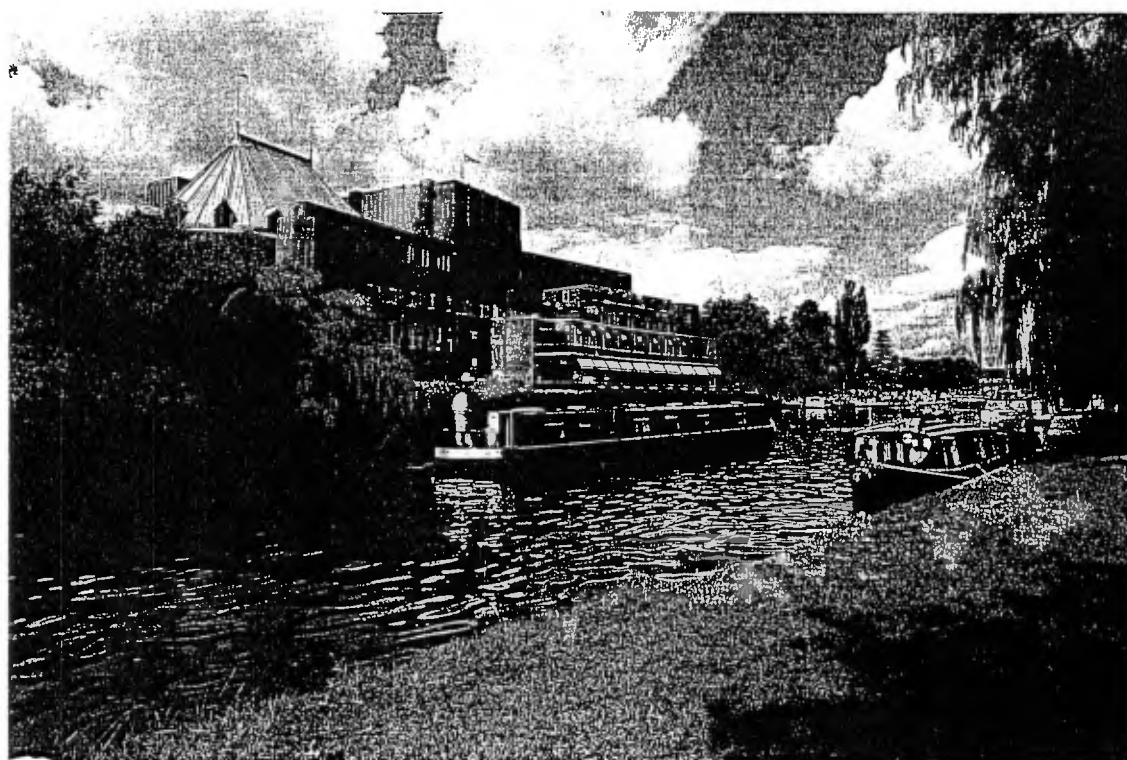


ISSN 0960-7870

BRITISH BRICK SOCIETY

INFORMATION 91

JULY 2003



OFFICERS OF THE BRITISH BRICK SOCIETY

Chairman	Terence Paul Smith BA, MA, MLitt E-mail: tsmith@museumoflondon.org.uk	Flat 6 6 Hart Hill Drive LUTON Bedfordshire LU2 0AX
Honorary Secretary	Michael Hammett ARIBA Tel: 01494-520299 E-mail michael@mhammett.freemasonry.co.uk	9 Bailey Close HIGH WYCOMBE Buckinghamshire HP13 6QA
Membership Secretary	Keith Sanders (Receives all direct subscriptions, £10-00 per annum*) Tel: 01732-358383 E-mail lapwing@tesco.uk	24 Woodside Road TONBRIDGE Kent TN9 2PD
Editor of BBS Information	David H. Kennett BA, MSc (Receives all articles and items for BBS Information) Tel: 01608-664039 E-mail: davidkennett@stratford.ac.uk (term-time only)	7 Watery Lane SHIPSTON-ON-STOUR Warwickshire CV36 4BE
Honorary Treasurer	Mrs W. Ann Los (For matters concerning annual accounts, expenses) and Bibliographer	"Peran" 30 Plaxton Bridge Woodmansey BEVERLEY East Yorkshire HU17 0RT
Publications Officer	Mr John Tibbles	Barff House 5 Ash Grove Sigglesthorne HULL East Yorkshire HU11 5QE

OFFICERS OF THE BRITISH ARCHAEOLOGICAL ASSOCIATION : BRICK SECTION*

Chairman	Terence Paul Smith	Address as above
Honorary Secretary	Michael Hammett	Address as above

* *Members of the BAA may join its brick section and, as such, will be eligible for affiliation to the British Brick Society at a reduced annual subscription of £7-00 per annum; for BAA Life Members, the subscription is waived: they should inform the BAA:BS secretary of their interest so that they can be included in the Membership List. Telephone numbers of members would be helpful for contact purposes, but will not be included in the Membership List.*

British Brick Society web site:

<http://www.britishbricksoc.free-online.co.uk/index.htm>

Contents

Editorial: Bridging the Gap	....	....	....	....	....	....	....	2
Buckinghamshire and the Brick Tax: a Curious Anomaly								
by David H. Kennett	....	....	....	....	....	....	....	4
Cast Basalt Bricks and Related Products								
by Paul W. Sowan	....	....	....	....	....	....	....	8
Samuel Collier's Brickworks at Reading in 1858								
by Paul W. Sowan	....	....	....	....	....	....	....	13
Decorative Brick Plaques from Eastleigh, Hampshire								
by Kathleen Clarke	....	....	....	....	....	....	....	14
Review Notice: Brick and Tile Works in France								
by Owen Ward	....	....	....	....	....	....	....	26
Brick in Print	....	....	....	....	....	....	....	30
Identities of Brickmarks and Brick Manufacturers								
by Michael Hammett	....	....	....	....	....	....	....	34
A New Way to Look Traditional								
by Ray Hollands	....	....	....	....	....	....	....	35

Cover Illustration

The Royal Shakespeare Theatre at Stratford-upon-Avon visited by members of the society during the Spring Meeting, 2003. The theatre was a prize-winning design in an open competition won by Elizabeth Whitworth Scott in 1928 and was opened on 23 April 1932.

Editorial: Bridging the Gap

There is a gap of almost a century between the records for brick production provided by the collectors of the Brick Tax (1785-1849) and those provided by the Office of National Statistics in the annual volumes of *Housing and Construction Statistics* (1947 onwards). The publication in this issue of *British Brick Society Information* of a short note on 'Samuel Collier's Brickworks at Reading in 1858' based on the published *Mining Records. Mineral statistics of the United Kingdom of Great Britain and Ireland, being part II for 1858* offers the possibility of seeking to find ways to bridge the gap of almost a hundred years between the Brick Tax returns and those provided by the statistics collected after the Second World War.

It would take a co-operative effort between several workers, each with a specialist knowledge of one or more specific areas of taxation and other records, to construct a long run sequence providing a national estimate for brick production for the last two centuries. It is something which would be very valuable to have and something which the editor of *British Brick Society Information* would be very keen to publish.

Alternatively individuals could construct a local sequence. The latter would begin with the Brick Tax, available for thirty-nine named urban centres in England from 1830 to 1849 and for ten centres given only as the county for the same time frame, although as the article in this issue of *BBS Information* entitled 'Buckinghamshire and the Brick Tax: a Curious Anomaly' makes clear there are counties for which no centre is named to provide a record of brick production. Tax was presumably accounted at some place over the county boundary. Buckinghamshire, for example, in Oxford, Reading, Uxbridge to 1843, Bedford, and Northampton, and possibly even Cambridge and Coventry. Uxbridge was one of three centres which were abolished before the tax was rescinded: the others were Whitby and Wigan, both in 1846 although the last-named had been suspended between 1832 and 1838.

The ideal local sequence would then proceed to production data derived from the unpublished and sparsely published records originating from mineral statistics collected in the second half of the nineteenth century and beyond with the advantage that it is possible to cross-check records of production against the statistics generated by Quarries Act of 1894.

The records published in *Housing and Construction Statistics* are regional and national rather than local or county-based. These may fit less easily in any publication of local or county statistics.

There is no doubt that any future attempt at a county brickworks gazetteer ought to try as a minimum to construct a record of brick production for that county from 1830 to 1939 using the records of the Brick Tax, the mineral statistics, and the Quarries Act. As a proxy record, housebuilding statistics exist for many towns, some from the 1850s onwards, and these have long been in print for the Victorian and Edwardian periods in *Building Cycles and Britain's Growth* by J. Parry Lewis, although this is necessarily mostly derived from major urban centres.

The Brick Tax was originally imposed in the budget of 1784 by William Pitt the younger as part of the financial measures to re-coup some of the costs of the (for Britain) disastrous war fought between 1776 and 1783 to retain the Thirteen Colonies on the Atlantic seaboard of north America. The various levels of taxation and alterations to the tax have been the subject of a long paper by Norman Nail in *British Brick Society Information*, 67, March 1996 and need not be repeated here; there is another equally full coverage of the vicissitudes of the tax's history in Stephen Dowell's *History of Taxes and Taxation*, second edition of 1888, volume IV, which is in some large libraries: the editor of *BBS Information* found a set of all four volumes in

Birmingham Reference Library.

Chapter II of volume II of Dowell's work examines the fiscal policies of Lord John Russell's first administration, 1846-1852, during which the Brick Tax was abolished. Dowell wrote a succinct summary of the reasons for the abolition:

The tax on bricks had always been acknowledged to be partial in its operation as regards different parts of the country, in some parts of which there is, while in other parts there is not, any stone available for building purposes, and unfair, from its failure to touch the dwellings built by the richer class, usually of stone. But the gravest practical objection to the tax was its effect in increasing the price of raw materials for cottages, farm buildings, warehouses, railway tunnels, and other constructions of that kind.

With the abolition of the Brick Tax in the budget of 1850 records, both local and national, for the production of bricks cease.

For a century afterwards, as far as publication is concerned, we have only a sketchy outline of the number of bricks produced. There are single years from the early twentieth century when a *Census of Production* was undertaken; these are published for 1907, 1924, 1930 and 1935, which give a national figure for brick production. There are unpublished records available for the censuses of production conducted 1912 and 1939, again a total national figure for brick production and the same is true of the published estimates for 1937 and 1938. All of these were included in Table 1 of David Kennett's article entitled 'Britain, 1919-1939: Brick and Economic Regeneration' in *BBS Information*, 88, July 2002.

Clearly a mechanism for collecting brick statistics existed sometime before 1907 and was current until 1939, although perhaps dormant between 1914 and 1920 owing to the Great War and its aftermath. The most likely mechanism used for this was the operation of the Quarries Act of 1894 although this applied only to those brickworks, and other materials pits, which were over 20 feet deep.

The records generated by the Quarries Act of 1894 have been studied by a number of persons but as far as the editor is aware, little of their research is published. Again space is open in *British Brick Society Information* for those who wish to publish their researches.

