | Я | ĸ | | | Я | R | | | Ι | Я | R | | | R | | | | R | T |
| Pos I/R M/S | | | | Н | SH | | | Н | Н | | | XX | SH | Н | | | Н | | | | Н | Ī |
| Marks | | | | 1. 既 | 2. pellet | | | ER | ER | | | PAWSON/CAMB | Н | ER | | | ER | | | | ER | |
| Date | 1660-1680 | 1600-1640 | 17th c | 1660-1680 | | 20 1660-1680 | 1640-1660 | 1640-1660 | 1640-1660 | 1640-1660 | 1780-1820 | 19th c | 1730-1780 | 1660-1680 | 17th c | 1660-1680 | 1640-1660 | 1640-1660 | 1840-1880 | 1660-1680 | 1660-1680 | 1660-1680 |
| T | 1 | 2 | 14 | 82 | | | 9 | 2 | 35 | 1 | 1 | 1 | 1 | 57 | 7 | ∞ | 9 | П | П | 5 | 32 | 16 |
| Z | 0 0 | 0 1 | 0 81 | 3 | | 16 0 | 0 | 0 1 | 5 2 | 0 0 | 0 0 | 0 1 | 0 0 | 1 | 5 0 | 0 2 | 5 0 | 0 0 | 0 0 | 3 0 | 2 | 9 |
| 8 | 1 | 1 | 1 1 | 13 68 | | 4 16 | 2 (| _ | 7 26 | _ | _ | 0 | _ | 27 29 | 2 | _ | 1 | _ | _ | 2 | 8 22 | 4 |
| rt] | 00 | 54 | 22 | 0398 | | 66 | 00 | 11 | 0.7 |)5 | 52 | 54 | 33 | _ | 0852 | 83 | 98 | 34 | 7.5 | 41 | 1552 | 1554 |
| Cxt | 0100 | 0254 | 0355 | 03 | | 0399 | 0400 | 0401 | 0402 | 0405 | 0462 | 0464 | 0533 | 0755 | 80 | 0883 | 9880 | 0934 | 0975 | 1541 | 15 | 1 |

Table 1: Summary of the pipes from contexts containing bowl fragments.

Makers' marks

IH (context 0533)

Large, *serif* initials moulded in relief on the sides of the heel of a type OS 12 bowl (1730–1780). The maker is unknown (not illustrated).

PAWSON/CAMB (context 0464)

Stamped incuse across the top of a nineteenth-century stem fragment, in a circular frame. The lettering is *serif* and in two rows. The mark of the Cambridge maker *Pawson* has been recorded previously, although details are not given (Oswald 1975, 162) (not illustrated).

ER #1 (context 0398)

The initials, surmounted by a probable fleur-de-lys, are stamped in relief on the base of the heel of a type OS 6 bowl (1660–1680). The die is probably heart-shaped. The bowl is large and slightly bulbous with a pronounced oval and everted heel. Crude milling has been applied to the back of the bowl (Figure 5).

ER #2 (context 0401)

A heart-shaped die with the initials in relief separated by a pellet, and with a crude representation of a crown below. The R is slightly larger than the E. The bowl is of type OS 5 (1640–1660) with a heart-shaped and everted heel. A line of milling has been applied with some care to the back half of the bowl rim (Figure 10).

ER #3 (context 0755)

A heart-shaped die with the initials in relief separated by a pellet, and with a crude representation of a crown below. The *R* is slightly larger than the *E*. This stamp is probably from the same die as #2. The bowl is fragmentary and cannot be identified, but has a heart-shaped and everted heel (Figure 25).

ER #4 (context 0886)

A heart-shaped die with the initials in relief separated by a pellet, and with two small circles below. The *R* is noticeably larger than the *E*. The bowl is of type OS 5 (1640–1660) though slightly longer than some other examples and with a heart-shaped heel. It has been finished to a poor standard. A crude line of milling extends about half way round the back of the rim (Figure 26).

ER #5 (context 0402)

This circular die has large and rather crude initials, in relief. The bowl is of type OS 5 (1640–1660). It has milling around the back half of the rim and a low profile, circular heel (Figure 11).

ER #6 (context 1552)

This circular die has large and rather crude initials, in relief, and is probably the same as #5. The bowl is of type OS 7 (1660–1680) with relatively straight sides and a neat,

circular heel. It is decorated on both sides with the so-called 'mulberry' design. There is a line of milling on the back of the bowl (Figure 22).

Pellet (context 0398)

A single pellet moulded in bold relief occurs on the left side of the heel of a type OS 6 bowl (1660–1680). This type of moulded mark is unusual on seventeenth-century pipes but has been recorded previously in Bury St Edmunds (Higgins, 2003). The oval heel has been poorly trimmed leaving a pronounced ridge at the front, and a crude line of milling has been applied to the back of the bowl (Figure 6).

In addition to the marked pipes described above there is a type OS 4 bowl from context 0254 with a line of milling across the base of the heel. This is not a maker's mark but could be a tally mark or a test piece for the milling wheel (not illustrated).

Decorated pipes

Three pipe bowls are decorated with the so-called 'mulberry' design – a triangle of moulded dots with a line below representing a stalk or trunk. It has been suggested that the design originated in East Anglia in the mid seventeenth century, but it is found also in the Midlands, the West Country and along the south coast (Oswald 1975, 96). Although known generally as *mulberry pipes* it has been suggested alternatively that the design might represent an orange or cherry tree or a bunch of grapes.

Type OS 5 bowl (1640–1660) from context 0755. The bowl is small and bulbous, with a heart-shaped and everted heel. The rim is almost fully milled. The design, which occurs on both sides of the bowl, is by necessity more compact than the other examples from this site and has three additional dots below and to the left of the main triangular grouping (Figure 15).

Type OS 7 bowl (1660–1680) from context 1552, which also has the maker's mark *ER* stamped on the heel. There is a line of milling on the back of the bowl (Figure 22).

Type OS 7 bowl (1660–1680) from context 1554. This bowl is similar in form to the example from context 1552, though slightly smaller. The design is similar also except that on the left side of the bowl there is an additional dot to the right of the stalk or trunk. There is a line of milling on the back of the bowl (Figure 24).

Key Groups

Three Key Groups of pipes have been have been selected for detailed study. These are groups that contain significant numbers of pipes and a range of seventeenth-century bowl forms. Many of the bowls are sufficiently characteristic to be given unique mould numbers, as described below. The Key Groups are from the fills of three pits and it is noted that some mould types occur in more than one pit, suggesting that these features were backfilled at roughly the same time.

Key Group 1: the fills of quarry/rubbish pit 0395

This Key Group contains 30 bowl, 112 stem and 4 mouthpiece fragments. The bowls are types OS 5 (1640–1660) from contexts 0400, 0401 and 0402 and OS 6 (1660–1680) from contexts 0398 and 0399. Assuming than the higher context numbers are associated with earlier fills of the pit, the pipe evidence suggests that there were two distinct phases of backfilling.

Context 0398 (13 bowl, 69 stem, 1 mouthpiece)

Five of the bowl fragments are too small to be identified positively but are clearly of seventeenth-century date. The other bowls are all of type OS 6 (1660–1680), being large and slightly bulbous with thick walls and a variety of heel forms, as described below:

Mould 1: Large, slightly bulbous type OS 6 with a pronounced heart-shaped and everted heel. Part of the rim is missing but the pipe does not appear to have been milled. This is the only example of this mould type in the Key Groups (Figure 1).

Mould 2: Two examples from the same mould. Large, slightly bulbous type OS 6 with a pronounced oval-shaped and everted heel. The more complete example has a line of milling on the back of the bowl (Figure 2).

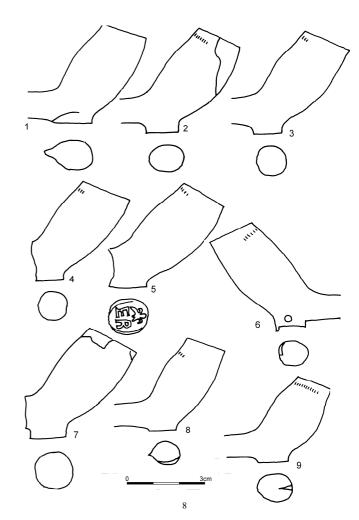
Mould 3: There are two examples of type OS 6 bowls from the same mould. They have pronounced, circular and everted heels and short lines of milling on the back of the rim (Figure 3).

Mould 4: Another type OS 6 bowl with a pronounced, circular and everted heel. This mould type is shorter and slightly wider at the rim than Mould 3 (Figure 4).

Mould 5: This is a type OS 6 bowl with a very pronounced oval and everted heel and is the only example of this mould type in the Key Groups. The heel is stamped with the initials *ER* below a probable *fleur-de-lys*. The back of the rim is milled (Figure 5).

Mould 6: Another type OS 6 bowl with a single pellet moulded in bold relief on the left side of the heel. There is a crooked line of milling on the back of the bowl. The heel has been trimmed badly, leaving a pronounced ridge on the front end (Figure 6).

Context 0398 contains also a pipe clay object resembling a piece of pipe stem. It is cylindrical, 52mm in length, and has been pinched into a dumbbell shape and pierced lengthwise with a moulding wire. It was cut from a longer roll of clay, with a circular cutting action, and the wire was inserted after it had been cut. The evidence for this is a raised lip at either end (such as is found on the mouthpiece of a pipe) produced by the insertion and withdrawal of the wire. Although the surface of the clay has a lumpy finish, the piece has been burnished crudely. Its function is unknown, but it might have been a trial piece fashioned by an apprentice pipe maker (Figure 27).



Context 0399 (4 bowl, 16 stem, 0 mouthpiece)

Three bowls are identified as type OS 6 (1660–1680) and a fourth is a heel fragment that cannot be identified although it is clearly of seventeenth-century date.

Mould 2(?): There are two type OS 6 bowls with pronounced oval and everted heels that are probably from Mould 2 (see context 0398). They have short lines of milling on the back of the rim (not illustrated).

Mould 7: A third bowl is another type OS 6 with a very pronounced, circular and everted heel. It is similar to Mould 5 in context 0398 (with the ER stamp) but has a sharper angle at the top of the heel on the front of the bowl. This mould type occurs also in context 0755 (Key Group 2) (Figure 7).

Context 0400 (5 bowl, 0 stem, 1 mouthpiece)

This context contains two type OS 5 (1640–1660) bowls from different moulds and three seventeenth-century heel fragments. Type OS 5 bowls are medium-sized and bulbous, and are similar to contemporary London types. The complete bowls are described below:

Mould 8: This is a type OS 5 bowl, quite long and slender with a small, oval heel. There is a crooked line of milling on the back of the bowl (Figure 8).

Mould 9: Another type OS 5 bowl, squatter than the example above, with a moderate, oval heel. Three-quarters of the rim is neatly milled (Figure 9).

Context 0401 (1 bowl, 1 stem, 0 mouthpiece)

This context contains a single type OS 5 bowl (1640–1660), described below:

Mould 10: The bowl is rather small with a moderate heart-shaped and everted heel. The heel is stamped with the initials *ER*, separated by a dot and above a crude representation of a crown, all within a heart-shaped die. The back half of the rim has been milled (Figure 10).

