

PETROLOGICAL EXAMINATION OF THIRTEENTH CENTURY BRICKS
FROM THE TOWER OF LONDON

D.F. Williams, Ph.D., F.S.A.

(DOE Ceramic Petrology Project)

Department of Archaeology, University of Southampton

Three samples of early mediaeval bricks of likely thirteenth century date were submitted for thin section examination under the petrological microscope. The main object of the analysis was to compare the fabrics of the bricks to see if they might share a common origin - thought likely on documentary evidence to be Flanders (see elsewhere). Munsell colour charts are referred to, together with free descriptive terms.

- 1) AM Lab. no. 802772 From West curtain - 3rd loop North of Bell Tower.

Hard, rough sandy fabric, grey (2.5YR N6/) outer surface (heavily affixed with mortar), orangy-buff (5YR 7/6-7.5YR 7/4) core. Thin sectioning shows frequent subangular grains of quartz, average size 0.10-0.40mm. across, flecks of mica, ?chert, limestone, some argillaceous material and red iron ore.

- 2) AM Lab. no. 802773 From Tower Hill Postern.

Hard, rough sandy fabric, grey (10YR 6/1) outer surface, pale yellow (5Y 8/4) core. Thin sectioning shows a similar range of inclusions to AM Lab. no. 802772 above, but with a much higher proportion of limestone.

- 3) AM Lab. no. 820416 From Legge's Mount, layer ⑦⑦, △36.

Hard, rough sandy fabric, light red (2.5YR 6/8) outer surface, darker red core (10R 3/6). Thin sectioning shows frequent well-sorted subangular quartz grains 0.10mm and under in size, together with some flecks of mica and a little felspar.

Comments

The range of non-plastic inclusions present in the above three brick samples are too common to indicate source areas without suitable comparanda from known origins. Sample no.3 (AM Lab. no. 820416) appears to be in a quite different fabric to the other two bricks. While nos 1 and 2 (AM Lab nos. 802772 and 820416) share some common features which may suggest production in the same general area.

TOWER OF LONDON: BRICKS:

Justina,

The story of the tower bricks is as follows: - Peter Curwen gave Leo a brick from the inner west curtain* about 18 months - 2 years ago. This particular brick, along with 273,960 others, was ordered from Flanders sometime between 1276 and 1278.

Peter Curwen subsequently appeared with another brick this time from the recently excavated Eastern Gate† at the Tower Mount (no lab reference for either is known). The Eastern is thought to be of similar date to the curtain wall and it was hoped therefore that an analysis of the brick would support this.

In 1283, a second order was issued for 120,000 bricks for use in the outer curtain wall‡. They were probably used in the embrasures on top of the wall, as disappeared when the wall was heightened later in the medieval period. A scatter of broken bricks was in fact revealed at the ground level within Lege's Mount during excavations in 1976. A new source is reasonable to ask whether this equate with the 1283 purchase.

Finally, the interiors of the garderobe chutes at Beass Mount are lined with brick. The Mount was raised at the same time as the outer curtain and it seems possible that the bricks were taken from the dismantled embrasures mentioned above. A sample from one of the chutes will be obtained in the very near future.

J. Pennell

LIST OF TECHNOLOGICAL SAMPLES SENT TO THE ANCIENT MONUMENTS LABORATORY

Please contact Leo Blek (01-734-6010 x 529) or Justine Bayley (x533) before you excavate or at least while you are excavating. We need to see structures in situ and can usually arrange to visit at short notice.

SITE: TOWER OF LONDON

GRID REF

SHEET NO 1

COUNTY: GLC

EXCAVATION DATE

PERIOD: Med

DATE SENT Apr/May 1980

EXCAVATOR'S NAME, ADDRESS AND TELEPHONE NUMBER FOR FUTURE COMMUNICATION.

PECUNOW R. 233, 23 Smile Row

MATERIAL: Please complete a separate sheet for each category ringling the appropriate material(s).

RAW MATERIALS

Clay/Coal/Ore/Sand

STRUCTURES

Furnace/Hearth/Kiln/Oven/Tank

CRUDE PRODUCTS

Bloom/Enamel cake/Glass bun/Ingot/Pig

WASTE

Ash/Dross/Slag

WASTE BUILDING MATERIALS

Brick/Burnt daub/Floor/Mortar/Plaster/Tile

ORDERING OBJECTS

(For technological examination rather than conservation)

VESSELS ETC

Alembic/Crucible/Palette/Potsherds

OTHER MATERIALS

Char/Food residue/Pigment/Other

Please send these lists to RECORDS OFFICE, ROOM 522, FORTRESS HOUSE, 23 SAVILE ROW, LONDON W1X 2HE, under separate cover. Boxes should be labelled ON THE OUTSIDE with site name and contents and should contain identification label.

WORK CANNOT BEGIN UNLESS LISTS ARE RECEIVED

[illegible]

LIST OF TECHNOLOGICAL SAMPLES SENT TO THE ANCIENT MONUMENTS LABORATORY

Please contact Leo Blek (01-734-6010 x 529) or Justine Bayley (x533) before you excavate or at least while you are excavating. We need to see structures in situ and can usually arrange to visit at short notice.

SITE: LEPPES MOUNT.

GRID REF

SHEET NO 1

COUNTY: TOWER OF LONDON

EXCAVATION DATE AUGUST '76

PERIOD: MEDIEVAL

DATE SENT 11 MARCH '82

EXCAVATOR'S NAME, ADDRESS AND TELEPHONE NUMBER FOR FUTURE COMMUNICATION.

JEFFREY PARNELL

Phone No 874 8338

34, AMERLAND ROAD, LONDON SW18 1PZ

MATERIAL: Please complete a separate sheet for each category ringed the appropriate material(s).

RAW MATERIALS

Clay/Coal/Ore/Sand

STRUCTURES

Furnace/Hearth/Kiln/Oven/Tank

CRUDE PRODUCTS

Bloom/Enamel cake/Glass bun/Ingot/Pig

WASTE

Ash/Dross/Slag

BUILDING MATERIALS

Brick/Burnt daub/Floor/Mortar/Plaster/Tile

OBJECTS

(For technological examination rather than conservation)

VESSELS ETC

Alembic/Crucible/Palette/Potsherds

OTHER MATERIALS

Char/Food residue/Pigment/Other

Please send these lists to RECORDS OFFICE, ROOM 522, FORTRESS HOUSE, 23 SAVILE ROW, LONDON W1X 2HE, under separate cover. Boxes should be labelled ON THE OUTSIDE with site name and contents and should contain identification label.

WORK CANNOT BEGIN UNLESS LISTS ARE RECEIVED

Excavator's No
Separate entry
for each item

AM Lab No

Full details of Archaeological and Stratigraphic context and Problem to be investigated. Please include sketch plan and section, photographs and colour slides.

36

820416

BRICK FOR ANALYSIS.

(see attached letter for details)