In drawing attention to a single publication for a single year, BBS member Paul Sowan has opened up the possibility of a much fuller record being available in manuscript in some form or other in a government repository. The editor of *BBS Information*, in making this claim, has made no attempt to contact either the Public Record Office at Kew or the Geological Museum in South Kensington. Perhaps others have.

The last issue of *British Brick Society Information* was guest-edited by the society's Chairman, Terence Smith and as editor, I am grateful to my friend for his excellent work. The society is fortunate in having others who can relieve the editor of the burden for an issue.

The British Brick Society in 2003 has held two successful Spring Meetings, at the Nostell Priory Brickworks and to see the garden buildings at Temple Newsam, Leeds, in West Yorkshire and visiting the Royal Shakespeare Theatre in Stratford-upon-Avon followed by a walk to see brick buildings in the southern and western parts of the town. Reports on these meetings will be included in a future issue of *BBS Information*.

DAVID H. KENNETT

Editor, *BBS Information*

Shipston-on-Stour, 27 May 2003

Buckinghamshire and the Brick Tax: a curious anomaly

David H. Kennett

The Brick Tax was levied from 1784 to 1850 and local records are available for the calendar years 1829 to 1849 inclusive: the year for this tax ended on 5 January, so the records of 1849 are those compiled to end on 5 January 1850. In England, no fewer than fifty-three centres were involved in the collection of the Brick Tax and these are shown on the map (fig. 1). Some counties are designated as the centre for the collection of the tax; some counties have one centre, usually the county town, and some counties have two, three or even, briefly, four different collection centres.

Nevertheless, the recorded collection centres present some curious anomalies. Some counties appear to have no centre. Amongst these seven is Buckinghamshire, which at first sight does not appear to be a county where a collection centre was unnecessary. It is a long, thin county, and perhaps it was served by several centres based in adjacent counties: Bedford for the north-west, Northampton for the north, Oxford for the centre and the west, Reading and Uxbridge for the south. Significantly all of these collection centres are named as towns, not counties. We just do not know the areas covered by individual centres although perhaps we may surmise that those designated by a county name, such as Shropshire, represent the Brick Tax collected in that county. .

What the lack of a designated centre in Buckinghamshire for the collection of the Brick Tax may reflect is the accessibility of parts of the county in the 1780s. The county is crossed from south-west to east centre by a range of chalk hills, the Chilterns. Rivers drain south from these hills, ultimately to the River Thames, and form deep, wooded valleys along which roads progress. Often these roads were very narrow and would have been deeply rutted: even in the writer's childhood in the early 1950s the Buckinghamshire Chilterns was a mysterious place. The north of the county is a large, not quite flat plain with limestone hills, more properly the Northamptonshire Uplands, providing a fringe in the extreme northern parishes. Using adjacent centres may have been easier for the eighteenth-century government rather than attempting to set up a single centre for Buckinghamshire: Aylesbury or Buckingham would have been the obvious choice, but the site for the county town was disputed between them.

It is certain that the lack of a designated centre in the county does not represent a lack of brickyards in Buckinghamshire. The earliest directory cited by Andrew Pike in *Gazetteer of Buckinghamshire Brickyards*, (Aylesbury: Buckinghamshire County Museum, 2nd ed., 1995), is Pigot & Co., *National and Commercial Directory* of 1830. This lists individual brickmakers in Amersham, Aylesbury, Buckingham, Great Linford, Olney, and Whitchurch, as well as two at Marlow and three at Newport Pagnell. The first edition of Kelly's *Directory of Buckinghamshire*, in 1847 has entries showing brickmakers working in an even wider range of parishes: Brill, Chalfont St Peter, Chartridge, Coleshill, Haddenham, Medenham, Newton Longville, North Crawley, Slapton, Stony Stratford, Walters Ash, Water Eaton, and Wooburn are additions to the parishes listed for 1830. There is good evidence of brickmaking in Buckinghamshire at the period when the Brick Tax was in force.

There is earlier evidence of kilns. An eighteenth-century estate map shows a kiln at Chilton. The kiln at Froghall, Bottrells Lane, Chalfont St Giles, began in 1783 but the brickmaker is not listed in a directory until 1853.

In the north-west of the county, Cowper's House in Olney is brick: William Cowper, the poet and hymn writer, lived in the house on the market square from 1767 to 1786. Elsewhere in the town there are other brick-built houses pre-dating 1850. Newport Pagnell, likewise, has

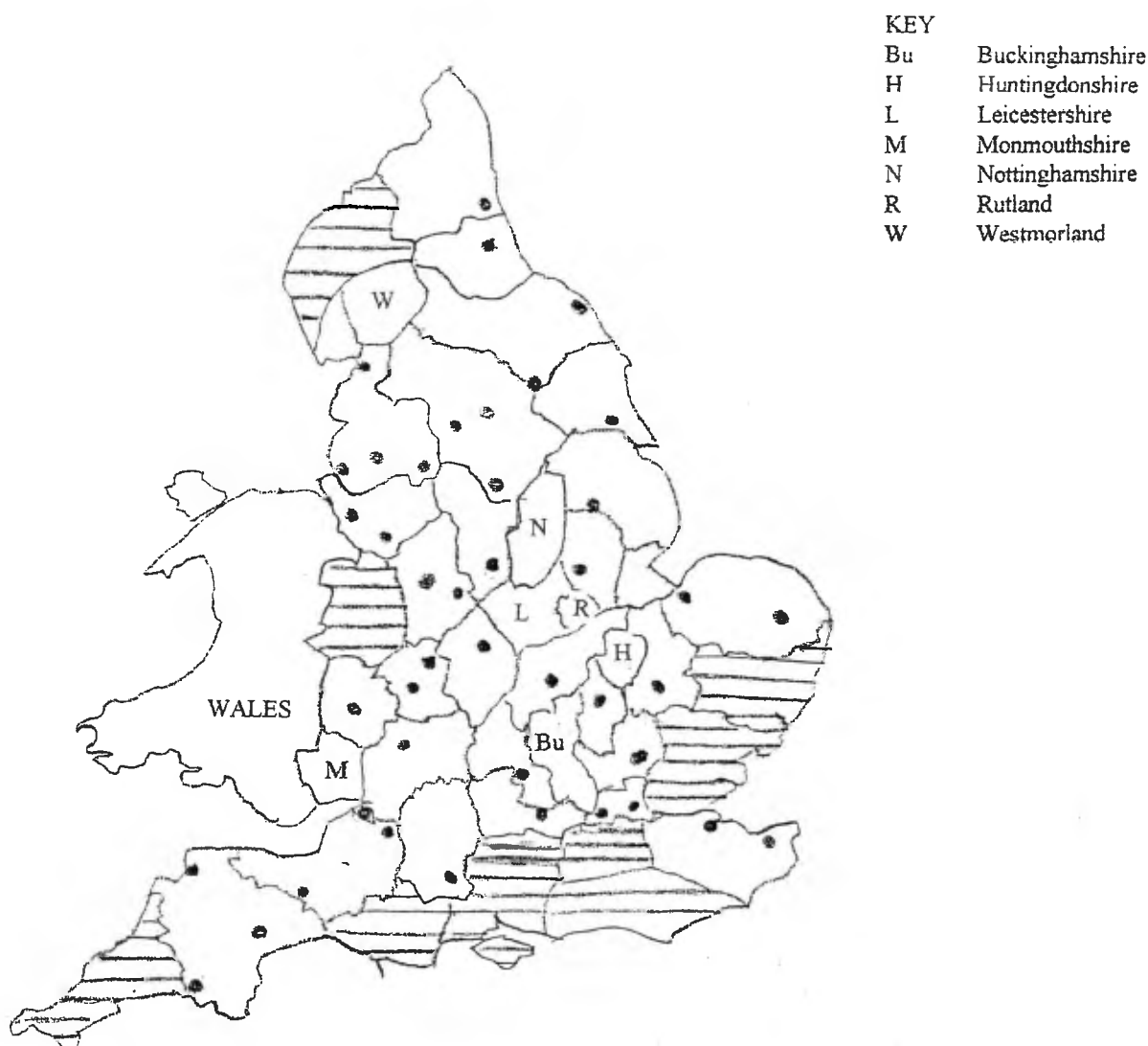


Fig. 1 The Brick Tax. Collection centres in England

Counties as collection centres shown by horizontal shading; towns by a dot.

County boundaries are those of 1830.

Note The only counties named are those with no apparent collection centre.

early-nineteenth-century brick buildings or timber-framed ones refaced in brick between 1830 and 1850.

The county has several comparatively well-known brick-built country houses, mostly earlier in the eighteenth century than the imposition of the Brick Tax: for example, Winslow Hall of 1700, Chicheley Hall of 1719-24, both in the northern half of the county, and Marlow Place of c. 1720, in the extreme south. Nevertheless these country houses and the market halls like those at Amersham of 1682 and High Wycombe of 1757 point to a vigorous tradition in the county of using high quality brick for important buildings. The history behind brick in Buckinghamshire makes the lack of a defined centre for the collection of the Brick Tax seem a curious anomaly.

This becomes even more apparent in the last decade of the tax when railways were being built across the county. Buckinghamshire is a county traversed by railways, and had a major

railway carriage-building plant and engine works at Wolverton: a rebuilt locomotive of a type constructed there stands in the car park outside the new Milton Keynes Station. The London and Birmingham Railway was built with viaducts and bridges over roads: although the bridge was partly rebuilt to take account of the quadrupling of the line in the 1880s, the great train robbers used a bridge at Cheddington from the original construction period.

The London and North Western Railway, as the London and Birmingham Railway became in 1838, opened branch lines in the county throughout the 1840s: to Aylesbury from Horton; to Bedford from Bletchley, and to Newport Pagnell from Wolverton. The cross-country line from Bletchley to Winslow, Bicester and Oxford itself had a branch to Buckingham leaving this line at Verney Junction. When Queen Victoria visited the Duke of Buckingham's house at Stowe in 1845, she and Prince Albert went from Euston Station to Buckingham by Royal Train, which was parked overnight at Padbury, where until the 1990s there was a lengthy viaduct and there was another viaduct west of Buckingham itself. All of the viaducts, the stations, the bridges used brick. Wolverton Viaduct is a mile and a half in length and includes the viaduct over the road beside the meadow in Milton Keynes with the concrete cows; it is a particularly high one. The viaduct of 1838, now hidden in later work, now appears to have been built of engineering bricks but may not have been originally..

These bricks, as with so many elsewhere in the county, must have been recorded somewhere for purpose of levying the Brick Tax. The question is: Where?

What has been said about Buckinghamshire equally could apply to Huntingdonshire, Leicestershire and Nottinghamshire, all counties seemingly without a collection centre. Perhaps, the centre at Grantham served both the Parts of Kesteven and Nottinghamshire although we cannot be certain. Apparently, the geographical area covered by each collection centre is nowhere recorded. Yet in the second quarter of the nineteenth century one would have thought that building in Nottinghamshire is mainly using brick and the same almost certainly applies in west Leicestershire, even if east Leicestershire remained a stone-building area.