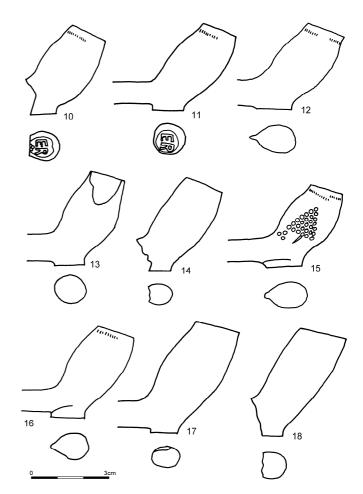
Context 0402 (7 bowl, 26 stem, 2 mouthpiece)

0402 contains seven type OS 5 bowls (1640–1660), as described below:

Mould 11: A type OS 5 bowl, slightly less bulbous than some and with a flattish, circular heel. The heel is stamped with the initials *ER* in a circular die. The back half of the rim has been milled (Figure 11).

Mould 12: A type OS 5 bowl with a medium-sized, heart-shaped heel. Three-quarters of the rim has been milled (Figure 12).

Mould 13: This type OS 5 bowl has a medium-sized, circular heel. The back half of the bowl has been milled. It is similar to mould 11 but is more upright and has a more pronounced curve to the lower part of the front of the bowl (Figure 13).



Mould 14: This type OS 5 bowl is slightly cylindrical and has a small, oval heel. This pipe has not been milled (Figure 14). There are three similar bowls, possibly from the same mould (not illustrated).

Key Group 2: the fill of well/cesspit 0882

Context 0755, the single fill of pit 0882, contained 27 bowl, 29 stem and 1 mouthpiece fragments. This is a mixed group of pipes with a broad date range of 1600–1680 and a terminus post quem of c.1660. There are five unidentified heel fragments of seventeenth-century date and a number of more complete bowls, described below:

A single bowl of type OS 4 (1600–1640) is small and bulbous with a neat, circular heel. It is well made, having been milled fully and burnished. It is very much like contemporary pipes of type AO 5 from London (Atkinson and Oswald, 1669). As this is the only example of an early seventeenth-century pipe in this context it is likely to be residual (not illustrated).

Mould 10(?): There is a heel fragment stamped with the initials *ER*, separated by a dot and above a crude representation of a crown, all within a heart-shaped die (Figure 25). This is probably the same mould and stamp as found in context 0401 (see Figure 10).

Mould 15: This type OS 5 bowl (1640–1660) is small and bulbous with a heart-shaped and everted heel, and is an early example of a pipe decorated with the so-called 'mulberry' design. The rim is almost fully milled (Figure 15).

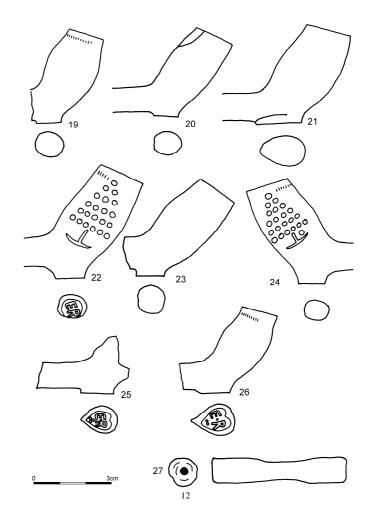
Mould 16: Five type OS 5 bowls (1640–1660) are clearly from the same mould. They are medium-sized, bulbous bowls with pronounced, heart-shaped and everted heels. They have all been milled for three-quarters of the rim (Figure 16). A similar bowl is from a different mould (not illustrated).

In addition there are ten type OS 5 bowls (1640–1660) of medium size and with either oval or circular heels. They all have some milling, between one-quarter and three-quarters of the rim (not illustrated).

Mould 7: Another example of this type OS 6 bowl (1660–1680) with a very pronounced, circular and everted heel. It occurs also in context 0399, Key Group 1 (see Figure 7).

Mould 17: This type OS 6 bowl (1660–1680) is fairly slender and has an unusually small, oval heel (Figure 17).

Mould 18: A type OS 6 bowl (1660–1680), similar to mould 17 but slightly more forward leaning and with a larger, oval heel (Figure 18).



Key Group 3: the fills of quarry/rubbish pit 1550

Two fills of pit 1550 produced a total of 12 bowl, 31 stem and 5 mouthpiece fragments. This group has a broad date range of 1640–1680 and a *terminus post quem* of c1660.

Context 1552 (8 bowl, 22 stem, 2 mouthpiece)

There are seven identifiable bowls of types OS 5 (1640–1660), OS 6 (1660–1680) and OS 7 (1660–1680) and a seventeenth-century heel fragment.

Mould 19: A type OS 5 bowl (1640–1660) that is small, bulbous and has a fairly flat, slightly oval heel (Figure 19).

Mould 20: A type OS 5 bowl (1640–1660) that is small, slightly cylindrical and has a fairly flat, oval heel (Figure 20).

Mould 21: Three OS 6 bowls from the same mould are slightly smaller than some of the other examples of this type. They are bulbous with thick walls and stems, and large, heart-shaped and everted heels (Figure 21). Another bowl is similar, but obviously from a different mould (not illustrated).

Mould 22: The bowl is of type OS 7 (1660-1680) being fairly long with relatively straight sides and a neat, circular heel. It is decorated on both sides with the so-called 'mulberry' design. There is a line of milling on the back of the bowl. The initials ER are stamped on the heel, in a circular die (Figure 22). The same stamp was probably used on a plain, type OS 5 bowl (Mould 11) from context 0402, Key Group 1 (see Figure 11).

Context 1554 (4 bowl, 9 stem, 3 mouthpiece)

Mould 10(?): Type OS 5 bowl (1640–1660), medium-sized and bulbous with a fairly pronounced heart-shaped base. This bowl is very similar to Mould 10 in context 0401, Key Group 1 (not illustrated).

Mould 23: This type OS 6 bowl (1660–1680) is rather long and slender with a circular heel. The bowl is more forward leaning than others of this type (Figure 23).

Mould 24: Type OS 7 bowl (1660–1680) decorated with the so-called 'mulberry' design. The bowl is cylindrical with a small, oval heel and has been milled on the back of the rim. The design is of the usual pattern except that on the left side of the bowl there is an additional dot below the main triangular grouping (Figure 24).

Discussion

The excavation has produced a medium-sized assemblage of clay tobacco pipes dating mostly to the mid-late seventeenth century. It is reasonable to assume that they form a representative sample of the range of pipes that were in use in Bury St Edmunds at that time.

In the absence of a typology for East Anglian pipes this material have been classified according to Oswald's Simplified General Typology (Oswald 1975, 37). As such they fall into two main groups: type OS 5 (1640–1660) and type OS 6 (1660–1680). However, it is clear that within these two groups there is considerable variation in form.

The assemblage contains only two early seventeenth-century pipes (type OS 4, dated 1600–1640) and these are identical to contemporary London forms. As in London these early pipes are well made and have been finished to a high standard.

The type OS 5 bowls are also generally similar to contemporary forms from London and the southeast of England, being bulbous and of medium size. However, they display a wider range of heel forms, including heart-shaped and everted bases. Also they are comparatively robust, which is a characteristic of East Anglian pipes (Higgins, 2003). These pipes are not particularly well made, with incomplete milling and some surface defects. The spurred pipes of this date that are found in London are absent from this assemblage.

The type OS 6 bowls are larger and less bulbous, marking the transition to the straight-sided pipes of the very late 17th- and 18th centuries. They also display a wide range of heel forms, with everted bases being prevalent. This is in contrast to the situation in London and presumably represents a local tradition. Again, spurred pipes are absent and it is safe to assume that they were not a feature of the industry in this part of the country. Generally the type OS 6 pipes are finished poorly, often with only cursory milling and little attempt to remove defects. Many have been deformed prior to firing.

It is assumed that the pipes were produced in local workshops, probably in Bury St Edmunds itself. The three Key Groups contain 69 of the 84 pipe bowls from the site. Within the Key Groups there are at least 24 different mould types; it is unlikely that a single workshop would possess so many moulds, so it is assumed that there were several makers working in the town in the mid–late seventeenth century.

There are six pipes stamped with the maker's mark ER, using at least four different dies on five different mould types. The maker is unknown but was clearly a prominent figure in the local pipe-making industry. It is hoped that documentary research might shed some light on his identity. It is particularly interesting to note that this maker was producing 'mulberry' pipes.

Another type of maker's mark, a pellet on the left side of the heel, was an unusual style in the seventeenth century but is found on eighteenth-century pipes from London and elsewhere.

This is only the second assemblage of pipes from Bury St Edmunds to have been recorded in detail. The first was from a site in High Baxter Street (site code: BSE 202)

(Higgins, 2003). The two assemblages have many features in common. The pipes from High Baxter Street (derived mainly from the backfilling of a cellar) are primarily of late seventeenth-century date (1660–1690) and include at least one (possibly two) further examples of the ER stamped mark. That group also contains a pipe with the dot mark on the left side of the heel and three 'mulberry' pipes that are apparently similar to one of the examples from the Cattle Market site (Mould 22, Figure 22). Higgins identifies a wide range of seventeenth-century bowl forms, with at least 34 mould types being present.

In fact, many of the comments made here regarding the range of seventeenth-century bowl forms and the degree of finishing of the pipes from the Cattle Market site are stated also by Higgins in relation to the High Baxter Street pipes. A third group of pipes, from St Edmundsbury Cathedral, awaits assessment. It is hoped that considered together, these three groups of pipes will provide a firm basis for the construction of a typology of mid–late seventeenth-century clay pipes in Suffolk.

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Rare Japanese Concealed Weapons

by Felix van Tienhoven

Bronze and iron objects were first introduced into Japan from China during the early Yayoi Period (c300 BC-AD c300). By about 100 BC native craftsmen used these metals to produce arrowheads, swords, daggers, halberd blades, mirrors, bells and ornaments. Japan had a plentiful supply of copper that was usually used in the form of alloys, mainly bronze, largely associated with ceremonial uses. Gold and silver were not often used. Iron was used widely, especially for swords and tools. The most common process for making metal objects was casting, but various metalworking

techniques, such as forging, embossing, beating, chasing, engraving, damascening, and plating, were also employed.

In the Azuchi-Momoyama (1568-1600) and Edo (1600-1868) period's metal was formed into firearms and clocks under European influence, as well as into ornamental objects and, most significant, the making of swords and sword guards experienced a new flourishing-time.

The Japanese sword smith was traditionally held in high regard. The earliest sword smiths were often members of the Shugendō sect, who with their apprentices lived an austere and religiously dedicated life. Approximately 200 schools of Japanese sword smith-artists were scattered throughout Japan, each with its own history and its identifiable and surprisingly consistent blade characteristics that can be traced down through centuries. Therefore in 1868, when the emperor Meiji promulgated regulations forbidding the making and wearing of swords, the profession suffered.

In parallel, a number of other developments at the beginning of the Meiji-period (1868 -1912) resulted in changed circumstances for the metalworkers. Their original principals, like the Buddhist temples and the samurai-class, disappeared and therefore they had to look for alternative sources of income.

The sword smiths switched to knives and cutlery etc. whereas the craftsman formerly occupied with handles and the decoration shifted to vases, sculptures and kiseru. In the rare pipes presented in this paper, the skills of the sword smith and the decorators are married again. A dagger and a knife hidden in a "kiseru".



