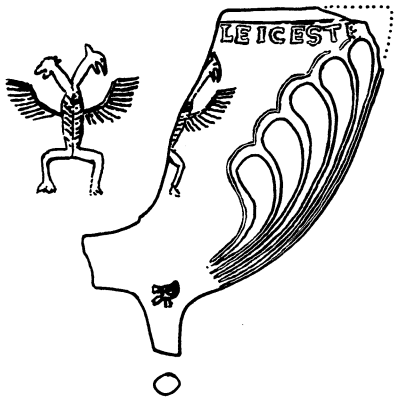
The Clay Tobacco Pipes from Causeway Lane, Leicester



By
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1999

Roman and Medieval Occupation in Causeway Lane, Leicester

Excavations 1980 and 1991

by
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with contributions from:

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University of Leicester Archaeological Services,
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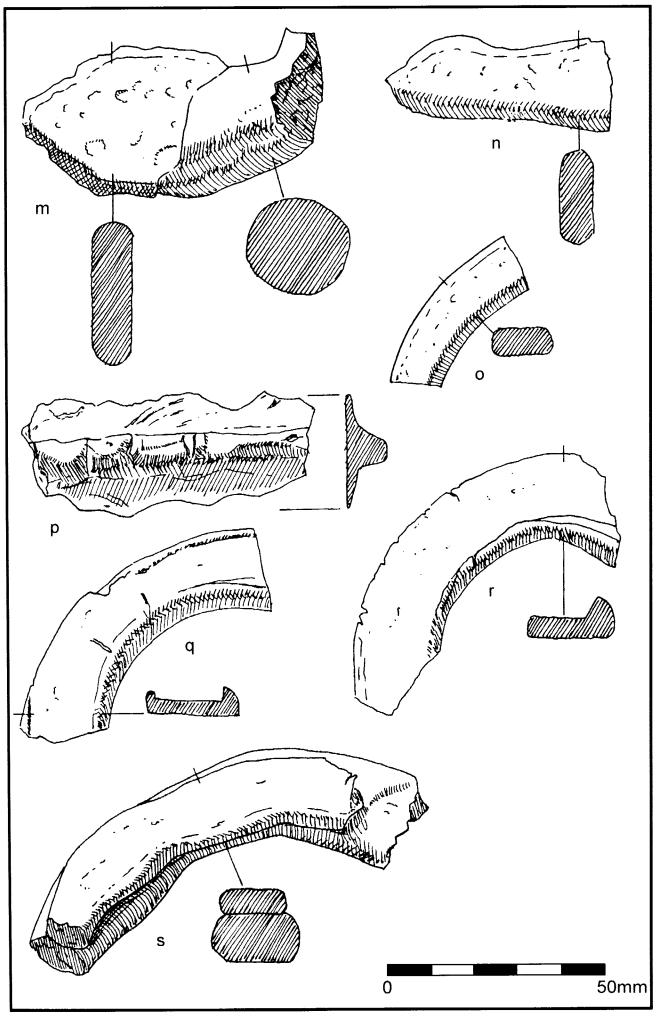