Both Westmorland and Rutland are geographically small counties with the local stone as the main building material. Their absence from the list of collection centres is more easily explained.

Bricks produced in Westmorland may well have been counted in with those from north Lancashire. It would seem likely that the two long-term centres at Liverpool and Manchester between them counted the bricks produced at brickyards between the Ribble and the Mersey and that north of the Ribble and in the area over the sands, bricks were counted at Lancaster. Given that Cumberland was a county centre, Westmorland may have been part of the area served by the collection centre at Lancaster.

Monmouthshire (more properly Gwent) was transferred by Henry VIII from Wales to England in 1536 and thus when the Brick Tax was being levied was administered as an English, not a Welsh, county. No collection centre appears for Monmouthshire. It seems likely that tax was collected for the north of the county by the centre at Hereford and for south Monmouthshire by that at Gloucester or by tax collectors crossing the sea from Bristol.

It would assist the local study of brick and its uses if the compilers of county or area gazetteers were to include figures for the Brick Tax in their publications. Obviously this could not be done for Buckinghamshire or the other counties, like Nottinghamshire, noted as without a collection centre but would be possible for Shropshire, Surrey and Sussex. By combining the records from Rochester and Canterbury, it could be done for Kent, and by combining those from Barnstaple, Exeter and Plymouth, the annual totals from 1829 to 1849 for Devon could be established.

If the county was the area of tax collection, one might be able to see how total brick

production in a county relates to the number and size of local brickyards. One might start to ask other questions, like how do the local production figures relate to new brickmaking sites being established or to brickyards going out of business. To be this precise may be more difficult than it might at first seem. Local records of the Brick Tax relate to the period 1829 to 1849. First editions of Ordnance Survey maps at one inch to one mile date to the 1830s. This cartographic record can be supplemented by Tithe Apportionment maps drawn up for about a third of all parishes in the early 1840s and by the maps attached to Enclosure Awards, of various dates, mostly between 1770 and 1850, with some concentration between about 1820 and about 1840, for about half of all parishes, but with each county having its own specific history. Norfolk and Suffolk have Enclosure Acts for only about a quarter of their parishes, and in Bedfordshire, there are only seven places where the Enclosure Act affects all the land in the parish. In this, admittedly small, county more usually it is between a third and two thirds of the land of a parish which is subject to the Enclosure Act and thus shown in detail on the accompanying map.

For the printed record, local trade directories do not really cover every village and hamlet until those produced for a few counties in the 1840s and the majority of counties in the 1850s or later. Sadly, there is the same mismatch in date range as there is between the records of the Brick Tax and the local building records of cities and towns noted in the Editorial to *BBS Information*, 84, June 2001.

CAST BASALT BRICKS AND RELATED PRODUCTS

Paul W. Sowan

A minor industry, in both Britain and Germany, produced bricks and other items by re-melting and casting igneous rocks, normally fine-grained or medium-grained basic rocks such as basalts and dolerites. Bricks made by this process, particularly hard and heavy, were used where very hard-wearing surfaces were required, as for instance on a power station floor of which Shoreham, Sussex, has been cited as an example, or where acid-proof surfaces were needed. Other uses for cast basalt have included floor slabs, decorative architectural elements, sills, thin roofing 'slates', and a variety of glass fibre used for insulation and other purposes.

If basalt (or dolerite, a mineralogically similar rock with a somewhat larger grain size) is melted and allowed to crystallize slowly, a material very similar to the original rock is obtained. More rapid cooling inhibits crystallization and results in a mineral glass. The stony varieties of cast basalt have been used for brickmaking, and the glassy versions for wine bottles and for decorative purposes such as door plates and door knobs.

The published evidence for the manufacture of such items from re-melting and casting basalt and dolerite runs from as early as 1837 and as late as 1946; it is summarized herein. Mineral wool has been manufactured, quite widely, from re-melted basaltic rocks even more recently. This unusual building material seems to have been manufactured in England after the 1850s but the industry was largely forgotten by the 1940s. Some tentative suggestions for the means of identifying the building material are put forward.

Bricks

Standard works on bricks and brickmaking tend to dwell almost exclusively on bricks made by firing brickearths and brick-clays, although sand-lime bricks are often also mentioned. Most such works are silent on the question of cast basalt and similar materials.

Basalt

Basalt is a fine-grained crystalline igneous rock, extruded from volcanoes on to the earth's surface as extensive lava flows, the upper parts of which, at least, are usually highly vesicular (full of gas bubbles). Below this vesicular and slaggy crust however (which will be familiar to volcanic areas such as Iceland or Tenerife) there is a vesicle-free, dense, compact black basalt forming the main thickness of the lava flow. Dolerite, a slightly coarser-grained rock from the same magma, is generally found as an intrusive rock in the form of dykes and sills, the slower rate of cooling resulting in the larger grain size. Chilled margins of such dykes and sills, where the magma has encountered cold country rock and cooled and solidified rapidly, are often of the glassy variety of the same rock-type, known as tachylyte. Tachylyte *en masse* is not a common rock type, as shock-cooling of basaltic magma tends to lead to hyaloclasite rocks or 'palagonite tuffs' (well-known in sub-glacially erupted materials in central Iceland) composed of shattered glass fragments and resembling sandstones in external appearance. Obsidian, a more common glassy volcanic rock, has a significantly higher percentage of silica in its composition and is derived from shock-cooling of 'granitic' rather than basaltic magmas.

Basalt lava is erupted from volcanoes, and the corresponding magma is intruded into dykes and sills, at temperatures around 1130° - 1150°C, according to Trausti Einarsson.¹ This

relatively low apparent melting/freezing point is a result of dissolved steam and other volatiles in the magma. On solidification of the magma as lava or shallow-level intrusive dykes or sills, these volatiles escape altogether or at least for distinct vesicles (bubbles) in the solid rock. Re-melting such rocks is possible only at a considerably higher temperature.² Einarsson determined re-melting temperatures for solid basalt of 1230° to 1300°C. Furnaces to re-melt basalt or dolerite have, therefore, to be considerably hotter than the temperatures in the volcanoes in which the rocks were formed.³

Basalt glass wine bottles in 1837

An encyclopædia of 1837⁴ notes that 'Basaltes ... [have] also been converted into glass from which wine bottles have been manufactured.'

Basaltic stone manufacture at Rowley Regis, West Midlands in 1851

The second earliest published description of cast basalt I have so far found is by Samuel Timmins⁵ who credits one Henry Adcock with the invention of cast-basalt bricks and other architectural elements, using a furnace made available by Messrs Chance Brothers & Co, themselves glass-makers, at Rowley Regis, then in Staffordshire, in 1851. Timmins describes the methods used for converting "Rowley rag", a basalt or dolerite found in the district, and tells us that:

A great variety of articles were manufactured - slabs for steps, window-heads and sills, string-courses, mantel-pieces, doorways, columns and capitals, besides a number of objects suitable for internal decoration, slabs for tables and sideboards, door plates and knobs, &c, &c. All of these articles were admirably adapted for the purpose they were intended to serve, but, unfortunately, the cost of production was too high for them to compete successfully with those manufactured on a less expensive system.

Both stony products (cooled gradually in an annealing oven, so re-forming the micro-crystalline nature of the feedstock rock) and 'glassy' (more rapidly cooled) items could be produced. Bulky items were cast whereas sheets of glassy material were rolled out on iron slabs. Imitation 'marble' was manufactured by stirring variously coloured conventional glasses into the molten basalt before pouring.

Timmins goes on to tell us that manufacturing costs (principally the operation of the furnaces) were so high that the process was abandoned. The cost of model making and mould-making, also, for a great variety of shaped pieces for architectural use, was unacceptably high and not competitive with equivalent articles made from fired clay. Manufacturing was discontinued 'about three years after its establishment'. In 1886, little remained to be seen of the products of this industry, although

One house in Handsworth still retains the window-heads and sills, string courses, mantle-pieces, &c., cast from the Rowley rag, and somewhat similar examples are to be seen in a terrace near Aston Park and another terrace in Wolverhampton. The best specimens, however, are to be seen in the Edgbaston Vestry Hall, a building in the Anglo-Norman style, the whole of the columns, window-pieces, doorways, and ornamental steps of which are cast in this material.

I have yet to establish if any of these buildings survive.⁶

Basaltic stone works at Oldbury, West Midlands, c. 1857

Richard E. Threlfall's company history of the phosphorus manufacturers Albright and Wilson⁷

contains a map, dated c. 1857 which shows clearly a phosphorus works and, immediately to its east between Windsor Street and a short branch canal, a 'Patent basaltic stone works'. No products have been recorded or traced.

Cast basalt manufacture at Rowley Regis, 1858

Robert Hunt⁸ reports that a quarry at Rowley Regis was, in 1858, being worked by Chance & Co., and the basalt employed in the manufacture of 'artificial basaltic stone'. He describes the melting, casting and annealing processes. Glass obtained by rapid cooling, he says, is 'hard and brittle'. As Mining Records Office was at this time more or less a one man and a dog sort of organisation, and as he had no statutory powers to require returns from quarry owners, or specifically allocated funds for such purposes, his information, although 'for' 1858 was probably out of date when published.

Basaltine stone in 1915

Alfred Searle⁹ describes what he calls basaltine stone but makes it clear he is describing a concrete composed of basalt chippings held together by a trass and Portland cement matrix, not a re-melted and cast product.

The German cast basalt industry in the 1940s

After the end of the Second World War in Europe, the British Intelligence Objectives Sub-Committee of the British Government arranged visits to Germany for industrialists and other experts to appraise various branches of German industry, among them the cast basalt industry. A BIOS Report¹⁰ describes the single manufacturer of cast basalt operating in Germany in 1946. In 1938, Schmelzbasaltwerk Kalenborn had taken over a basalt smelting concern operated by A.G. Linz from about 1926 at a basalt quarry they had worked for conventional roadstone or similar purposes since 1888.

The British investigators (seemingly in ignorance of Timmins' comments of eighty years earlier) concluded that the process used, which they describe in some detail, was uneconomic and difficult to manage without experienced and skilled operatives. Melting temperatures of 1200° to 1500° C are noted, as is the addition of calcium carbonate, or other unspecified materials, to the melt in quantities to be decided by the experienced operatives. The annealing process took up to 60 hours. Pre-war German prices for ordinary bricks, at 3 to 4 marks per square metre, are cited, as compared with 6 to 8 marks per square metre for acid-resistant bricks and 20 to 24 marks per square metre for cast basalt bricks. It was recommended that it would not be economically viable, in fact re-establish, a cast basalt industry in England.

The entire output of the German factory in 1946 was employed in making ceramic linings for steel pipes for the coal industry, the factory being located on the Rhine, with basalt resources to hand and cheap water transport for coal from and basalt to the Ruhr coalfield. It is not clear if, for example, the linings were for abrasion-resistant pipeline transfer of coal/water mixes or for thermal insulation or for some other purpose.