Figure 1: Bronze Kiseru

Both the bronze pipes illustrated in Figures 1-2, with a length of 29cm and 32cm respectively, resemble well-known kiseru-models that were used by sumo-wrestlers

and kabuki-actors (Figure 3). The dagger and the knife are made of steel. In the hilts of the pipes, which are fixed into the mouthpiece, a bore has been drilled allowing actual smoking.



Figure 2: Kiseru opened to reveal concealed blades.

A further feature of these pipes is that the stem is covered with "same-gawa" (shark-skin) which was formerly used to cover the sword-hilt in order to prevent it from

becoming slippery by blood. The Japanese were mistaken about the origin of the skin, because it actually comes from the skin of the tail of the giant manta (*Manta birostris*) imported by the Dutch.

The exquisite embossment (choh-kin) of the "knifepipe" in classical style bears witness of great craftsmanship (Figures 4-5).

It is assumed that these "O-o" (huge) kiseru have grown out of the long (50-60 cm) iron kiseru used in the Edo-period by hooligans that were forbidden to wear swords. They were called "Kenka" (fighting) kiseru and some already had concealed weapons.

To date, we have not been able to locate documentary evidence to support the theory that these weapon-pipes were made for what were called "outlaws", the ancestors of the present *Yakuza*, the Japanese



Figure 3: A kabuki-actor.





Figures 4 & 5: Detail of Choch-kin embossment.

equivalent of the mafia. The type of dagger, called "dosu" or "aikuchi", which is now hidden in the pipe, was originally used by the "outlaws" as an independent object. The expensive manifestation of the "knife-pipe" certainly indicates the important status of the owner in the organisation.

I have also not been able to ascertain the origin of the pipes. The seller at the "Heiwajima Antique Market", Tokyo, said at the time (1995) that they came from Kyoto from the Meiji Period (1880-1900). The date is without doubt correct, but Kyoto can not be confirmed, although it was indeed an important centre of sword smiths and decorators.

In conclusion, I have two rare specimen of Japanese cultural heritage in my collection, but who made them and who these "pipe-weapons" or "weapon-pipes" were made has yet to be proven.

Acknowledgement

I am grateful to Barney Suzuki and Jun Higuchi who kindly assisted me with "local" knowledge and reviewed this paper.

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'Time Team' - Information or Misinformation?

by David Higgins

Time Team is one of television's most popular archaeology programmes, with each episode being seen by millions of viewers. The work is carried out by professional archaeologists and the programme acts as an important interface through which the public can be shown the importance and value of serious academic research. Given the programme's high profile and role as an ambassador for the profession, it is incumbent upon them to make sure that the evidence they present is both accurate and correctly interpreted. Two of the recent episodes from Series 16 have strayed into the world of pipes and pipe clay and on both occasions the evidence presented has fallen well short of the mark that could reasonably be expected.

In the programme on Lincoln's Inn in London a pipe clay hair curler was recovered. The popular misconception that these are "wig curlers" was then perpetuated (you curl hair, not wigs) and it was stated that "these are usually nineteenth century in date". This is completely wrong, since the wearing of wigs became popular with the Restoration in 1660 and continued until the very end of the eighteenth century, when wigs rapidly fell out of fashion – except amongst lawyers. So far as I am aware, there are no known examples of hair curlers that can be reliably dated to the nineteenth century. A golden opportunity was missed to correctly explain the name and function of these objects, and to relate this find to the particular social context in which it was found.

The same programme went on to examine an area of Lincoln's Inn Fields, where it was postulated that they had found evidence for a temporary camp set up by homeless inhabitants of London following the Great Fire of 1666. Close dating of the excavated deposits appeared to hinge on a single sherd of Staffordshire type slipware. This dish fragment was of a style that was produced for a relatively long period of time and, as with any pottery, the vessel itself could have been in use for a considerable period before being discarded. In contrast, the same finds tray included three complete pipe bowls, which are not only more accurately datable in the first instance but also had a much shorter life expectancy. One of these bowls appeared to date from c1610-50 but the other two were clearly of mid-seventeenth century date – the very period the programme was trying to find evidence for.

At least the pipe bowls from Lincoln's Inn Fields were merely overlooked rather than being blatantly misidentified. In contrast, the programme entitled 'Blood, Sweat and Beers: Risehill, North Yorkshire' (Channel 4, first screened 1.2.09), examined a railway navvy camp dating from the 1870s, with one of the stated aims being to examine the material culture associated with this particular class of itinerant labourer. Clay tobacco pipes figured large amongst the featured finds and three fragments with

coloured enamel decoration were singled out for particular attention, with the finds assistant saying "these are very identifiable". So far, so good. Unfortunately the programme went on to make an absolute nonsense of the identifications, and completely failed to pick up on the significance of these finds. The decayed enamel decoration around the rim of one piece was mis-identified as metal corrosion, resulting in an incorrect reconstruction of the pipe as having had a metal cap on it. In another instance a fragment was identified with an Irish Harp on it and we were told that these pipes were made in Manchester, "typically by Irishmen", which is completely untrue. There is no evidence that Irish workers were particularly employed by the Manchester pipemaking firms, or anywhere else in England come to that. Not one of the three fragments examined in detail on the programme was correctly identified and described.

The glaringly obvious characteristic about all three featured pipes (and completely overlooked) was the use of coloured enamel, a type of decoration that was never produced in the British Isles but which is typical of pipes produced in France and the Low Countries. Enamelled pipes such as these were imported into this country in large numbers during the second half of the nineteenth century, but they were always much more expensive than the ordinary British clays – which is why these finds are so significant on this particular site. A 'theoretical model' would predict that these are 'high status' pipes and so they would not be expected on a navvy site. If, as seems to be the case, they formed a significant proportion of the pipes recovered, then this model needs to be re-examined.

Conversely, the programme flashed up a quick shot of another pipe that appeared to have a 'DUBLIN' bowl stamp on it, but which they did not go on to discuss. Pipes with Irish names and slogans like this were made in large numbers in England (especially in places like Manchester), supposedly to cater for the demand from Irish migrants and other manual workers, which is exactly what might be expected on this site. So the programme not only failed to pick up on the unexpected presence of exotic and 'high status' foreign imports but also the presence of Irish style pipes that were made in England to cater specifically for the labouring classes.

While *Time Team* may be a popular television programme, the work is still carried out by full time archaeologists. It is a poor reflection on the profession when such fundamental mistakes in the identification and interpretation of finds are not only made but then disseminated to millions of unsuspecting viewers – particularly when one of the stated aims of the Risehill programme was the study of material culture. As Tony Robinson said in this episode "at the heart of archaeology is rubbish - and rubbish is information". Let's just hope that they do rather better with their 'information' in the final site report. And if anyone from the programme would like a membership application for the *Society for Clay Pipe Research*, I would be happy to oblige.

Sundry Newspaper Cuttings

by Ron Dagnall

During a period of free internet access to the Thomson Gale Digital Collection of English Newspapers I was able to collect the following cuttings concerning pipemakers from several different early newspapers. These provide interesting insights into the less commercial aspects of these pipemakers lives, which are rarely recorded elsewhere. Spelling and punctuation have been transcribed as originally printed.

LONDON GAZETTE: Saturday 14 August 1725

The under mentioned Persons being all Prisoners in the Corporation Gaol of Wenlock in the County of Salop, and claiming the Benefit of the late Act of Parliament for the Relief of Insolvent Debtors, give Notice that they intend to be discharged at the next General Sessions of the Peace to be held in and for the said Town and Liberties of Wenlock aforesaid. Richard Patten, late of Benthall within the Liberties of Wenlock and County of Salop, Butcher. George Allen, late of Much Wenlock in the said County, Labourer. Samuel Allen, late of the same Town, Labourer; and Edward Johnson, late of Brosely within the Liberties and County aforesaid, Pipe-maker.

FARLEY'S EXETER JOURNAL: Friday 18 November 1726, Advertisements:

PETER GALE, Pipe-Maker,

Who lately liv'd within two Doors of the Plume of Feathers without *North-Gate, Exon*, but by an unexpected dreadful Fire, which happen'd the 3d Instant, was burnt out of his said Dwelling House, which was intirely consum'd, gives this publick Notice, That at his Ware-House behind his late Dwelling-House, Gentlemen and Others may be supply'd, as usual, with all Sorts of long glaz'd and other Pipes, at a very cheap Rate. Nov. 11.

[Oswald's list of Devon pipemakers (1975, 166) records Peter Gale at Exeter from 1721-37].

FOG'S WEEKLY JOURNAL: Saturday 9 November 1728

FOULSTONE in KENT.

A Convenient House to be lett, and Tools to be sold fit for a Pipe-maker, (in which the Trade is now carried on) at very reasonable Terms; the present Possessor having no Right to keep that Trade, he not having serv'd an Apprenticeship to it, as the Charter

of that Company directs. Enquire of Mr. Webb, Pipe-maker, in Hartshorn-Lane, or of Mr. John Bayly, of Foulstone, aforesaid.

[Oswald's list of Kent pipemakers (1975, 175) records John Bayley at Folkestone in 1758 (Sun Assurance for £400)].

WEEKLY JOURNAL or BRITISH GAZATEER: Saturday 21 September 1728, Advertisements:

Run away from his Master, Thomas Parsley, of Harleston in the County of Norfolk, Pipe-maker, one William Tink, a thick quaddy Lad, about 18 Years of Age, with his Hair cut off his Head, if not since grown; he hath also a full Face, thick Lips, and a frowning Countenance. Whoever gives Notice to his said Master of him, shall have full Satisfaction, and whoever employs the said William Tink, he being an Apprentice to his said Master ar this present, must expect to suffer as the Law directs, he having, from this Time, almost two Years to serve his said Master.

[Oswald's list of Norfolk pipemakers (1975, 189) records Thomas Parsley in Redenhall between 1722-36 when he took William Pink apprentice in 1722, and John Neach apprentice in 1736]

THE MORNING CHRONICLE:Saturday 1 January 1831

WORTHY OF IMITATION --- The tobacco-pipe masters of Rainford, in consequence of an advance of 20 per cent. on their goods, have advanced the wages of their journeymen in the same ratio.

Reference

Oswald, A., (1975) Clay Pipes for the Archaeologist, British Archaeological Reports (British Series 14), Oxford, 207pp.



SCPR Conference 2009 - Grantham

Don't forget to book your place at this year's conference in Grantham by completing the booking form enclosed with is issue and returning it to Peter Hammond (contact details inside the front

cover). Anyone wishing to contribute a paper at the conference should also contact Peter.

21

Nineteenth-century Tailor's Chalks from St. John's, Newfoundland

by Blair Temple and Barry Gaulton

During archaeological monitoring activities of a major sewer construction and excavation project in St. John's, Newfoundland, Canada, several examples of a peculiar artefact type were recovered from a single find-spot. These artefacts, dating from the latter part of the nineteenth century, initially caused some confusion as nothing like them had ever been found on an archaeological site on the island. They are all made of pipe or ball clay, occur in triangular, rectangular and square shapes and are impressed with the mark W.WHITE/GLASGOW. The connection to the prominent Scottish pipe manufacturing company of William White seemed to imply that these artefacts were tobacco or smoking related. However, after several inquiries to David Higgins (and Gordon Pollock) these objects were identified as tailor's chalks - a thin, hard piece of chalk/clay used to make temporary guide marks on clothing being altered (Houghton Mifflin Company 2004). Under normal circumstances these unfired clay pieces would not survive in the archaeological record. In this instance, their preservation was the result of accidental firing during the 'Great Fire of 1892' a devastating episode that destroyed many homes and businesses in downtown St. John's.

