DM Report 2676

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FMA

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Branc aster - The Slag

Nearly half the samples submitted as slag were in fact volcanic lava. Some of these pieces had apparently deliberately shaped flat surfaces. Dr F W Anderson comments: "I am sure they are all lavas, ie pumice, ie vesicular basalt. I don't think they are Niedermendig Basalt, but they may have been fragments of querns. The possibilities appear to be:-

1. Fragments from the Boulder Clay
2. Lava imported from the Rhine Valley for querns
3. Lava imported to be crushed to form pozzolena mortar - from Pozzuoli near Naples, or Crista Vecchia or Rome - or from Andernach, Germany or Bavaria.

If the Romans needed a hydraulic cement at Brancaster they may have thought it worthwhile importing pumice from Italy or Germany!"

Of the actual slags, about half was iron smithing slag, including one plano-convex 'bun' of slag from the bottom of a smithing hearth. The rest of the slag was made up of vitrified clay and fuel ash slag. Both these materials are formed by the action of ash from a fire on the surrounding clayey soil at high temperatures, the name applied depending on whether the clay is the major or minor constituent. The production of these vitreous materials is usually but not necessarily assoicated with metal working. Among the vitrified clay are the pieces of hearth lining, clay that has been heated strongly and vitrified, but on one side only.

Included with the slags was one piece of "clinker" (AM No 774152). This appeared to be a piece of shale which probably got into the fire together with some coal and whose surface was fluxed by the fire. There were also two tiles (AM Nos 773944 and 774065) whose surfaces had been fluxed by the fire, giving them a "fuel ash glaze" and three pieces of ferruginous sandstone (AM Nos 773901-2 and 773961).