

SLAGS FROM 107-115 BOROUGH HIGH STREET, SOUTHWARK

Justine Bayley
Ancient Monuments Lab

The Slag came from the packing (AM 821862) and fill (AM 821860-61, 821863) of a 3rd Century well.

The main group (AM 821860) was all produced by iron smithing. It was made up of smithing slag including hearth bottoms, plano-convex 'buns' of slag that collect at the bottom of the smithing hearth, pieces of vitrified clay hearth lining and fuel ash slags that formed as the silica-rich clay and sand of the hearth structure reacted with the ash in the fire at high temperatures. Much of this fuel ash slag contained considerable quantities of iron too which suggests it formed in an iron-working hearth rather than in any other fire. Several of the larger pieces of fuel ash slag had bits of hearth lining attached at one end. This and the appearance of the two tuyeres (holes where bellows were inserted into the hearth) which survive suggest that these slags formed in the hottest part of the hearth, just below the tuyere (which had a diameter of about 3cm). In addition to the various slags, these bags also contained a number of nails and scraps of metallic iron.

AM 821863 was smithing slag together with scraps of metallic iron. AM 821861 was mainly fuel ash slag, some with adhering fragments of hearth lining. In addition however it contained a large, dense blackish lump of material which was approximately plano-convex in shape. This looked quite unlike the iron-working slags and was analysed qualitatively by x-ray fluorescence. The major element detected was lead and copper and silver were also present. This composition suggest it may have something to do with the refining of non-ferrous metals; a more detailed study will be carried out to attempt to define the process involved more precisely.

The final sample (AM 821862) was not a slag but a calcareous concretion of some sort; it was almost totally soluble in dilute acid.