Geological Survey of Great Britain war-time mineral surveys

Although the Geological Survey of Great Britain, now the British Geological Survey made extensive enquiries during the Second World War to identify economically useful domestic minerals,¹¹ basalt as a feedstock for a cast basalt industry appears not to have been considered.

Recognition of cast basalt bricks

As I have yet to positively identify a cast basalt brick, I can only propose the following aids to recognition.

Colour - presumably more or less very dark grey or black (as are basalt and dolerite from which they are derived).

Hardness - presumably at least as hard as a 'Staffordshire blue' fired clay brick, in fact almost certainly harder.

Mineral composition and texture - micro-crystalline basic plagioclase feldspar (usually labradorite), augite pyroxene, possibly olivine, and probably accessory magnetite, all either as microscopic crystals or as a glassy solid solution. Small spherical vesicles (gas bubbles) might be present and visible to the naked eye, but probably no solid inclusions differing from the main fabric. Identification would be most readily confirmed by examination of a thin section using a polarising microscope, when the crystalline or glassy nature of the material (quite unlike fired clay) would be obvious.

Density - Edward Hull¹² cites 171 to 181 lb per cubic foot for the density of basalt, equivalent to about 2.74 to 2.90 gm cm⁻³. David Page¹³ suggested 2.4 to 2.9 gm cm⁻³ but says nothing about the cast basalt industry. Alfred Searle¹⁴ has suggested apparent (bulk) densities of 1.87 and 1.90 gm cm⁻³ for Staffordshire red and blue engineering bricks respectively, and lower values for 'ordinary' bricks, with a theoretical maximum for burned clay of 2.6 gm cm⁻³ (i.e. making no allowance for porosity etc.).

Location in use - such expensive special-purpose bricks are to be expected only in floors or wall-surfaces and corners where exceptionally heavy wear from industrial traffic was the norm or where resistance to corrosive mineral acids was needed (perhaps in electroplating works, for example).

The most useful features for recognition of cast basalt bricks in the field are therefore probably the colour, hardness, density, absence of inclusions, very fine grain size, perhaps vesicles (more or less circular bubbles), and locations in specific industrial contexts. Such bricks should be expected in the same locations, subject to heavy wear or traffic, as Staffordshire blue or Southwater red and other engineering bricks.

However, there is probably scope for confusion in the identification of cast basalt as a building material, as in certain areas such as Bristol for example various furnace slags were used for constructional purposes.¹⁵ These are a dense, dark coloured, and very fine-grained or glassy materials, and sometimes vesicular. Blocks of such material are thought, in Gloucestershire and especially near Bristol, to derive from copper smelting,¹⁶ perhaps cheaply manufactured by casting slag directly from the furnaces, obviating the costs of re-melting. Chemical analysis may be necessary to distinguish such 'bricks' from cast basalt.

Basalt Fibre manufacture in Europe, the former USSR and the USA

Much more recently, Peter Harben and Robert Bates¹⁷ have described how basalt may be 'melted and blown into high quality fibers' and tell us that such material had (by 1984) been developed at several plants in the USSR and western Europe. (The manufactured material would presumably resemble the naturally occurring 'Pele's hair' formed where lava is extruded, as in Hawaii or Iceland, in wind-blown conditions). Basalt 'fibre-glass' had also been produced experimentally using waste basalt from copper mining in the Keweenaw Peninsula or Michigan, USA, although production there was not economical owing to remoteness from the markets. In Czechoslovakia, the same authors inform us basalt was (at the time when they wrote) melted and cast into floor tiles and acid-resistant equipment for heavy industrial use.¹⁸

REFERENCES

1. Einarsson, T., 1949, 'The flowing lava: studies of its main physical and chemical properties', *The Eruption of Helka, 1947-48*, IV(3), Reykjavik: Visindafélag Íslendinga.
2. Bowen, N.L., 1956, *The Evolution of Igneous Rocks*, revised by J.F. Schairer, New York: Dover Publications Inc.
3. Einarsson, 1949.
4. Herbert, L., 1837, *The Engineer's and Mechanic's Encyclopædia*, Volume I, page 153.
5. Timmins, S., 1866, *Birmingham and the Midland Hardware District*, chapter on 'Basaltic stone manufacture' pp.163-165, whence the quotations.
- [6. None of these locations is recorded in architectural gazetteers DHK]
7. Thelfall, R.E., 1951, *The story of 100 years of phosphorus making 1851-1951*, Oldbury: Albright and Wilson Ltd., page 137.
8. Hunt, R., *Mining Records. Mineral Statistics of the United Kingdom ... Part II for 1858*. London: Memoir of the Geological Survey.
9. Searle, A.B., 1915, *Bricks and Artificial Stones of non-plastic materials: their manufacture and uses*, London: J. & A. Churchill.
10. British Intelligence Objectives Subcommittee, 1946, *Investigation of Cast Basalt*, London: HMSO: BIOS Final Report 949 (Item no. 21), 6 pp. [The title page identifies the investigator as one R.J.P. Nicklin, the BIOS number 2327a, and BIOS target number C21/905]
11. Published in the *GSGB Wartime Pamphlets series*.
12. Hull, E., 1872, *A treatise on the building and ornamental stones of Great Britain and foreign countries*.
13. Page, D., 1874, *Economic Geology, or geology and its relations to the arts and manufactures*.
14. Searle, A.B., 1924, *The Chemistry and Physics of Clays and other ceramic materials*, London:
15. Walker, K., 2000, 'Slag blocks as building materials', *The New Regard [Journal of the Forest of Dean Local History Society]*, 15, pp.40-41.
- [16. The most notable example is Arnos Castle, Arnos Vale, Bristol, built for a Mr Reeves, a rich copper smelter. The building was the stables of a more sedate Gothick house. See N. Pevsner, *The Buildings of England: North Somerset and Bristol*, Harmondsworth: Penguin Books, 1958, 461-462; an illustration is to be found P. Newman and E. Frankl, *Bristol*, Cambridge, The Pevensey Press, 1987, 96, pl. 75. DHK]
17. Harben, P.W., and Bates, R.L., 1984, *Geology of the non-metallics*, New York: Metals Bulletin Inc.
18. Paper submitted December 2001.

Samuel Collier's Brickworks at Reading in 1858

Paul W. Sowan

An enquiry in *British Brick Society Information*, **85**, November 2002, sought material on the Reading brickmaking firm of S. & E. Collier, active in the nineteenth and twentieth centuries.

One source for information is the pioneer list of brickfields in Great Britain and Ireland produced by Robert Hunt in 1860. He notes 35 brick and tile works in Berkshire, of which eleven were in or around Reading, including Caversham and Erleigh (so spelled). Two of these entries relate to Samuel Collier. The relevant information is:

Kiln:	Castle Kiln, Reading
Formation	Reading Beds (Plastic Clay)
Freeholder	J. Bushell Esq
Manufacturer	Samuel Collier
Output p.a.	bricks 750,000; socket pipes 20,000; best red ware 5,00

Kiln	Coley Kiln, Reading
Formation	Reading Beds (Plastic Clay)
Freeholder	-
Manufacturer	Samuel Collier
Output p.a.	red bricks (see Katesgrove)

The Katesgrove entry reads:

Kiln	Katesgrove Kiln, Reading
Formation	Reading Beds (Plastic Clay)
Freeholder	-
Manufacturer	E. Slater & Co.
Output p.a.	bricks 800,000; tiles 200,000

It may well be that Samuel Collier had some hand in digging the chalk mines, the collapse of which at Field Road in recent years has given so much trouble.

The source is Robert Hunt, 1860, *Mining Records. Mineral Statistics of the United Kingdom of Great Britain and Ireland, being Part II for 1858*, Memoirs of the Geological Survey of Great Britain and of the Museum of Practical Geology: xi + 379 pages. [The brick and clay returns (for England, wales, Scotland, and Jersey) are in pages 1-125 (Berkshire pp.46-47)] The rest of the volume lists quarries, with a few pages at the end devoted to miscellaneous minerals such as fullers' earth, silver sand and so forth. There are no comparable 'Part II' issues listing brickfields in earlier or later issues in the series.

This work with all its numerous faults is a useful source for information on brickfields, published long before the coming into force of inspection and regulation under the Quarries Act, 1894, which in any case applied only to open pits 20 feet or more in depth.

Decorative Plaques from Eastleigh, Hampshire

Kathleen Clarke

INTRODUCTION

In September 2000, a public house in Eastleigh, 'The Golden Hind' (fig. 1), was demolished. At one point the celebrated walker, Tommy Green, had been the landlord.

Originally the building was a private house, 'Meadow Bank', the home of the Wheeler family. Henry Edmund Wheeler came very much to the fore as a thrusting local entrepreneur in the 1880s and 1890s. The house, built in a flamboyant, mock Tudor style had an octagonal cupola with stained glass. The entrance was through a beautiful, rustic, carved, wooden porch over a tiled floor. 'Meadow Bank' was of brick construction with elaborate timber-framing as external decoration on the first floor. The timbers were separated by areas of white plaster.

Of particular interest in the ceramic building materials of this house were a set of about thirty-six plaques built as a continuous row, thought to encircle the house, between the lintels of the ground floor windows and the portion of the timber-framing which served as the cills of first floor. They were also used immediately below the timbers forming the cills of the windows to the semi-attic rooms on the second floor found on the rear of the house, which faced east, and on the north side.

'MEADOW BANK', EASTLEIGH: SITUATION AND CONTEXT

Henry Wheeler, senior, was born 8 December 1824 at Winchester. According to the census for 1881, his wife, aged 50, and Annie, his daughter, aged 25, both also born at Winchester, were living with him at 'Meadow Bank'. He was the son of Thomas and Sarah Wheeler.

He can be traced to the period when the railway first came to Eastleigh which gave the prospect of many more people coming for jobs in the area. This was not only because of the line between Southampton and Nine Elms, the terminus for the London and South Western Railway before London Waterloo was built, but also the likelihood of other industries.

Before the railway arrived, Eastleigh was merely three farms. Bishopstoke was the nearest small village in this part of the river valley, just across the River Itchen and the later railway lines; initially, therefore, Bishopstoke gave its name to the station.

In Kelly's *Directory for Hampshire* of 1867, there is an entry under Twyford which reads: "Wheeler, Henry: wood turner and saw mills, Allbrook". Later in the text we read that brickmaking is carried on here. In the Trades Directory in the business section of Kelly's *Directory of Hampshire* for 1867, under Coal Merchants, we have Wheeler, S., Bishopstoke, which is borne out by the entry for Stephen Wheeler, Anchor Inn and coal merchant. Under Public Houses there is an entry for Anchor Inn, Stephen Wheeler, Bishopstoke. Under Turners - Wood, we have Wheeler, H., Allbrook, Twyford, Winchester. In 1869 when Dean Garnier was leaving Bishopstoke to take up his residence in the Cathedral Close in Winchester, he was given a "capital dinner" in the Anchor Inn where the hosts were Mr and Mrs Wheeler. Many famous people lived in Bishopstoke at this time.