Archaeological and Historical Background

The Harbour Interceptor Sewer (HIS) is an extensive, multi-year construction and excavation project located in the downtown area of St. John's. In 2006, mechanized excavations began on the construction of a large trunk sewer system, intended to collect and direct sewage from the entire city (as well as other neighbouring towns and cities) into a newly constructed wastewater treatment plant on the opposite side of the harbour. Additional excavation and installation were necessary for new water mains, storm and sanitary sewer systems, as well as the associated services to structures in the immediate area. All archaeological monitoring was conducted by Gerald Penney Associates Limited, a consulting firm based in St. John's (Penney 2008a-b).

In 2007, excavations focused on the east end of Water Street, a focal point for commercial activity throughout much of the city's history. From an archaeological perspective one of the significant aspects of this history is the various fires that have taken place beginning in the late seventeenth century and continuing into the twentieth (O'Neill 2003:445-484). Of particular importance here are three fires that ripped through the city during the nineteenth century, one in 1816/17, the second in 1846 and finally in 1892. This last conflagration is best remembered as the 'Great Fire of 1892' and it is responsible for the layout of downtown St. John's we see today. Following this fire, the destroyed portions of Water Street were altered to a uniform width of

generally 60 feet and the orientation of the street was changed to make it straighter (Penney 2006a-b; 2008a-b). Coincidently, the portion of Water Street that was altered the most after the 1892 fire was the focus of the 2007 excavations and construction (Figure 1). As the modern road is as much as 20-25 metres north of the historic location of Water Street, trunk sewer excavations went directly through the foundations of three separate blocks of buildings.

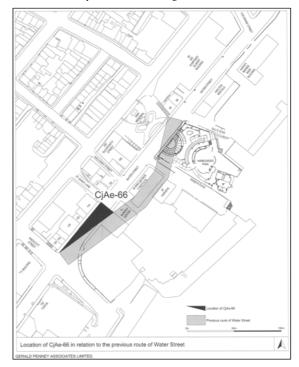


Figure 1: Portion of Water Street excavated in 2007, showing the approximate location of the street before the 1892 fire and its altered orientation, and the location of CjAe-66.

The westernmost block consisted of a length of attached structures with mortaredstone foundations and was given the site designation Water Street East 2 (CjAe-66). Within these structures were extensive deposits of 1892 fire-related debris, covered by post-fire cleanup material and rubble. Examination of city insurance plans and directories determined that construction on these buildings began in the years immediately following the 1846 fire. By 1852, the majority of the block had been rebuilt and by 1880 the entire block was occupied in some form. The tailor's chalks were amongst the fire-related deposits inside one of these structures, a building formerly listed as 128 Water Street (Figure 2). The insurance plans and directories mentioned above also record this building as a tailor shop, first operated by Joseph English in the 1860s-70s, followed by a Mark Chaplin (Goad 1880; Might 1890; Noad 1852).

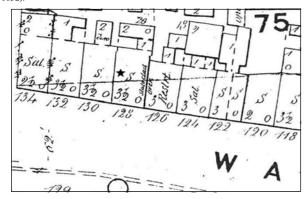


Figure 2: Section of the 1880 insurance plan (Goad 1880), showing 128 Water Street. The 'star' inside the building indicates the approximate location of the tailor's chalks. (Courtesy of the City of St. John's Archives)

The Tailor's Chalks

Brief test excavations inside 128 Water Street recovered a total of 34 tailor's chalk fragments, representing a minimum number of 18 pieces. They were found on the building's sub-floor in two distinct clusters only a meter apart, possibly representing the remains of two boxes/containers of chalks. All three shapes (triangular, rectangular and square) were represented in each location. Each shape or form is also mould-made and has slightly rounded corners and tapered edges. The triangular examples measure approximately 5.4cm from top to bottom point, 5.4cm from top corner to top corner and are 6.1mm thick (Figure 3a). The rectangular pieces are 6.8cm long by 4.2cm wide and 5.7mm thick (Figure 3b). The square chalks (Figure 3c), while all identical, are not as uniform in shape compared to the others and vary in height from 5.2-5.3cm, 5.4-5.6cm in width, and are 6.0mm thick.



Figure 3a: Triangular chalk (photograph by Barry Gaulton). From the collections of The Rooms Provincial Museum.



Figure 3b: Rectangular chalk (photograph by Barry Gaulton). From the collections of The Rooms Provincial Museum.



Figure 3c: Square chalk (photograph by Barry Gaulton). Provincial Museum.

The above measurements represent averages. Although the artefacts are clearly mould-made, the complete examples exhibit slight variations likely caused by differential exposure to the heat of the 1892 fire. This is best illustrated by one rectangular chalk fired to a stoneware consistency, whose fabric is light grey and surface a mottled brown (Figure 3d). Despite its slightly warped and melted form, it measures 6.7cm long by 4.0cm wide. The measurable attributes given above may therefore be slightly less than the 'original' size of these normally unfired chalks.

All three forms bear the incuse maker's mark W. WHITE/GLASGOW in block letters on the 'upper' surface of the chalk. On both the From the collections of The Rooms triangular and rectangular examples, this mark is contained within a similarly-shaped, impressed



Figure 3d: Burned square chalk (photograph by Barry Gaulton). From the collections of The Rooms Provincial Museum.

inset with a bevelled edge radiating out from each of its corners. Based on the precise positioning of the inset and mark on all complete specimens, it looks to have been incorporated into the mould rather than stamped afterwards. A simple, relief-decorated motif - possibly representing knot work - also underlies the manufacturer's name and city of origin on the triangular and rectangular forms, and each is slightly different (Figure 4a-b). The square examples, while still bearing the mark of W. WHITE/GLASGOW, are noticeably fainter, the name and city are spaced close together and there is no sign of any decoration. As would be expected, the

use of incuse block lettering and relief-moulded decoration are also common features on nineteenth-century Glasgow pipes (Gallagher 1987,73).



Figure 4a: Close up of mark on triangular chalk (photograph by Barry Gaulton). From the collections of The Rooms Provincial Museum.

The clay tobacco pipe business first established by William White in Glasgow, Scotland was in operation from 1805 to 1955 (Walker 1977,1031). However, based on what we have researched thus far, there are no published references to this company ever having manufactured tailor's chalks. Many nineteenth-and early twentieth-century Scottish pipe manufacturers produced and sold a limited number of other clay-based goods unrelated to smoking. For example, a stock of materials listed at Alexander Coghill's Glasgow shop dated March 1860 shows '250 Bath Bricks' and '1 Gross Clay Squares': whereas William Christie's pipe factory is described in 1891 as carrying on an "immense trade in his New Patent Household Cleaning Stone" (Gallagher 1987, 65-66. In



Figure 4b: Close up of mark on rectangular chalk (photograph by Barry Gaulton). From the collections of The Rooms Provincial Museum.

Edinburgh, one pipe company is also listed in 1919 as making pipe clay blocks for whitening doorsteps (Walker 1977, 341). The production of tailor's chalks by William White in the nineteenth century can be seen as an extension of this increasingly diversified industry. It comes as no surprise therefore to find a trade directory from 1872 listing William White and Sons as selling tobacco and fancy goods (*Ibid.*).

Conclusion

Two things can be stated as a result of these finds. First, tailor's chalks were made by the company William White (and Sons) as early as 1892 as a sideline to manufacturing clay tobacco pipes. Second, future work in downtown St. John's has the potential to reveal other ephemeral objects inadvertently preserved from the various fires that ripped through this city over the last four hundred years. Even though a listing or advertisement for the manufacture or sale of tailor's chalks by pipe makers has yet to be found, further research into the full range of products produced by William White may reveal a time frame for the manufacture of these interesting items.

Acknowledgements

Both authors thank Dr. David Higgins and Mr. Gordon Pollock for their help in identifying these curious objects. It was David's inquiry to Mr. Pollock, a retired pipe maker who remembered making similar objects at Pollock's Manchester pipe factory, that later led to a positive identification. We also acknowledge the assistance of Elain Anton and Kevin McAleese at *The Rooms Provincial Museum* for allowing a short term loan of the tailor's chalks and for permission to photograph these artefacts. Thank you to Gerald Penney and Robert Cuff of Gerald Penny Associates Limited for reading

the initial manuscript and to Toby Simpson, also from GPA Ltd., for producing the map in Figure 1.

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The Flûte L'Atlas

Report on the Pipes Discovered on the Wreck of the Flute *L'Atlas* on December 2nd 1739 in Lampaul Bay, Ouessant, France.

by the late Maurice Raphael (Translated and re-worked by Peter Davey)

The last voyage of the L'Atlas

The *L'Atlas* left Brest (France) and made a passage to New Orleans in Louisiana (America), where she took on cargo such as, brays, tar, cocoa, peltries, indigo, rice and tobacco for different La Rochelle merchants, as well as twenty four thousand bricks for the King.

After loading the cargo she left New Orleans on August 16th 1739 but had to go into quarantine in La Balise Roads for forty days, as several men had been affected by fever, and did not set sail for France until September 25th. During the journey the epidemic spread among the crew and the soldiers who were travelling as passengers. Seventy men perished, among them the Captain De Kerlorec who died on November 25th. His deputy Captain Sorel took command.

On December 1st, the L'Atlas found herself ten miles to the north of Ouessant, the wind having freshened from the northwest. She remained on the starboard tack until the end of the day, when she lay close to the Stiff Light at Ouessant. Towards midnight the wind backed to the southwest and, with a head wind, and not having enough fit men to beat to the open sea, L'Atlas was driven irretrievably on to Pern point.

On December 2nd, surrounded with breakers, *L'Atlas* dropped two anchors, whose cables parted. The ship broke up on Loqueltas point, with the loss of sixteen lives (Figure 1 below).



The Pipes

In 1994 under water excavations in Lampaul Bay, France located the wreck and parts of two clay tobacco pipes were recovered. The first is a slightly damaged spur-less bowl and adjoining stem fragment, stained yellow and red probably by the conditions in which it had lain (Figures 2 and 3). The bowl has the moulded initials RD with a dot in between within a heart-shaped frame on the right hand side. At its aperture it is 20.4mm wide on its long axis and 2.6mm thick. The stem bore is 2.2mm.



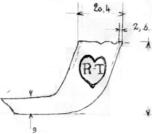


Figure 2: Photograph of the first bowl from the wreck showing the staining.

Figure 3: Sketch of the first bowl from the wreck with dimensions.

The second pipe is from a similar form and mould but only a small part of the bowl survives, enough to identify the remaining left hand side of a heart-shaped stamp similar to the first and the base of what is almost certainly the left side of a letter R (Figure 4). A much greater length of stem survives in two parts. It is also greatly stained.



Figure 4: Second pipe fragment from the wreck with traces of a heart-shaped stamp on the side of the bowl.