Fig. 106: ***Roll and wad fragments***

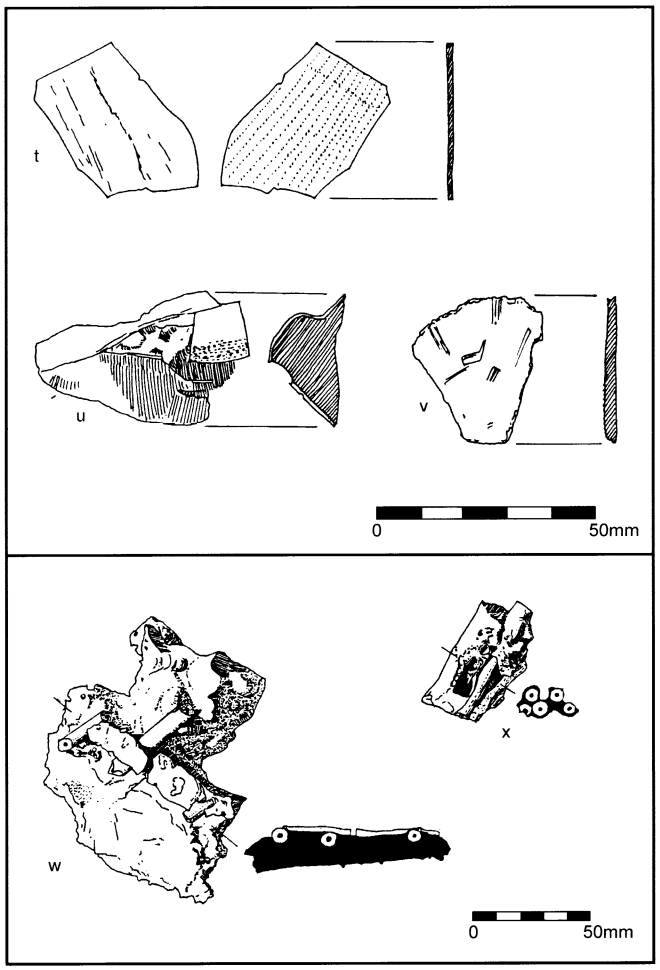

Fig. 107: ***Sheet fragments, strip fragments, stem slag laminates***

Fig. 106 *Kiln Group 1, c.1820: Furniture supplements*

m) Roll fragment with one unbroken end deformed by pressure between parallel surfaces to form a wad.

n) Type 1 wad fragment with two opposed parallel contact surfaces.

o) Type 5 wad fragment.

p) Type 4 wad fragment.

q) Type 5 wad fragment.

r) Type 5 wad fragment.

s) Doubled up Type 5 wad fragment.

Fig. 107 *Kiln Group 1, c.1820: (t-v): Kiln Group 2, c.1865(w); 1980 stray find (x)*

t) Thin sheet fragment with one side scraped, the other with paper contact impression. Formed from Fabric 6.

u) Type 2 applied strip fragment, of triangular section, coated on two surfaces with white clay lute. Formed from Fabric 4.

v) Thin sheet fragment with one side scraped, the other with paper contact impression. Formed from Fabric 9.

w) Thin sheet, stem, slag laminate. The thin sheet is formed from Fabric 9.

x) Stem slag laminate.

Method used for the removal of iron staining from the pipes

J. Mirdamadi

The following method used was found to be very effective for the removal of iron staining from the pipes and may be of use in dealing with other groups of iron stained ceramics. The method employed was to soak the fragments in a 0.1M solution of ethylenediaminetetra-acetic acid (EDTA). The di-sodium salt (EDTA Na_2) was used, as the free acid is practically insoluble in water.

The solution was made up in tap water by dissolving 37.2g of the salt in each litre of water. Great accuracy is not

necessary. The clay tobacco pipe fragments were put into large deep trays and sufficient solution was added to cover them. It was found that 10 litres of solution was sufficient to submerge 6kg of fragments. The tray was covered to reduce evaporation and left for several days.

Each day the fragments were brushed with a soft tooth brush, and any clean fragments were transferred to clean water. After about one week the solution was very dark in colour, and the remaining fragments with stubborn stains were transferred to a smaller volume of fresh solution. This routine was repeated until the only fragments remaining were those resistant to further cleaning.

Meanwhile the rinsing routine was to place the fragments in running water for about one hour and then to soak each batch in a large volume of water in a bucket, the water being changed each day to remove the EDTA which had been absorbed by the fragments. The final soak on the fifth day was in deionised water.

It was found that most iron stain could be removed by this method, except where there was very heavy encrustation, a rough surface or cracks in the clay. Unfortunately the site code markings, presumably in india ink, were also largely removed since the majority of them had been applied over iron staining. Where the markings had been applied to a clean clay surface they were not affected by the EDTA.

There is no particular hazard from the chemical if used as above, but rubber or disposable gloves should be worn when brushing the fragments and care should be taken not to breathe in the dust when weighing out large quantities of the dry chemical.