Henry Wheeler (senior) would have been almost 23 when the 1867 directory was issued. With no great leap of imagination, as this Henry was a wood turner, and presumably could carve, *he* made the moulds for the plaques to be used by him a few years later in his house?



Fig. 1 'Meadow Bank' in 1993, when in use as a public house 'The Golden Hind' from the north-west. The octagonal cupola to the staircase is clearly visible on the left. The building on the extreme left is an addition to the structure, built as a function room for the public house.

The Henry Wheeler in the census for 1871, living in 'Meadow Bank', probably built the house in that year, although it is not shown on the Ordnance Survey map of 1871. Henry Wheeler employed many workers in his saw-mills, and for them there were cottages in Mill Street and a row of similar houses along the main road called Wheeler's Terrace. His men had no excuse to be late: they lived practically on site. The mill in Eastleigh, which he owned, still carries on a similar trade under the name of Travis Perkins.

In the 1875 edition of Kelly's *Directory of Hampshire*, Henry Wheeler is entered under Bishopstoke and his business as turning and saw mills and at Otterbourne. He is also entered under Twyford in the same words as were used in the 1867 Directory. Allbrook, Twyford, Otterbourne, Bishopstoke are all within very easy walking distance of one another. The Wheeler family spread out but remained connected and obviously could turn its hand to many skills, as was necessary in the countryside at that time in Victorian England.

A decade later, Kelly's *Directory for Hampshire* of 1885 records that the son has already been taken into the business, and also a partner called Coombs. Under Eastleigh is entered:

Wheeler, Son & Coombs, english and foreign timber, brick, slate and coal merchant & manufacturer of compressed railway keys, treenails and all kinds of wood railway fastenings, Eastleigh sawmills.

Henry Edmund Wheeler would have been only eighteen when he became part of the firm. Another adult was included perhaps because Henry Edmund was still under the then age of majority (sc. 21).



Fig. 2 'Meadow Bank' awaiting demolition, 2000, from the south-west.

In the census for 1881, Henry Edmund Wheeler was not mentioned as living with his father in that part of Eastleigh. Presumably he moved to 'Meadow Bank' on the death of his father, or maybe before, if his mother and father were thinking of taking things a little more gently. Henry Wheeler, senior, was buried at Eastleigh on 20 January 1888, aged 63 (just). In 1891, Henry's widow was living in one of a pair of houses built by her husband, known as St Catherine's. It is mentioned in notes made by one of the early historians of Eastleigh that Henry Wheeler was erecting two villas in 1882.

From 1889 onwards we see the thrusting entrepreneurial dynamism of Henry Edmund Wheeler, continuing in his father's footsteps.

In the 1891 census Henry Edmund Wheeler is living in 'Meadow Bank' with his wife, a daughter aged four, and two sons, aged three and one respectively; all these children are entered as being born in Eastleigh. What an amazing prospective husband he was. Agnes Emilie from Cambridgeshire was his chosen spouse, three years younger. To help his wife, this family man employed a live-in cook/domestic servant, a nurse and an under-nurse. Life must have been extremely pleasant in this very large house with gardens stretching down a slope or bank, to the River Itchen, separated from it only by the railway. Henry Edmund Wheeler was the owner and developer of what was the first big business in Eastleigh, apart from the railway.

In the 1891 census, his age is given as 32: he had therefore been 28 when he took over the business here. His occupation in the 1891 census was described as Timber Merchant, Farmer, Brickmaker. It seems that young Henry must have been anxious to expand the business even before that because while his father was still alive, an entry in an Eastleigh Directory reads:

Wheeler, Son & Coombs, timber merchant, etc. Eastleigh sawmills and at Otterbourne, Bishop's Waltham and Romsey.

Investigations were conducted into the connections with Romsey and Bishop's Waltham with the intention of finding out as much as possible about them. I already knew that Blanchard's from Bishop's Waltham were famous for bricks and terracotta ware.

The Romsey Connection

In Kelly's *Directory for Hampshire* of 1852, according to the Lower Test Valley Archaeological Society publication entitled *Romsey's Mills and Waterways*, it is noted that "here are extensive sawmills where sleepers for the adjacent railways are manufactured". The book continues

This is plausible; Romsey's first railway line from Bishopstoke to Salisbury opened in 1847

In Kelly's *Directory for Hampshire* of 1867 there are entries:

Wheeler, George: builder, Porter's Bridge
Wheeler, William, Master of Nowe's Foundation School, Middle Bridge St[reet]

Romsey's Mills and Waterways notes

There was a sawmill in Middlebridge Street, a little way down from the Town Mill. *In 1892 the ownership had passed to Henry Wheeler, who paid £10 per annum for the water.* A plan by a local surveyor, John Jenvey, shows the sawmill still there in 1905. (the present writer's italics)

This explains the connection with Romsey as noted above for 1892.

The Bishop's Waltham Connection

Here I drew a blank, although in the garden of Tommy Green's daughter there is a single brick built into a pier which has DIAMOND JUBILEE written on it. This brick looks like a product of the yards at Bishop's Waltham. How this relates to the house is uncertain (but see below for material from 'Meadow Bank' in this garden).

Railway Connections

It did become obvious, however, that in the whole of this area of Hampshire from Bishop's Waltham in the east to Romsey in the west, with Eastleigh in the middle of these two, that a great deal of speculation was taking place to do with the coming of the London and South Western Railway and other railway lines. Every businessman with any ambition wanted to be "in on the act".

Those living near Bishop's Waltham were under the impression that the railway was going to be really "big" in their area. The Bishop's Waltham Clay Company thought it would make a fortune. In the early 1860s, Arthur Helps, Clerk of the Privy Council and private secretary to Queen Victoria, who lived in Bishop's Waltham, invested £80,000 in the enterprise. Bricks would obviously be needed. Henry Edmund Wheeler must have "hedged his bets", and, as in Romsey, tried to be prepared with timber required for the railway.

However, it was at Eastleigh that the big development took place. Hundreds of men came from Nine Elms to build railway carriages in 1890/91 and ten years later locomotives. This is why there was such a flurry of speculative building to begin with and then row upon row of houses for the workers. The town mushroomed in size. The streets were not paved with gold - they were not paved at all - but the "gold rush" was on. Commercial ventures of all sorts took off.

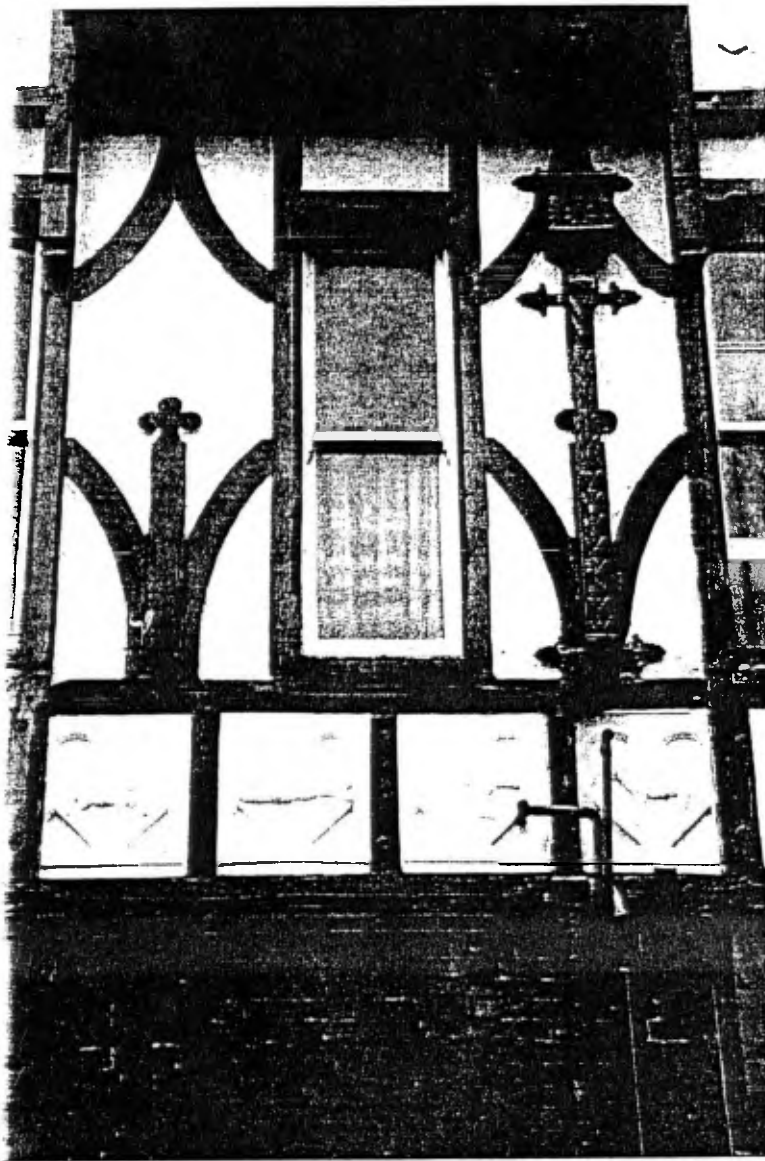


Fig. 3 (left) Close-up of the central plaques to the east side of 'Meadow Bank'. Note also the elaborate drainpipe.



Fig. 4 (right) Close-up with timberwork removed, as the building deteriorated. Originally there would have been timber above, below and between the plaques, which in this photograph have the white paint flaking off. Note the changing bond for the brickwork: Flemish bond on the ground floor, stretcher bond under the plasterwork and timber-framing of the first floor. Elsewhere, raking stretcher bond is used for the bricks behind the decorated first floor.

In *British Brick Society Information*, 86, December 2001, I wrote about the Victorian Jubilee plaques found in Hampshire. These were not made locally but most probably brought in by train. Eastleigh was, and still is, a railway junction. The main line of the former London and South Western Railway opened in 1839 running north-east to south-west from London to Southampton intersects with a cross-country route going south-east to north-west from Portsmouth to Bishopstoke Junction opened in 1842 and thence to Salisbury in 1847.

In 1893, the status of Eastleigh changed from that of an Ecclesiastical Parish to that of

a Local Government Board. Henry Edmund Wheeler was the first, eager member to arrive for the inaugural meeting. He progressed as the town progressed and became one of the first councillors when the Local Government Board became the Eastleigh and Bishopstoke Urban District Council in 1895. This is a measure of the fantastic growth and prosperity brought by the railway.

Henry Wheeler also went in for farming. In *The Southampton Times* of 26 April 1884, he advertised mangolds for sale. In 1888, another newspaper report says that ricks of straw belonging to Henry Wheeler were burnt at Ham Farm. This must be the younger Henry, as his father had died in January that year.



Fig. 5 Close-up of the plaques used as pattern of threes below the second-floor windows on the south side and on the east side at the rear of the property.