The origin of the clay pipes found on the L'Atlas

The pipes found on the *L'Atlas* can be closely compared with those recovered from the Tippet family kiln site in Romarin Street, Bristol (Figure 5), which also included 'export' models lacking in a spur eg:

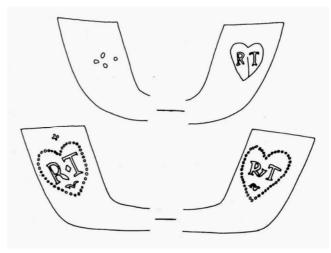


Figure 5: Tippet pipes after Jackson and Price (1974, 111, Figs 208, 281).

The Tippets were manufacturers of clay pipes in Bristol from 1660 to 1720. This kiln appears to have been in use between 1710 and 1750. The initials, RT in a heart, are the mark of the factory of Robert Tippet of Bristol, England which spanned three generations from 1660 to 1722 and was arguably the most important manufacturer in Bristol at the time.

Robert Tippet I (1660-1682), married Joan daughter of William Thomas in 1660 and was made freeman on May 14th 1660. When he died in 1682, his wife Joan continued production until 1696, with William Tippet II and John Quinton as apprentices.

Robert Tippet II, son of Robert I and Joan was born in 1660 or 1661. He was

apprenticed to Lluellin and Elizabeth Evans and was made free on November 14th 1678. He married Sarah and in 1696 lived in the parish of Saint James with his children Robert, Sarah and Susanna and probably Sarah's mother Joan Tippet.

Robert Tippet III, son of Robert II, was probably born in 1692. He was trained by his father Robert Tippet II and was made free on July 20th 1713. Robert III and his wife Mary took Richard Hemsley as apprentice on September 19th 1720. A will signed on April 13th 1722, indicates that he was still living at that date.

The factory that had been developed by Robert Tippet II and III, had a unique pipe export business with a vast market which continued long after the death of Tippet III as the business is still being referred to as late as 1760. Their pipes have been found in Canada in Newfoundland, New Scotland, New Brunswick and Quebec, and in North America, in Maine, Massachusetts, New York, Pennsylvania, Michigan, Delaware, Virginia. Tennessee and Louisiana as well as in Jamaica (Walker 1977. 660-665).

Discussion

Although the stem bore of 2.2 mm might suggest an early eighteenth-century date range it seems most likely that these pipes were made for export at the Tippett factory in the 1730s in time for them to have been conveyed to north-west France, probably via St Malo and eventually lost with the *L'Atlas* in1739 after a return voyage across the Atlantic. Two hundred and fifty-five and a half years later they broke surface to tell us their story.

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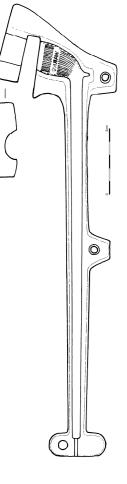
A Mid-Nineteenth Century Pipe Mould from Lincolnshire

by David Higgins

At the 2008 SCPR conference in Liverpool Pete Rayner showed a part of cast iron pipe mould and asked if anyone could identify the age and origin of the mould. This paper puts forward the evidence to suggest that the mould can almost certainly be dated to the 1850s and that it was originally used by the Warrs family at Alford in Lincolnshire.

Only the left hand side of the mould survives and it was clearly for making a medium length pipe (Figure 1). The mould is of a typical English design with a slot for trimming the top of the bowl during manufacture and inserted pins to accurately locate the two halves of the mould (there is one pin in this half near the mouthpiece and two holes to take pins from the missing half of the mould). The narrow area immediately around the outline of the pipe (the 'tables') is flat and would have clamped tightly against the other half of the mould to form the pipe while the surrounding areas are gently angled away to allow surplus clay to escape. The stem in the mould measures 274mm (about 1034") but experience of making pipes from similar moulds suggests that, as a result of shrinkage during drying and firing, the finished pipes would have had stems of around 258mm (101/4") in length. The bowl has a small plain spur beneath it and is decorated with leaf seams and closely spaced narrow flutes (Figure 2). The flutes are interrupted by a central band containing lettering, but the mould surface is in poor condition so that the lettering is only partially legible. The word represented appears to start 'WAR...' and to be four or five characters in length. Pipes with lettering around the bowl are most frequently found in Lincolnshire and the surrounding areas and typically give the maker's name and/or place of work. The maker's name is usually found on the left hand side of the bowl and so this is what the lettering is most likely to represent.

The mould itself at one time it belonged to John Goforth, the last pipemaker in Beverley, who was born in about 1841 and worked as a pipemaker from c1861-1909. The lettering on the bowl, however, does not match either his name or place of work, suggesting that this was an old mould that he had obtained from elsewhere. In their study of regional bowl markings, Walker and Wells illustrate a bowl marked WARRS / ALFORD, which they attribute to John Warrs of Alford, citing references to him in the town in 1851 and 1856 (Walker and Wells 1979, 16-7). The bowl they illustrate is decorated with exactly the same design as this mould and the maker's name would fit perfectly with the surviving lettering in the mould. It seems likely that the bowl they illustrated was made in this mould and that the missing half would have been marked with the place name ALFORD.



Having deciphered the surname and found the place where this mould was likely to have been used originally, it was possible to look for more information regarding the pipemaker himself and the dates when he was working. It turned out that, in fact, there were two pipemakers named Warrs in Alford at this time. Joseph and John Warrs are first recorded as pipemakers in the 1851 Census when they were living in West Street, Alford, in Lincolnshire. They were brothers, aged 23 and 15 respectively, both born in Hull, and they were visitors staying with John and Charlotte Cunningham (John was a farm labourer). How they had become involved in pipemaking is not known since their father, Thomas, was a metalworker from Dudley in the West Midlands. He is variously described as a boiler maker, smith and shoeing smith in the 1841, 1851 and 1861 census returns respectively. In 1841 the family had been living in St James Street, Hull where the census shows that Thomas and his wife Rebecca had five sons, then aged between 5 and 15, but with no occupations shown for any of the children. Rebecca had died by 1851 and the family had clearly broken up. Thomas had moved to Grimsby with two of his sons, who were working as an engineer and a smith, while Joseph and his youngest brother, John, had moved to Alford to work as pipemakers.

The 1856 reference referred to by Walker and Wells has not been relocated but, by this date, John would still have only been about 20 years old, which seems rather young to be having moulds made on his own account. Furthermore, he did not stay in the pipemaking trade since, by 1861, he had married and moved to Grimsby, where he was working as a stoker on a steam packet. By that date he also had a one year old son, born in Grimsby, showing that he had been there since at least 1860. This tends to undermine Walker and Wells' suggestion that it was John Warrs who originally used the mould. It seems more likely that the 'WARRS' pipe mould was in fact made for Joseph, John's older brother, who must have been looking after him as he grew up in Alford, and who continued in the pipe making trade for the rest of his life. In practise, the two brothers were presumably working together in Alford during the 1850s and so the named mould may well have referred to their joint business.



Figure 2: Detail from the mould drawing shown reversed so that the bowl form and decoration can be seen as it would have appeared on the finished pipes. Drawn by the author.

By 1861 Joseph Warrs had also married and moved on, since he was then living in Market Rasen with his wife, Martha, and two children, Richard and Martha, who were then aged 4 and 2. Both of the children had been born in Alford so he must have still been there as recently as about 1859. Joseph was still described as a tobacco pipe maker and he was living next door to George Spencer Watkinson, another tobacco pipe maker, who was six years his senior. George had also been born in Hull but had been brought up in Grimsby, where he is shown as an apprentice pipe maker to his father, Spencer Watkinson, in the 1841 census. Given that both families had links with Hull and Grimsby they may well have known each other and it seems likely that Joseph moved to work for George in Market Rasen when his brother married and moved to Grimsby.

Joseph and Martha Warrs had three children and continued living in Serpentine Street, Market Rasen, next to the Watkinson's, until at least 1871. By 1881, however, Joseph had died and his widow had moved with the three children, all still unmarried, to Clee with Weelsby. None of them followed into their father's trade and even George Watkinson may have retired from pipemaking, being given as a 'cottager and cow keeper' in Legsby Lane, Market Rasen, in the 1881 census. George Watkinson died in 1885, having moved to the town in 1843 to set up his own workshop (Walker & Wells, 1979, 17), where he was already employing three men by 1851 (census). John Goforth of Beverley was working as a pipemaker from at least 1861 and so could have either obtained the mould direct from the Warrs' when they moved from Alford, or via George Watkinson, for whom Joseph Warrs probably worked during the 1860s and 70s.

Drawn by the author.

Figure 1: Cast iron pipe mould with the maker's name WARRS around the bowl.

From this brief review of the evidence, it seems clear that Joseph and John Warrs did not come from a pipemaking family but that, following the death of their mother, they moved to Alford where they worked together as pipemakers. They are only recorded in the town from c1851-1859, which provides a narrow date range for the production of the mould with their name on. By 1861 both brothers had married and left the town. John gave up pipemaking and moved to be near his father in Grimsby while Joseph moved to Market Rasen, where he almost certainly worked for George Watkinson. George Watkinson came from a pipemaking family and had moved to Market Rasen in 1843, where he was already employing three men by 1851. Joseph died during the 1870s and none of his children continued in the trade. George stayed in Market Rasen until his death in 1885. John Goforth could therefore have obtained the mould at any time between c1860, when the Warrs' left Alford, and 1885, when Watkinson died.

What is particularly important about this mould is the close dating for its production that is provided by the Warrs' time in Alford, since the mould can almost certainly be dated to the 1850s. As such, it not only provides a reference point for the form and construction of moulds in the mid-nineteenth century but also tightly dated evidence for the stem length, bowl form and the styles of decoration that were being employed.

Reference

Walker, I.C., and Wells, P.K., (1979), 'Regional Varieties of Clay Tobacco Pipe Markings in Eastern England' in P Davey (ed.), *The Archaeology of the Clay Tobacco Pipe*, I, British Archaeological Reports, British Series 63, Oxford, 3-66 (411pp).

News from Pipe Aston 2008

by Allan Peacey

2008 will be remembered as the wettest season since we began in 1995. We have always experience the odd thunderstorm, but these are usually quickly over. This year it rained every day, or rather every evening and night. The site is so well drained that we were hardly hampered by this in the daytime. The water never penetrated more that 1cm and the ground, which in previous years had been so hard to dig, was this year ideal. We began by opening a trench over the larger of the two magnetic anomalies shown on the geophysics. To our surprise we found a kiln largely demolished by the pipe-makers, probably in search of re-useable materials, and leaving little evidence of its structure. The chamber floor had been a single large stone tile of which a part remained in situ with some joining fragments stacked on edge to one side indicating a failure to recover it in tact and the abandonment of the effort. The kiln did however display one interesting, and so far unique, feature. The fire path from the stoke pit was

on a tangent to the probably circular chamber. This design anomaly was not carried forward to the later kiln examined last year. With so little surviving stratigraphy in Trench VI we opened a second trench, VII with three clear objectives.

- To gain a better understanding of the relationship between the later kiln and the two associated ditches.
- To recover more stamped pipes, stamping tools and, hopefully, to complete the
 profile of the tin glazed albarello, fragments of which had been recovered last
 season.
- To gain a better understanding of the superstructure of our two kilns by recovering material from their demolition that had been dumped into the adiacent ditch.

Trench VII was sited to the north of trench II and with trench I bisecting it diagonally we were able to check our interpretation of the features seen in the narrow confines of trench I. Excavation of the larger area on plan removed all doubts regarding our previous interpretation; that ditch one was cut or cleaned immediately prior to the construction of kiln two, that it had been filled with debris from the use of the kiln over a period of time and that ditch two had been cut through this back fill probably after production had ceased. Ditch one was a V ditch whilst ditch two had a flat bottom and sloping sides.

We did recover more stamped pipes together with three new stamping tools and base sherds from the alborello which gave us the complete profile. One of the stamping tools prints the initials EF or EP. It is crudely formed by squeezing and rolling in the form of a small carrot. The end has been knife pared and the initials pressed in with a simple tool as a series of straight lines. Of the other two tools one is a modified pipe stem with one end notched out so as to impart a wheel stamp, the other, also a wheel stamp is a rolled billet which had been transversely pierced to take string or wire carrying handle.

Work has continued on the processing of finds; initially the preparation of a full catalogue. In the process two further stamping tools have been discovered amongst the material recovered in 2002. One of these is a neat wheel with notches cut between the radial lines. The second has two capital letter initials. The first being an T with centre diamond shaped boss. The second is more difficult, having damage to the upper part. It may be an A, an R or an H. It has clearly been impressed rather than engraved as there is a ghost image caused by a double strike. The material relating to the kiln superstructure is quite informative. There is nothing comparable with the usual stem reinforced composite that we are familiar with from Roy's Orchard and other sites spread around the British Isles. In its place are large tile fragments made both from white clay and split stone together with fillets of white clay daubed over angled surfaces. These have clear finger marks on the one side and angled flat contact faces on the reverse. This suggests a muffle chamber made up of stone and clay tile joined

and bonded with daubed clay. This method of construction is reminiscent of the kilns described and illustrated by Duhamel du Monceau in 1771. The kilns he was describing were those used at Roen, France, where according to Walker the industry had been established by English makers.

I am pleased to report that Liz Gross, who came to work with us in Roy's Orchard as a complete novice, is currently working towards a Higher Education Certificate in Archaeology at Leicester University inspired by working at Pipe Aston. This is not the first time one of our members has chosen to further their knowledge through an academic course. Margaret Feryock achieved a Post Graduate Diploma in Field Archaeology from Birmingham whilst working on the project and is currently working in Bristol.

Drawings of Eighteenth-Century Clay Tobacco Pipe Kilns from Alingsas, Sweden

by Arne Åkerhagen and David Higgins

The Provincial Record Office in Gothenburg contains two eighteenth-century drawings of clay tobacco pipe kilns from Alingsas in Sweden. These are the only pipe kiln drawings that are known to survive from anywhere the country and they provide a valuable insight into the types of kiln that were being used in Sweden at that time. The drawings are particularly important since they not only show the internal arrangement of the kilns, but also the design of the superstructure and chimney, parts of the kiln about which very little is known from anywhere across Europe at this date. As such, the information provided by these drawings is of international significance.

39



Figure 1: Jonas Alströmer (1685-1761).

The drawings were made at the factory of Jonas Alströmer (Figure 1) in Alingsas. Jonas Alströmer (1685-1761) is best known for having introduced the potato to Sweden, but he was also a pioneer of early industry and agriculture and established many successful businesses in Sweden. He had moved to London to work as a clerk in 1707 but went on to become a successful shipbroker in his own right. During his travels he is once said to have visited a clay pipe works in Scotland, where he commented that he could make pipes much better than they did there. This visit clearly shows that he would have been aware of British pipe making technology, which he could have transferred back to Sweden. In 1729 he received a permit to start a clay pipe factory (kritpipsbruk) in Nolhag, a suburb of his home town Alingsas. It is not known how quickly production was started but it was clearly well-established by 1746, when the following account of it was made (TJr manufakturdirektionens; Gothenburg Record Office).

In that year it was recorded that the although the factory belonging to Mr Jonas Alströmer was originally intended to be inside the city, the factory was actually built outside of the city so as to avoid the risk of fire from the kilns. The factory made both English and Dutch styles of pipe and had three kilns. There were two master pipemakers, under whom were 16 further pipemakers. In addition, others were employed in burning the pipes, moulding, clay preparation, making barrels, cutting wood, packing, rolling, trimming and polishing, making a total of 79 in all. With wives and children connected with the factory there were 138 people employed in total. Output in the year had risen to a value of 54,761 Daler 20 Ore in Royal coins.

In 1746 the factory was also visited by Alströmer's friend, Carl Linnaeus, who wrote a description of it. Linnaeus recorded that the pipe factory was built outside the city and that there were 60 people engaged in preparing the clay, rolling, drying, polishing and stamping the pipes. The clay was shaped in two piece brass moulds, which were made and filed by a mould maker in a separate building. A sketch of a mould prepared by Linnaeus (Figure 2; from his "Vastgotaresan" in the Linnaeus Society, London) is particularly interesting since it clearly shows a slot for trimming the top of the pipe, which is a distinctly English rather than Continental technique.



Figure 2: Drawing of a pipe mould by Linnaeus (1746).

Linnaeus noted that the clay from Holland was white and didn't discolour in firing. When he scraped the unfired pipes with his nail or a knife to see what they were made of, the resulting powder was slippery, like talcum powder. There was a basement in the factory in which the unfired pipes could be protected from frosts and strong drafts. The container in which the pipes were fired was made of clay, similar in shape to a sugar loaf, although with a flat base. When the pipes had been placed in the container for firing, they were covered with a piece of paper, bent so as to form a cone. This paper was smeared with clay on both sides so that it formed a hard crust as the paper burned away. Once again, this is an English technique, which suggests that Alströmer may have obtained his technology from Britain rather than elsewhere on the Continent. The pipes were burned for 25-26 hours and there were 15-16 barrels of pipes in each firing. Each barrel held 10-20 gross of pipes with 144 pipes to the gross. This

suggests that the kiln would have held somewhere between 21,600 and 46,080 pipes for each firing.

It is extremely useful so have these two descriptions of the factory from 1746 since one of the two drawings in the Gothenburg archives is dated 13 April 1750, just a few years after these descriptions were written. This drawing (Figures 3 & 4) has a partially surviving caption at the top, which is very difficult to read, but appears to say "...... Pypmaka bekommit ... 13 April 1750 uti Unges ... 9d ... 2 May vide copieboken ". The drawing itself is particularly interesting since it is labelled in English, which once again suggests a link between British technology and the pipe factory at Alingsas. The captions identify, from top to bottom, the chimney, arch, pot, fire place and furnace hole. The 'pot' is what we would now refer to as a 'muffle', i.e., the actual chamber within which the pipes were stacked for firing and, in keeping with Linnaeus's description, it has tapering sides and a flat base. This is a very distinctive form, unlike any so far known from England, and it may represent a particular Swedish development. It is also different from the system used in the Netherlands where large, roughly bi-conical ceramic vessels that acted like giant saggers were used. It is also important that the 'pot' is clearly and unambiguously identified, since this description has been noted elsewhere in England and so seems to have been the contemporary term used for the actual firing container (muffle) during the seventeenth and eighteenth centuries. For example, the late seventeenth century inventory of Thomas Sharp of Romsey in Hampshire includes "raw pipes in the pott readie to be burned".

It is also interesting to note in the drawing (Figure 3) that a stepped line is indicated next to the 'fire place', most likely suggesting tapered sides so that the heat would be directed up and round the sides of the 'pot'. The arch above the pot was presumably to accommodate the cone shape formed by the stems of the pipes, which would have been covered with the paper smeared in clay to seal them from the smoke and flames prior to being fired.

The second drawing is rather more neatly executed than the first but clearly shows either the same kiln or a similar one to it (Figures 5 & 6). In this instance, however, the drawing is a little more difficult to interpret in that there is just a domed chamber depicted within the kiln and not the 'pot' within which the pipes would have been placed. It is not clear whether this has just been omitted or whether the internal arrangement of this kiln is different. The latter is perhaps more likely in that the other views appear to show external elevations and cross sections of the kiln with a series of internal features, perhaps representing fire bars and flues, which seem to differ from the first drawing. These flues seem to enter into the domed chamber, which may well have been accessed by the large arched opening shown in one of the external elevations. The caption to this drawing has been translated as 'copies of Tobakz Pypmakar Brännugnrn Rytning as Petter Unge have with them' and there are some numbers in the top left corner, which appear to include the date 1795.

41

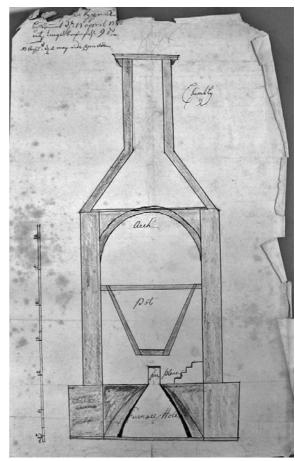


Figure 3: Drawing of a pipe kiln from Alströmer's factory dated 13 April 1750.



Figure 4: Detail of the text from the pipe kiln drawing dated 13 April 1750.

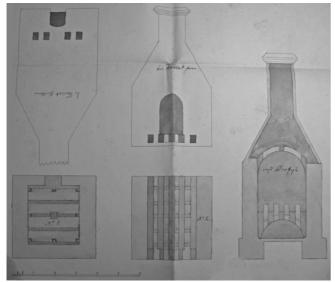


Figure 5: Second drawing of a pipe kiln.

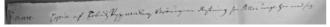


Figure 6: Detail of the text from the second drawing of a pipe kiln.

These two sets of drawings provide a wealth of information about the internal arrangement and external appearance of these eighteenth century kilns. There are no surviving examples of kilns of this date and excavated evidence can only ever reveal

the foundations, not the superstructure itself. These images have clearly been carefully observed and drawn, as a result of which they provide crucial evidence for the pipe kiln technology of the period. They are of particular interest to British archaeologists given the possible transfer of British pipe making technology to Sweden.

It is not known when the factory at Alingsas closed – the last reference to it in the parish records is in 1828. These drawings, however, provide a lasting legacy for the factory and one that is of international significance for the study of this particular branch of eighteenth century technology.

Acknowledgement

The authors are grateful to Mr Walter Loewe, former head of the Swedish Tobacco Museum, for his help with deciphering the captions for the two drawings.

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Tennant & Son, Tobacco Pipe Makers, Berwick upon Tweed

by Peter Hammond

Many readers will be familiar with the late nineteenth-century and early twentieth-century pipes marked on their stems with either 'TENNANT & SON – BERWICK' or 'Wm TENNANT – NEWCASTLE'. Like many pipes dating from this period from the north-east of England (and Scotland) a great many of their products were short 'cutty' pipes, with the bowls commonly marked 'TW' facing the smoker and with a latticed heart motif on one side. Others were 'RAOB' pipes with double-spurs, fluted types, or plain spurless 'BURNS CUTTY' types.

There is no doubt that two of the major manufacturers operating in the north-east were Charles Tennant & Son of Berwick and William Tennant of Newcastle. But how were they related, and what influence did they have on the types of pipes made in the northeast? This article focuses on the Berwick pipe making concern that was run by the Tennant family while in the next issue there will be an article on William Tennant of Newcastle.

The story starts with Charles Tennant. He was born in Edinburgh in 1805 and began his career as a painter and glazier. He was married in 1837 to a dressmaker Mary Forster, daughter of a Berwick bookseller called Robert Forster. The couple were to have at least five children – William (born 1838), Elizabeth (born 1840), Robert (born 1841), Charles (born c1845) and Christian (born c1846).