On the Ordnance Survey map of 1871, the original road north can be seen. The construction of a new part of it is foreshadowed. This came after the bridge over the railway line to Salisbury was built and it was constructed straight. Along this road, originally called Winchester Road, but now changed to Twyford Road, Henry Wheeler's house was built. Mr Wheeler seems to have edged the old road with trees, or maybe they were there before, and he used it as the private drive to his mother's "dower" house.

On the 1897 Ordnance Survey map, houses built on the left side of the main road northwards out of Eastleigh, then known as Winchester Road, ended at St John's Road. At this period, Mr Wheeler still had a clear view across the fields in front of his house, trees to the south and his garden still sloping to the River Itchen to the east, beyond the London to Southampton railway line, while to the north an avenue of trees led to the house where his widowed mother lived. Apart from the ribbon development along the main road there were no houses north of the Salisbury railway line, and nothing between 'Meadow Bank' and Ham Farm, half a mile to the north.



Fig. 6 A well-preserved group of plaques above a ground floor window, in the centre of the east side. Subjects include a ram (centre one of three under the window) and a bird (right-hand one under the window).

'MEADOW BANK' AS A PUBLIC HOUSE

'Meadow Bank' became a public house and was re-named 'The Golden Hind'. Sometime after it had been given the name 'The Golden Hind', Tommy Green took over the management for the Whitbread Brewery.

Tommy Green was the walker from Eastleigh who gained the gold medal for the 50 km walk in the Olympic Games at Los Angeles in 1932. During the Second World War, Tommy Green allowed Vince Hawkins, who won of the British middleweight boxing title on 28 October 1946, to practise in an attic room in his pub. The two were great friends and used to go on training runs together. This pub therefore commemorated two great Eastleigh sportsmen.

It did gain a rather unsavoury reputation in some of its later years but the last landlord made valiant efforts to clean up the clientele. He made the unruly elements less welcome, cut out any drug taking that may have been going on and built up a kind of community centre. However, the building deteriorated further, probably because the brewery owners did not invest in its upkeep. The large room which had been built to one side and made to fit in with the former style of architecture, called 'The Meadow Bank Suite' was well-used for functions, but maybe the rest did not bring in as much money as could be desired.

In late February 2000, it was finally decided by the owners of 'The Golden Hind' that it should be sold to a developer, who would probably build flats on the site. It had been offered for sale to the man who was then running the pub, but he did not have the necessary money. The people who used this pub as their local tried to stay the demolition but their efforts, like mine

and those of one of the local councillors, were to no avail. The battle to keep the building was lost; the former owners sold the pub.

When passing in my car in September 2000, I saw that the building was being dismantled. Subsequently a block of flats has been built on the site. These are sheltered flats for the blind run by the charity See Ability. The flats are called the Meadowbank Project.



Fig. 7 Well-preserved plaques on the right hand of the east side of 'Meadow Bank'. Reading from the drainpipe, subjects include a crab, a cockerel, a goat, and an unknown sea creature.

PLAQUES NOT *IN SITU*

Since I began research on the plaques from 'Meadow Bank', I have been in contact with Tommy Green's daughter. In her garden wall are a series of diamond-shaped plaques, very like those on 'Meadow Bank'. The diamond is of the same size as those inside some square plaques on the house. The triangular sections of the latter are added at each corner. These diamond plaques have clean edges, so two suggestions are made. The diamonds could be prototypes or they could have been used like that on the north wall of the house. The now deceased husband of Tommy Green's daughter rescued these plaques when the builders were throwing them all down at the time when they were building the skittle alley: the year of this is unknown.

These plaques have not been painted. They show clearly non-mythical creatures but are representations of everyday country creatures: a pigeon (or dove), a pheasant, and a hare. As these are built into the back wall of the garden, it is impossible to see the rear of the plaques.

On at least one plaque there is an initial letter: 'K' is on a plaque showing a kangaroo (Fig. 9). It could be that these plaques represent a means of teaching children the alphabet by using a set of animals, rather like a Noah's Ark set.



Fig. 8 Well-preserved plaques below the left-hand window of the east side of 'Meadow Bank'. The creatures here are less easy to identify, although the one on the extreme left appears to be a wolf or beaver.

THE PLAQUES FROM 'MEADOW BANK'

I had taken photographs of this house in 1993 (fig. 1). When I looked *then* at the decorations which went all round the former house, I thought that this was pargeting; that someone had worked the fantastic creatures in evidence there in plaster. This was because they were white or a dirty cream colour.

After I had become known as someone interested in bricks, it was pointed out to me that the decorations were in fact terracotta plaques. This could be seen clearly, the white paint was flaking off and underneath was brick.

When I saw demolition in progress in September 2000, I stopped to ask about the plaques. I explained that I am a member of the Eastleigh and District Local History Society and of the British Brick Society. I thought perhaps the museum in Eastleigh might be interested in buying one. "How much are they?" The man I asked did not know. He gave me the telephone number to ring the owner, Mr Rogers, of the demolition firm in Southampton.

When I tried to contact them there was no answer. I went back on the next day to take photographs. Another member of the Eastleigh and District Local History Society was there watching. I parked and together we walked over. I took photographs and again asked about the plaques. The man I asked said that they cost £200 each. I was lucky to be offered a broken one. My friend helped me to put it in the boot of my car and my neighbour helped me carry it to the back of my garden. This was on Thursday 21 September 2000.

Subsequently the plaques were traced to dealers in Kent who were selling them, cleaned and totally restored, for as much as £500 each. It was also established that the plaques were

made by Royal Doulton Ltd., at their Lambeth works.

We measured the plaque and I took photographs of it (figs. 10 and 11). It is 22 inches square by $4\frac{1}{2}$ inches deep. If it took the place of bricks as courses, it would have taken the place of maybe five courses of bricks at that period. Bricks in my collection which came from a public house built by Jonas Nichols in 1887 are $9\frac{1}{4}$ inches long by $4\frac{1}{2}$ inches wide by $2\frac{3}{4}$ inches deep. These bricks have the imprint JN for Jonas Nichols who built most of the houses in Eastleigh during the town's booming growth 1887-1910.



Fig. 9 Unpainted diamond-shaped plaque in garden of Tommy Green's daughter. The animal shown is a kangaroo and the plaque has a letter 'K' on it. Other unpainted plaques show a pigeon (or dove), a pheasant, and a hare.

As the Jubilee plaques of 1887 and 1897 are similarly built into walls, I wondered how they compared. The Jubilee plaques measure approximately 22 inches square. An 1897 plaque in private ownership is $3\frac{1}{2}$ inches thick. A plaque of 1887 vintage is full thickness all over, with about 200 holes of $\frac{1}{4}$ inch in the back. Other large areas were removed from the back in the 1897 plaque. It is thought that these were for weight reduction and maybe for firing.

The plaque from 'Meadow Bank', possibly made 1870/71, is slightly smaller as regards the outer measurements but is at least an inch thicker. The builder/architect knew that these plaques were being used to support an outside wall and a roof. The back (fig. 11) would seem to be made of smaller squares as the framework is quite regular. However, the front dispels any idea of fusing squares together, I think, unless the decoration was added later and the whole then re-fired. The small squares at the back reveal obvious scrapings to take out some surplus clay. The small divisions in the rear are roughly $5\frac{1}{4}$ inches square and $1\frac{3}{4}$ inches deep. Inside two corner squares at the base much more clay has been scraped out, to a depth of almost $3\frac{1}{2}$ inches at the bottom.

There are also holes made by a large finger in the sides of all the inner dividing walls. This could be to let air circulate for better drying out or, possibly, for drainage. The holes acted as receptacles for the ties which tied them in with the main brickwork. David Kennett has informed me of similar holes on the much thinner terracotta blocks used as cladding on early Chicago skyscrapers. I have no means of weighing the plaque. It could well weigh one hundredweight (sc. 112 lb., or 50.91 kg.).



Fig. 10 Front view of broken plaque in author's collection.

I counted, I think, at the time, about thirty-six plaques. (At £200 each the salvage trade is doing well; at £500, the retailers even better!).

These plaques went all round the original house, I presume. I could not tell what used to be there before the extension was built on the north side, although from the evidence from the plaques in Tommy Green's daughter's garden it is clear that there were plaques here also.

The plaques on the house were where the ground floor met the first floor. From the ground when I saw them first it was very difficult to pick out the animals and birds, especially as they had been painted and this paint was flaking.

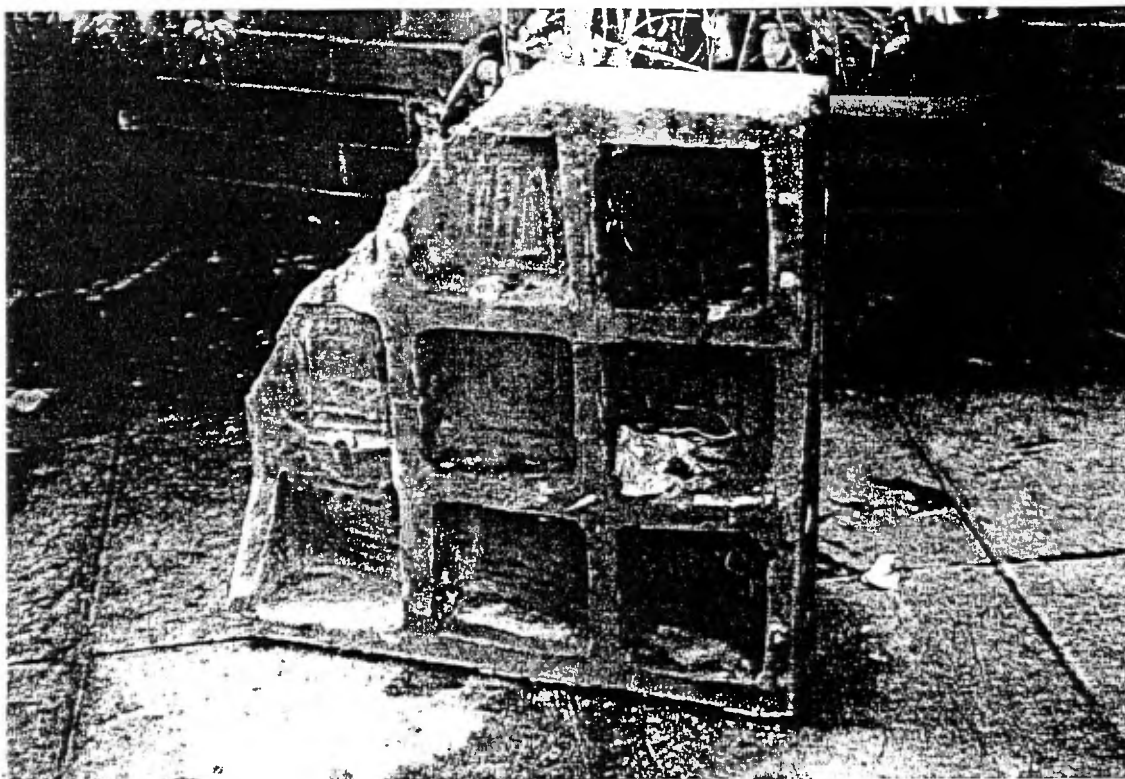


Fig. 11 Rear view of broken plaque in author's collection. Holes are distinctly visible in the left-centre upright framing. Finger and scoop marks are visible in various holes.