By the mid 1840s Charles had commenced pipe making, taking over a small pipemaking workshop close to the appropriately named Kiln Hill. Proof that this was not his main occupation during this period is confirmed with the 1851 census for he still described himself as a painter and glazier. A detailed map surveyed at that time shows the pipe manufactory with two kilns, store sheds, and workshops (Figure 1).

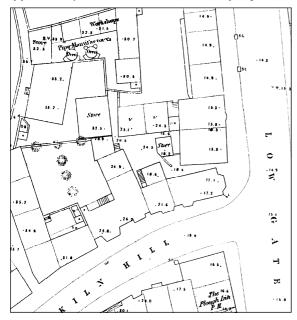


Figure 1: Large scale Ordnance Survey map of part of Tweedmouth c1852 showing the pipe manufactory to the east of Yard Heads.

Pipe makers are first recorded in the baptism registers for Tweedmouth in 1845, while some employees are listed in the vicinity of Main Street and Kiln Hill in the 1851 census. During the 1850s Charles Tennant must have also been trading as a grocer for he is listed as both a tobacco pipe manufacturer and grocer a Northumberland Directories dated 1858 and 1864, while in an earlier Directory dated 1855 Mary

Tennant was listed as a grocer.

The pipe making business grew rapidly, and by the time of the 1861 census, Charles Tennant described himself as a tobacco pipe manufacturer employing thirteen men and five women, with many of the employees again living in Main Street and Kiln Hill. In 1863 he was in a financial position to be able to purchase the land on which the manufactory, house and shop stood. His ownership is also confirmed within the Tweedmouth Parish Poor Rate Book of that year.

On 15th September 1864 a fire caused some damage to the pipe works. *The Berwick Journal* of 16th September reported that:

'Mr Charles Tennant has for a number of years carried on the business of a tobacco pipe manufacturer. As the business increased, Mr. Tennant was compelled to add building to building, until the premises now occupy a large irregular plot of ground, which includes clay stores, furnace yards, drying sheds, packing rooms & c., and at one side of the premises is a large stable which upon this occasion was filled with hay which was used for the purpose of packing. Adjoining the pipe manufactory is a joiner's shop, belonging to Mr Geo. Brown, and in this and the yard attached, a large quantity of seasoned wood was stored. Mr. Tennant has of late been busily engaged in supplying orders at a distance, and on Thursday the men in his employ were engaged until dark in executing the orders in hand. A large quantity of pipes were in the drying (or "putting") rooms, which were erected nearly in the centre of the ground occupied by the premises, and when the place was closed for the night, all was reported to be right. Just at eight o'clock, however, fire was seen by a neighbour to come from the building, and upon an alarm being raised, the whole building was seen to be in flames...'

Fortunately damage was confined to the drying room, and despite this set back (he was fully insured) the business continued to expand. In 1871 Charles Tennant described himself as a grocer [and] tobacco pipe and manufacturer employing eighteen men, twelve women, four girls and one boy – thus making a total of thirty-five employees. Eldest son William, then married, was then a 'commercial traveller in tobacco pipes'.

An ambrotype photograph, probably dating from the 1860s, survives with descendants of the family that shows Charles and Mary Tennant. Though the glass on which the picture is mounted is cracked it presents a very clear image of the couple, and Charles certainly has a striking appearance with his long sideburns that were so fashionable at that time (Figure 2).

In November 1871 'a deputation of tobacco pipe makers in the employment of Mr Charles Tennant, Berwick on Tweed, waited on that gentleman...to request an advance of 18 percent. He at once acceded to their request and the men commenced to receive the advanced rate on December 1st - further evidence that the business was



Figure 2: Ambrotype photograph of Charles and Mary Tennant c1860s.

continuing to be successful (Tobacco Trade Review, 9th December 1871). Weeks later he had to appear in the local court when he was charged 'with an offence against the Railway Act, in forwarding boxes to the Tweedmouth Station consigned as pipes...but which were found to contain matches, fuses, and pipes. The two former articles being dangerous, the defendant ought to have specified to that effect on the delivery of the boxes. The defendant agreed to pay the full penalty (£20) in one case, and the Company agreed to withdraw the other three cases' (Tobacco Trade Review, 13th January 1872). This was published as a warning for other people in the trade to take heed

Meanwhile Charles Tennant made his last will on 13 February 1873, at which time he described himself as a

pipe manufacturer, grocer, and provision merchant – the grocer and provision merchant part of the business was run from the front shop with the pipe manufactory behind. His will made no reference at all to eldest son William – who by that time had moved to Newcastle to set up his own business. At first this would suggest that Charles might have supplied capital and equipment to enable him to set up in his own right, but family tradition suggests that William and his father had quarrelled. The pipe factory in Tweedmouth was instead bequeathed to second eldest son Robert. By then the business was known as Charles Tennant & Son.

Charles Tennant died on 20 November 1873, at the age of 68 years. Robert proved to be as successful as his father in running the business, and continued to expand the premises and capacity. In 1877 he was in a position to purchase a house adjacent to the factory at 13 Yard Heads for the sum of £455 in which he went to live. He had married Sarah Wilson Moor in 1866 and the couple had at least eight children, though some died young.

Robert Tennant continued to live at 13 Yard Heads for the rest of his life. The 1881 census lists him there with his wife Sarah and family as a tobacco pipe manufacturer employing seventeen men and fourteen women – making a total of thirty-one employees at the time.

During October 1884 *The Berwick Journal* newspaper published a detailed account of the pipe factory in Tweedmouth. This is published in its entirety as it provides some useful detail regarding pipe making:

'Among the many industries which are prospering and extending on the south of the Tweed is a large and efficiently equipped clay pipe factory. There are over thirty men and women employed in Tennant's pipe factory, which demonstrates the immense number of pipes, which are smoked and broken in our district. It is now more than half a century since pipe making was one of the industries of Tweedmouth since when it has increased its importance. About forty years ago the late Mr. Charles Tennant purchased the goodwill of the business. He was well known in Berwick and his burly form and genial smile call up vivid recollections of as hard working, industrious and worthy a man as ever crossed Berwick Bridge. His son, Robert Tennant, is thoroughly master of his business and has had thirty years experience acquiring a practical knowledge of very department. The consequence is that "Tennants" pipes are the best that can be filled with tobacco and are sold at a low price when compared with the high wages of his operatives; some of the men in Robert Tennant's employ averaging about £2 per week.

Were it not for false pride more would smoke clay pipes than the wooden contrivances for if a man uses clay pipes he can at the expense of a farthing get a clean new one at any time. Any real smoker prefers a clay pipe and if a Borderer he would in all probability ay "Give me a Tennant's TW" or a "Burn's Cuttv."

The establishment in Tweedmouth is quite a factory. An engine is used for driving a sawmill and other machinery connected with the business. The sawmill is required for cutting wood to make boxes in which the pipes are packed for transit to customers.

There is only one part of England where pipe clay can be found and that is from a bank of it in Devonshire, which supplies the trade not only in England but all over the world. It is owned by three different firms who each earn a large sum of money annually from their lucky possession. Shiploads of this peculiar clay are to be seen emptying at the quay periodically.

Mr. Tennant uses three different kinds of clay in the preparation of his pipes. In the mill house the clay is first ground into meal from the solid lumps in which it is sent from the clay banks. After the clay is taken from the mill house it is spun into shapes and then arranged on the low benches at which pipe makers work.

Sheep's wool dampened with oil stands on a little dish on the bench and is used in the pipe mould in which the damp clay is placed. The mould is then closed and placed into a chest and the chest is closed upon the mould by a lever, which is placed on the bench close to the pipe maker's seat. After this a hole is bored through the shank of the pipe by means of a wire.

This process of moulding the pipe after the clay has been prepared is remarkably quick, an expert pipe maker making a pipe in less than a minute. The pipes are then placed on a long case on which they are arranged in front of a stove and dried before they are sent in the finishing room to be dressed by women. After the pipes are finished, they are taken to the packing house where they are arranged in round fireclay containers called saggers, which are then stacked in the kiln and after they have been fired they are ready for smoking.

Mr. Tennant's customers are found on both sides of the border and each pipe that is sent out from Tweedmouth has a finish and beauty of shape not found in those turned out by any other maker. The fancy pipes manufactured by Mr. Tennant are in some cases very artistic in design and combine not only beauty and shape but are good smoking pipes.'

Much of the process of pipe making process described above is standard, and the claim that Tennant's pipes were somehow unique in finish and beauty is perhaps an overstatement! However the reference to the 'TW' and 'Burn's Cutty' models confirms that they were well-known and popular pipes in the region at the time. Illustrations of typical pipes made by Tennant & Son are shown in Figure 3.

Their pipes were certainly popular in the north-east with examples commonly being found. I have recovered examples from the Yorkshire Dales, and they have also been found in the River Thames in London (some no doubt dropped by coal haulers coming from the north-east). I have even found one in canal dredgings near Nottingham.

The quay referred to in the report (Tweed dock) can be clearly seen on the 1898 Ordnance Survey map showing part of Tweedmouth in Figure 4, which also shows the position of the Pipe Manufactory. Yard Heads is the narrow path close to the works. This dock must have been very convenient for shipping the clay in and sending the finished pipes out. A bill-head from the same date (Figure 5) also states that the Charles Tennant & Son were also pipe clay manufacturers for step and hearth cleaning – a common side line with pipe makers.

Following the death of his father Robert had become the owner of the house at 13 Yard Heads while his mother Mary had continued to own most of the remaining premises, including the pipe manufactory, until her death in 1886 at the age of 80 years. Meanwhile Robert's wife Sarah died in early 1887, when she was only 46, and on 23rd November the same year Robert re-married to widow Jane Hossick Tait. At the time of the 1891 census, some of Robert's children were still living with them, including son John, then 14, who was described as an 'apprentice to tobacco pipe manufacturer'. Also in the household was their 3 year-old grandson Robert Tennant Tait. His mother was Robert's daughter Mary Forster Tennant, born in 1868, who had married Jane's son Thomas Tait in London in 1887. Mary died the following year when still only 19, and so their son went to live his maternal grandparents.

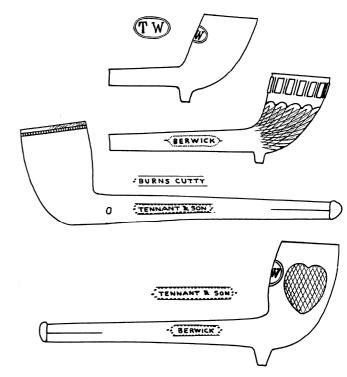


Figure 3: Examples of common types of pipes made by Tennant & Son, Berwick.

On 20th August 1892 Robert Tennant made his last will, where he named his five surviving children Margaret, Sarah Wilson, Alice Moor, John, and Robert, along with grandson Robert Tennant Tait.

A superb picture survives of Robert Tennant sitting in a room in his house at 13 Yard

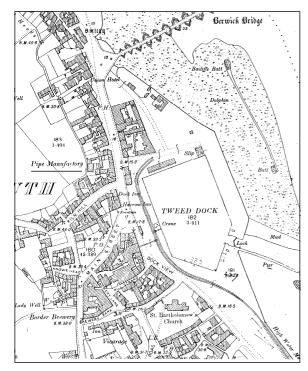


Figure 4: 1898 Ordnance Survey map of part of Tweedmouth.