Others were placed below the windows in the first floor. These seem to be the only ones repeated. The one I have is such as was used in threes on the back of the house. Close-to, it can be seen that the configuration is of three roses, the top one being a normal type of rose, still half in bud, whereas the ones either side are fully open as Tudor roses. A bird (almost like the bird-beak stone-carved decoration around a Norman window in the church of the Hospital of St Cross, near Winchester) is pecking at the centre of the right-hand rose.

I asked on several occasions, even when it was occupied, if there were any dates anywhere on the building but none was found. Nor were there any initials in frogs in the bricks.

The enormous timber planks, used for roof timbers and floors, which were salvaged, were as good as the day they had been put in. Mr Wheeler, timber merchant, used only the best.

Review Notice

Brick and Tile Works in France

Owen Ward

Usually devoted to large-scale industrial sites such as coal mines, shipyards and ironworks, *L'Archéologie Industrielle en France* also carries information and shorter articles on all manner of industrial sites under threat or in the course of preservation or development. Unusually, numero 39, Decembre 2001, has 70-odd pages dedicated to brick and tile works, with another 40 pages of short articles and news items concerning other revived or lost industries and all equally engrossing if you are the least bit interested. The illustrations are always illuminating and well-reproduced. There are dozen separate items on brick and tile works in France which are summarised here.

1. The first article tells, 'with rigour and precision', of the steps by which the rural craft of brickmaking became a major industry. It has illustrations and diagrams of kilns, brick-making machinery and printed publicity. There is a brief but lively history of the rise of brick for building, including later nineteenth-century 'castles of industry', and reasons for the locations of brick works.

This is necessarily a French history, and includes their dismissal of English brick-making machinery c.1828 on the grounds that it could operate no more quickly than a trained team of hand-brickmakers. Yet in the same year a prize offered for just such an invention by the French society for the encouragement of national industry resulted in the eventual adoption of the prize-winning machine.

After World War I came the gradual spread of permanent kilns. Some Hoffman kilns still remain in use in smaller enterprises producing relatively small quantities of bricks to special order: the tunnel kiln, though it appears some thirty years before the Hoffman type, did not replace it until after 1910, mainly because of problems with the trucks. (pp.8-19)

2. The state of the brick industry in the Touraine region has been investigated by a researcher in the history of technology to find that, as a rule, small brickworks survived even into the twentieth century using techniques similar to those of the eighteenth.

The historic paperwork involved in seeking permission to establish an 'insalubrious' industry shows that the usual design was to incorporate the drying shed around the kiln with no, or few, other permanent structures. Even the tall, vertical kiln took its origin from eighteenth-century legislation and practice. From 1866 a few mechanised sites in Toulouse, producing mainly roof tiles, were powered by steam engines. The production of high-quality durable floor tiles was limited to a few sites which could serve the entire region via the Canal du Midi.

The article is illustrated with diagrams and letterheads and a photograph of a typical works building which boasted some sturdy architectural features. (pp.20-29)

3. The Oustau works at Aureillan (Hautes-Pyrénées). This large and ornately enhanced structure was erected soon after the works began life making bricks, tiles and pipes in 1873. By the twentieth century, it flourished with the production of many kinds of decorative and refractory products until the 1939-45 war. After this it again turned to basic brick and tile production, but closed in 1970.

The main buildings include two Hoffman kilns, and an additional battery of four chambers destined for the production of stoneware pipes. There is also a separate group of four pottery kilns with their attendant works, and nearby is the imposing villa built for the owner in 1910. Both these latter complexes have been refurbished and are in use as offices, exhibition spaces, a restaurant, and a garage. The future of the main building remains to be decided, but it is hoped that the surviving ambience of a place of work can be preserved. (pp.30-37).

4. Since 1995 the Ecomusée du Creusot-Monceau has been involved in an ambitious programme for the rehabilitation of a brickworks and general ceramics industry at Ciry-le-Noble (Saône-et-Loire), one of several established around the 1860s on the Canal du Centre.

In 1919, a rail connection was put in, and the Latil road-rail tractor of 1925/30 remains in its garage to be restored. The products included paving bricks, a range of pots and containers for the chemical industry, and refractory items. This was a major operation on a large site, including thirteen intermittent kilns with masses of equipment and material remaining from its closure in 1967, and now all in process of rehabilitation and restoration.

The article is illustrated with pictures of the buildings then, now, and in between, and of a Chavassieux pug mill and a Rieter edge-runner mill of 1948, both restored to working order. The dozens of structures on the site include some dating from 1893 at the latest, and probably unchanged since the 1860s. The equipment includes wooden patterns for one-off brick orders and a complete set of tile-making machinery.

The restoration exercise is an important one, overseen by the Ecomusée, and a Departmental adult professional training scheme is deeply involved. The site is destined to become a significant artistic, educational, archaeological, and technical centre. (pp.38-47).

5. The survey of kilns in Touraine is generously illustrated, including diagrams and sketches by the author himself, and is summarised thus:

An exhaustive search for kilns for lime, tiles and bricks in the Indre-et-Loire has reaped a particularly rich harvest. The artisanal character of most of the sites explains their diversity, since it was industrialisation, with its emphasis on productivity, which led to a tendency to uniformity. The variations which are the subject of the article often result from the more-or-less successful attempts of the owners in the incorporation of new techniques.

This is a delightful survey of some fairly early enterprises; even the Hoffman kiln is a zig-zag pattern. (pp.48-59).

6. The restoration of terracotta ornamentation. Three case studies serve to study the replacement of decorative tile finishes.

The Gréber house of 1911 in Beauvais was embellished with a wide range of his glazed stoneware - tiles, garlands, bas-reliefs, salamanders and other fanciful designs - topped by decorative roof and ridge tiles. The motifs on the walls were, and in the restoration still are, mounted on wooden panels.

The Boulanger works dating from about 1858 at Auneuil (Oise) are similarly covered in tiles and bas-reliefs. The tomb of Napoleon III in Chislehurst, Kent, is decorated with Boulanger products.

The Villa Cavrios at Croix (Nord) is a typical 1930s design on a structure of concrete and brick.

The experience gained from these three sites is helping to determine the choice between 'authentic' or modern replacements elsewhere. A particular problem is being posed by the deterioration of decorative floor tiles in the overseas colonies and Departments, where authentic



Fig. 1 Brickworks and Tileworks - Protected historic monuments in France.
The number of diagonal lines indicates the number of protected site in the Department.

replacements would not be easy to come by or fabricate (pp.60-65).

7. Fifty years in a brickworks: an interview with an 80-year-old retired brickmaker from the Lambert family's works at St Pait (Eure-et-Loire). It was founded by them in 1859 and in 1997 was the last brickworks in the Department to close. Its products were particularly sought after by those concerned with the rehabilitation of historic monuments. The interview follows fairly conventional lines, but includes the man's recollection of the beneficent proprietor. British readers will perhaps find his wartime and immediate post-war experiences of social interest. Amongst the surviving equipment, in a series of buildings sadly in need of attention, is a Ruston and Hornsby diesel engine dating from the 1930s, purchased just before the war, but hidden in a barn to aid its being requisitioned; it was installed once the war was over. (pp.66-70).

8. Besides these main articles there three shorter accounts.

A tileworks in the Allier at Bomplein is being restored as a working museum (p.19).

A preliminary survey of brick and tile works in the Haute-Garonne is based on archival research. An additional study of the remains of half-a-dozen sites resulted in the deposit of exceptionally detailed surveys of them in the *DRAC* Midi-Pyrénées. (p.29).

The brickworks at Mangorvannec (Saint-Avé, Morbihan) of 1860 remained a family business until its closure. The works supplied bricks for a number of large public buildings between 1863 and 1923, and survived until 1956, while concrete gradually took over as the principal building material. Much of the working equipment remains; money is being raised to restore the kiln. (p.37).

9. The section on brick and tile works ends with a list of those which are protected historic monuments. Some detail is provided, but the distribution of these site is, as can be seen from the sketch map (fig. 1), very uneven. In any case, listing in this way needs to be supported by active care and maintenance on the ground.

10. Besides the articles on bricks and tiles, this Decembre 2001 issue of *L'Archéologie Industrielle en France* concludes with brief, but engaging, reports of the mills on the river Rance; a *CILAC* weekend visiting coal mines and other sites in Lorraine; a foundry which repairs church bells; a water-powered forge in the Basque country 'straight out of the pages of the *Encyclopédie*'; fifteen pages of news items; and a dozen book reviews. All (except the last two) illustrated with good photographs.

L'Archéologie Industrielle en France is published by CILAC, BP251, 56007, Vannes Cedex, France. Price is not stated. Typically each issue cost 130 francs, plus 16 francs postage; ask cilac@wanadoo.fr

Brick and Tile in Print

From time to time the British Brick Society receives notice of short publications, either as booklets or as articles in periodicals, which are worthy of notice in *British Brick Society Information*. Similarly, there are publications not solely concerned with bricks which nevertheless may be of interest. Members involved in publication or who come across items of interest are invited to submit notice of them to the editor of *BBS Information*. Unsigned contributions to this section are by the editor.

DAVID H. KENNETT

1. Nicholas Cooper, 'Newe House, Pakenham, Suffolk',
Country Life, 13 February 2003, pp.52-57, with cover photograph.

Newe House is one of the lesser known brick houses of Suffolk. Completed by 1622, for Robert Bright, a merchant from Bury St Edmunds with London connections, the house has three brick gables with two ogee curves separated by a single step. The latter is an external indication of the floor level of the upper attic storey, once the sleeping quarters of the servants: the final photograph of the article shows one such room. These so-called 'Dutch' gables appear in London between 1590 and 1610 and at grand country houses such as Blickling, Norfolk, in succeeding decades.

Newe House is well documented; the builder's will of 1630 names rooms and their furnishings. One important feature is the central entry to the great hall and the absence of a screens passage. The two-storeyed half-octagonal porch has an elaborate bay window on the first floor which originally lit the great chamber, a first-floor dining room: an 1881 sale catalogue described this as the 'bow drawing room', 38ft by 18ft, occupying the whole of the south end of the house.

In 1652, the executors of Henry Bright, Robert's second son, sold Newe House to Sir William Spring, who used it initially as a dower house. With outbuildings, it was assessed for 17 hearths in 1674. The Springs kept Newe House as a tenanted farmhouse until John Casborne, the local vicar, who was married to a descendant of Sir William Spring, occupied it, some time prior to the sale in 1881.