Heads wearing his smoking jacket and hat, and actually smoking one of his clay pipes (Figure 6), while the rear of 13 Yard Heads is shown in Figure 7.

Robert Tennant died of a heart attack on 25th October 1906 aged 64 years. His widow Jane Hossick Tennant continued to run the pipe factory, assisted by grandson Robert Tennant Tait. In 1911 he married Catherine (known as Katie) Richardson Tennant – who was actually his first cousin once removed. She was the daughter of William Tennant of Newcastle (older brother of Robert Tennant), born in 1879, who had

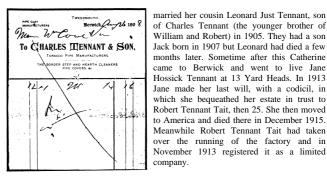


Figure 5: Bill head dated 1898 of Tennant & Son.



Figure 6: Robert Tennant, pipe maker.

In 1911, 1912, and 1913 the firm of Charles Tennant & Son, then described as of the Tweed Tobacco Pipe Works, registered the trade marks 'TENNANT'S IDL', 'BORDER GEM', 'CLIPPER' and 'ZENITH' for use on tobacco pipes. It would appear that these were intended for use on paper labels, common on the stems of pipes by his period. Samuel Mclardy and Edward Pollock of Manchester were for instance using labels on their so-called 'colouring' pipes at the time.

Apparently Robert Tennant Tait had wished to sign up for the war effort once the First World War had begun but he was not allowed on account of being an employer.

Unfortunately, a disastrous fire occurred at the manufactory on 10th November 1915. *The Berwickshire News* provided this report:

'About 1 o'clock vesterday morning, fire broke out in Tennant's Pipe Works, Tweedmouth, the present owner of which is Mr R. T. Tait. The outbreak was discovered by Miss Wood, a niece of Mrs Tait, who occupied a bedroom overlooking the factory. By the time the discovery was made, the flames, fanned by the strong wind, had taken a firm hold of the building, the roof of which was of wood, and thickly covered with tar. The family were soon aroused, and as the house, by reason of its contiguity to the blazing building, was in danger of catching fire, Mrs Tait, and the three other young occupants of the house, were removed to the house of Mr W. L. Trainer, Blakewell Road, Tweedmouth,



Figure 7: Rear of 13 Yard Heads, photograph taken 1980s.

Meanwhile Mr. Tait had endeavoured to keep down the flames until help arrived,

but the dry, and thickly tarred woodwork would have been an easy victim of the fire, even if it had been unaided by so strong a wind, and when Mr. Trainer arrived on the scene shortly afterwards, the factory was already doomed, and the flames had spread to the dwelling house. This too would have been doomed, for the framework of the windows was quite burned through, had not Mr. Trainer, before leaving his house, armed himself with a couple of fire extinguishers, kept for use in his own business premises. With these he was able to extinguish the flames in the house....

...The factory was completely gutted, and at daybreak, all that remained of it were the charred and cracked walls; twisted masses of iron which only shortly before had been machinery, and the smouldering bricks. The back part of Mr Tait's dwelling house was also badly damaged by flames and heat, while much damage was also done by water.

The total damage is estimated at about £1000. The greater part is covered by insurance. It is supposed that the origin of the fire was a spark from the factory kiln, which had been used on Tuesday.

As a result of the fire 30 employees have been temporarily thrown out of employment. One of these, Mr R Evans, had been in the service of the firm continuously for 34 years.

Tennant's Pipe Works have been long known as a large, and efficiently equipped Tweedmouth industry, and as far back as half a century ago, over 30 men and women were employed in this Border factory. The Works were established nearly 100 years ago, and it is 80 years ago since the late Charles Tennant purchased the goodwill of the business, and it descended in turn to his son Robert, who died a few years ago, and who was an expert in this particular industry. "Tennant's Clays" have worldwide reputation. Smokers at home and abroad know well Tennant's "T.W", which has almost [always] been noted for its finish. While every town and village on the Borderland knows its "Tennant's", the firm have done big business with London, Manchester and other centres.'

There would appear to be some exaggeration with the dates of pipe operation in the report above. Following the fire, pipe making ceased to take place at Tweedmouth. Robert Tennant Tait had intended to continue to produce hearth stones from pipe clay but a second fire dealt the final blow in late January 1916. Again *The Berwickshire News* (1⁴ February 1916) provided a detailed report:

'Considerable excitement was caused on Wednesday by a fire which broke out at Tweedmouth in a shed occupied by Mr. R. T. Tait, head of the well known Border establishment, Tennant's Pipe Works. This is the second fire which has broken out within ten weeks in premises occupied by Mr. Tait, with whom much sympathy is felt in his loss. On Nov. 10th his premises in Kiln Hill, where the business has been carried on for a long number of years, was burned to the ground – the machinery and all fittings being completely destroyed. As temporary premises Mr. Tait had erected a wooden shed on his own ground at West End, Tweedmouth, and he was putting the finishing touches to the shed when the fire broke out yesterday morning.

For some days past he has been asphalting and tarring the roof, and owing to the difficulty in getting the tar to boil in the open air on Tuesday he had removed the boiler into the shed yesterday morning.

Five minutes before the outbreak took place, Mr. Tait had inspected the pot, and the tar at the time did not seem even to be hot. He went on to the roof, and was about to lay a piece of asphalt when with a roar the flames shot up into the air and through the roof, about 10.30. On reaching the ground he found the inside of the shed completely ablaze. The alarm was at once given, but within a very few minutes the whole of the building and its contents were enveloped with the greedy flames, which hissed and crackled furiously, and there was no chance of saving anything.

The building, which was to have been used for the manufacture of hearth stones,

contained about 800 packing boxes, besides a circular saw-board, and a barrel of tar and oil. The barrels were among the first things attacked, and their contents added to the fury of the outbreak.

The loss amounts to about £100. The building was insured, but under certain conditions, one of which was that no fire should be used inside.'

Following the first fire Robert Tennant Tait had ceased pipe making, though he still described himself as a pipe manufacturer in January 1917 when he proved the will of his grandmother Jane Hossick Tait. The limited company was dissolved on 4th January 1918, and the premises were sold in 1920. The kilns, now in a dangerous state, were dismantled and the bricks used to build a lean-to extension to the house, while a good number of broken pipes were used as hardcore below the concrete in the courtvard.

Robert Tennant Tait later ran a tobacconists shop called 'Tennants' in Castlegate, Berwick. A picture survives of this shop with him standing in the doorway, shown in Figure 8.



Figure 8: Robert Tennant Tait in his tobacconist shop in Berwick.

During 1979 I made a visit to Tweedmouth and photographed 13 Yard Heads and the former shop on Kiln Hill, though there was no visible remains of the pipe works behind perhaps not surprising following the destruction in the 1915 fire. In 1980 the Rev David Holt Roberts and his wife Jovce moved into 13 Yard Heads (which they had purchased back in 1963) following their retirement from London. They already knew that clay pipes had been made behind their house, and to cut a long story short, once they knew of my interest, we became good friends. I visited them several times and even stayed in the very same room where the picture of Robert Tennant had been taken all those years before - so was probably his bedroom.

On finding more pipes in their garden Joyce became a member of the SCPR and she also wrote an article about the pipe factory within a local journal (see the References below). Sadly both died a few years ago. I would like to pay tribute to Joyce for her hospitality and friendship during the time I knew her.

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Roberts, J.E. (1987) 'Tennant's Clay Pipe Factory, Yardheads, Tweedmouth' in *The History of Berwickshire Naturalists Club*, **XLIV**, Part 1. [This includes illustrations of some pipes found in the garden behind 13 Yard Heads on the site of the pipe factory]

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Acknowledgements

I would like to acknowledge the late Joyce Roberts of 13 Yard Heads, Tweedmouth for her help and family descendant Richard Tennant of Nottingham for allowing me to use copies of surviving photographs.

Contributions to the Newsletter

Articles and other items for inclusion can be accepted either

- . on an IBM compatible floppy disk or CD preferably in Word.
- · as handwritten text, which must be clearly written please print names.
- as an email/email attachment, but please either ensure that object drawings/ photographs are sent as separate files, i.e., not embedded in the text, and that they have a scale with them to ensure they are sized correctly for publication. If your drawings/photographs do not have a scale with them, please send originals or hard copies as well by post.
- · with Harvard referencing, i.e., no footnotes or endnotes.

Illustrations and tables

- illustrations must be in ink, not pencil, or provided as digital scans of at least 600dpi resolution.
- can be either portrait or landscape to fit within a frame size of 11 x 18cm but please allow room for a caption.
- · tables should be compiled with an A5 format in mind.

Photographs - please include a scale with any objects photographed.

- should be good quality colour or black and white but bear in mind that they will be reproduced in black and white and so good contrast is essential.
- digital images can be sent by email or on a CD, as a .TIF or .JPG images. Make sure that the files are at least 600dpi resolution so as to allow sharp reproduction.

Please state clearly if you require original artwork or photographs to be returned and provide a stamped addressed envelope.

Enquiries

The following members are willing to help with general enquiries (including those from non-members) about pipes and pipe makers (please enclose an SAE for written correspondence):

Ron Dagnall, 14 Old Lane, Rainford, St Helens, Lancs, WA11 8JE. Email: rondag@blueyonder.co.uk (pipes and pipe makers in the north of England).

Peter Hammond, 17 Lady Bay Road, West Bridgford, Nottingham, NG2 5BJ. Email: claypipepeter@aol.com (nineteenth-century pipes and pipemakers).

Susie White, 3 Clarendon Road, Wallasey, Merseyside, CH44 8EH. Email: susie white@talktalk.net (pipes and pipe makers from Yorkshire and en

Email: susie_white@talktalk.net (pipes and pipe makers from Yorkshire and enquires relating to the National Clay Tobacco Pipe Archive).

National Clay Tobacco Pipe Archive: The National Clay Tobacco Pipe Archive is currently housed at the University of Liverpool and is available to researchers by prior appointment with the Curator, Susie White (details above).

SCPR 75 : Contents

| Editorial by Susie White |
|--|
| Clay Tobacco Pipes from an Excavation on the Site of the Former Cattle Market, Bury St Edmunds (BSE 252) by Kieron Heard |
| Rare Japanese Concealed Weapons by Felix van Tienhoven |
| 'Time Team' – Information or Misinformation? by David Higgins 19-2 |
| Sundry Newspaper Cuttings by Ron Dagnall |
| SCPR Conference 2009 Reminder |
| Nineteenth-century Tailor's Chalks from St. John's, Newfoundland by Blair Temple and Barry Gaulton |
| The Flûte <i>L'Atlas</i> : Report on the Pipes Discovered on the Wreck of the Flute <i>L'Atlas</i> on December 2 nd 1739 in Lampaul Bay, Ouessant, France by the late Maurice Raphael (Translated and re-worked by Peter Davey) |
| A Mid-Nineteenth Century Pipe Mould from Lincolnshire by David Higgins |
| News from Pipe Aston 2008 by Allan Peacey |
| Drawings of Eighteenth-Century Clay Tobacco Pipe Kilns from Alingsas, Sweden by Arne Åkerhagen and David Higgins |
| Tennant & Son, Tobacco Pipe Makers, Berwick upon Tweed by Peter Hammond |
| Contributions to the Newsletter5 |
| Enquiries5 |