2. Dan Cruickshank, 'Cradle of Civilisation',
Crafts (magazine of decorative and applied arts), 182, May/June 2003, pp.26-31.

In this article, written on the eve of the War on Iraq, Dan Cruickshank considers the cultural heritage of ancient Mesopotamia - modern Iraq. With sad prescience he foresees the destruction of antiquities - "if war comes" - not just by the invading forces but by indigenous looters. There are several aspects to the culture of ancient Iraq and "it is architecture ... that brings all these elements together". The *Epic of Gilgamesh* is quoted, with its protagonist's encomium on the brick-built city of Uruk - some of the bricks being stamped with his own name. Stone and timber were in short supply, and at first it was sun-dried mud bricks - some 300 mm square and 150 mm thick (12 in x 12 in x 6 in) - that were used for building. These, however, were unsuited to external walls: "rain would soon turn the bricks back into mud". A solution adopted at Uruk, 6,000 years ago, was to face mud brick structures with small coloured cones of stone and ceramic, their bases turned outwards and used to create polychrome patterns. Later, fired bricks were manufactured. "Brick technology appears to have reached its peak in Babylon around 2,600 years ago" with the work of King Nebuchadnezzar (reigned 604 to 561 B.C.), fragments of which survive, many of the bricks stamped with the king's name.

The article is based on a journey undertaken by the author in November 2002, and which

subsequently formed the basis of a television programme. The article is illustrated by his own high-quality colour photographs, including the striking ninth-century spiral minaret and mosque wall at Samarra (the minaret also appears on the cover of the magazine despite an erroneous note about the cover on p.1); the image of the god Marduk at Babylon, created from moulded bricks c. 600 B.C.; the brick-built ziggurat at Ur (c. 2000 B.C.); and the brick cones facing the mud bricks at Uruk (c. 4000 B.C.).

The same issue of the magazine also contains (pp. 52-53) a review by Catherine Croft of the recent Mies van der Rohe exhibition at the Whitechapel Art Gallery, London, illustrated by a photograph of the highly accomplished brick-built Hermann Lange House in Krefeld, Germany, of 1927-30 (here dated to 1928).

Another article covering much the same ground as Dan Cruickshank in *Crafts* is Jonathan Glancey, 'The Writing on the Wall', *Guardian Weekend*, Saturday 3 August 2003.

T.P. SMITH

3. Martyn Goddard with Michael Hall, 'London: the never-changing city', *Country Life*, 7 November 2002, pp.74-79.

Essentially a photographic essay, this includes vignettes of such little-known gems as the Hopton Almshouses, Southwark, and the Catholic Apostolic Church on Maida Avenue overlooking Regent's Canal. The Marx Memorial Library at 37A Clerkenwell Green is a brick house of 1738, while the world's first underground railway is represented by the brick tunnels of the Metropolitan Line at Baker Street, built in 1863.

This issue of *Country Life* also includes an article on 'Hampstead's Horticultural Hideaway' in which Leslie Geddes-Brown examines the gardens of Fenton House. This brick house, which appears in one of the illustrations, is late seventeenth century, square in plan.

4. John Hale, Jan Heinemeier, Lynne Lancaster, Alf Lindroos and Åsa Ringborn, 'Dating Ancient Mortar', *American Scientist*, 91, 2, March-April 2003, pp.130-137.

Though not directly concerned with historical brickwork, this article, by an international and interdisciplinary team, is of relevance to those concerned with the topic. The refined method of Carbon 14 (^{14}C) dating, which is explained in the article, has, moreover, been tested using mortar from (*inter alia*) independently dated *brick* buildings, including the so-called 'Trajan's Markets' in Rome (c. A.D. 110), the striking brickwork of which appears on the cover.

As mortar sets, it absorbs carbon dioxide from the atmosphere: the carbon contains a natural proportion of ^{14}C . Once the mortar has set there is no further absorption and the ^{14}C decays at the normal rate - that is with a half life of 5,730 years. Until recently, it has not been possible to use the carbon within mortar for dating purposes because of the impurities in all lime-based building materials, which may seriously affect the results. With the development of accelerator mass spectrometry (AMS), however, the amount of carbon required for analysis has been greatly reduced - to just one milligram. This enables the carbon in mortar to be analysed free of contaminants. Rigorous tests have confirmed the reliability of the method, and, as the authors conclude, the results "should be significant not only for the history of technology but for human history as a whole".

T.P. SMITH

5. Roger Hewitt, 'Isle of Wight Brickmaking History',
<http://freespace.virgin.net/roger.hewitt/iwias/bricks.htm>

This website can be accessed by typing in 'Isle of Wight Brickmaking History' into a search engine. Notes are included on brickmaking methods, dating bricks, some island brickmakers,

and examples of island brickwork including photographs which can be enlarged, and the site ends with a three page list of brickmaking sites. The brickmakers noted as the Pritchett family, the Downend Brick Manufacturing Company, Flux of Werrar, Kent of Shanklin, John Nash at Newton, Henry Prangnell at Newtown.

ALAN COX

6. Mary Miers, 'Designed for Me by Me',
Country Life, 21 November 2002, pp.52-57.

Ken Shuttleworth's Crescent House, Wiltshire, of concrete and with a glass wall looking out on the garden and the Marlborough Downs, is possibly well-known: it has been featured in more than one television programme. However, this is not so for Adrian James' neat brick house on Mill Street, Oxford, with, at the entrance, its separate domed studio. The architect used a steel frame, painted bright red where seen externally. The exterior is mostly of hand-made orange bricks from Sussex in a conventional stretcher bond although the bricks are set in a single vertical course above and below where the frame is exposed. A nice touch is that bricks form the sill of blue-painted window frames.

7. Jeremy Musson, 'Sissinghurst Castle',
Country Life, 5 September 2002, pp.132-135.

Country Life has been to Sissinghurst before: full references are given. A revisit to this early Elizabethan brick house with its great tower is, nevertheless, welcome. The gardens were laid out in the 1930s to emphasise the lost portions of the great house: the architect A.R. Powys, secretary of the Society for the Protection of Ancient Buildings, was much involved from 1932 to his death four years later. To these conservative repair principles we owe much of the conservation of the brickwork. A recent addition, mostly timber but with brick supports, is the new boathouse designed by Andrew Clark of Purcell Miller Tritton.

8. J.M. Robinson, 'How Lady Stafford Revived the Gothic',
Country Life, 3 April 2003, pp.82-85.

Costessey Park, just west of Norwich, was originally built in 1564 but is best known for J.C. Buckler's enlargement from 1826 onwards, done to celebrate the revival of the Barony of Stafford a year earlier. George, 8th Lord Stafford had a wife, Frances Henrietta Sulyarde, an enthusiastic amateur architect, who travelled round England with Buckler inspecting Tudor properties on which to base the new work, which included refenestration of the now sash-windowed Tudor house. A watercolour sketchbook by Buckler records their travels and their work at Costessey; the latter is illustrated in Robinson's article.

The estate brickyard produced elaborate moulded bricks for the turrets and chimneys, all swept away in the 1920s demolition. The brickworks became a commercial venture from which 'Cossey ware' was derived: The name is pronounced 'Cossey'.

9. John Selby, 'The Fenny Compton Tunnel, Oxford Canal',
Industrial Archaeology Review, 24, 2, 2002, pp.103-117

The Fenny Compton tunnel in Warwickshire on the Oxford Canal was built between 1775 and 1777. It no longer exists, although in name it appears to this day on all OS maps. The article describes the building of the tunnel, its demolition in 1838-40 and 1866-69, and the construction and operation of a brickyard established to exploit the resulting clay spoil. A brick kiln was built in 1840-41 and continued production until 1917. The remains of the kiln are extant and were described in *BBS Information*, 85, October 2001, pp.21-35.

JOHN SELBY (Author's summary, adapted)

10. Terence Paul Smith, 'The Flemish Connection: Cautions Regarding Some Building Materials Terminology',

Journal of the British Archaeological Association, 115, 2002, pp.272-277.

The term 'Flemish [or Flanders] tile' - variously spelled and sometimes occurring in Latin versions - is familiar to building historians and others. But, this paper argues, the term requires caution. First, the name *Flanders* has frequently been used, both in the past and in the present, for the whole of the Greater Netherlands rather than for Flanders proper. Second, and most important, the term has been applied to different building materials: small glazed floor tiles, large unglazed floor tiles, bricks (of various sorts), and pantiles. Usage has, moreover, varied over time. Sometimes the context or a gloss will make clear which material is intended - but this is by no means always the case. Finally, on some occasions (certainly in connection with pantiles) the term was used generically, to signify a *type* of material (*cf.* the modern 'Spanish tiles') rather than to indicate its provenance. The paper's conclusion recommends circumspection when considering the terms 'Flanders' and 'Flemish' and urges that the toponymic epithets be avoided except where there is incontrovertible evidence for materials coming from Flanders.

T.P. SMITH (Author's summary)

11. Terence Paul Smith, 'The Great St Albans Salvage: the Use of Roman Brick in St Albans Abbey',

The Alban Link: Newsletter of the Fraternity of the Friends of St Albans Abbey, 57, Autumn 2002, pp.13-18.

In this short contribution, the author considers the reuse of bricks from the Roman city of *Verulamium* in the nearby abbey church (now cathedral) of St Albans. The bricks were used structurally, not decoratively or for effect: only in the nineteenth century was the now familiar (and, to our eyes, attractive) russet tower revealed by stripping off the render. So too with such of the interior brickwork as is now exposed to view. Roman bricks - by their very nature intractable - suited (or perhaps *determined*) a severe Norman style, softened slightly only in the uppermost stage of the tower. Roman bricks continued to be employed down to the early fourteenth century, but by that time - with more complex mouldings and with stone more easily available - it was deployed only in a minor capacity. This circumstance is used to counter the sometimes expressed view that supplies of Roman bricks for reuse were exhausted by the mid-twelfth century: at St Albans at least that was certainly not the case.

T.P. SMITH (Author's summary)

12. Beryl Williams, *Captain Pilkington's Project The Great Works at Weedon 1804-1816*, Daventry: Beryl Williams, 140 pp, numerous (unnumbered) illustrations, 2003.

ISBN 0-9543448-0-4, price £15-00, pbk.

Robert Pilkington was a Captain in the Royal Engineers and his project to construct the Royal Depot in a Northamptonshire village became known as the Great Works at Weedon. The huge Ordnance Depot was established during the Napoleonic Wars when England was under threat of invasion by the French. King George III was to be evacuated to this complex, almost in the geographical centre of England, if the country were invaded.

Captain Pilkington planned the site, designed the buildings, estimated the costs, found the contractors, mostly local men, and housed the workers in a complex, mostly still in existence. The project included the building of a branch canal from the Grand Junction Canal to serve armouries to receive 200,000 muskets, storerooms for the guns and equipment of twenty-four brigades of Field Artillery and magazines to be fitted with racks for 20,000 barrels of gunpowder. Barracks and stables for the officers, men and horses of a Troop of Horse Artillery were also built.

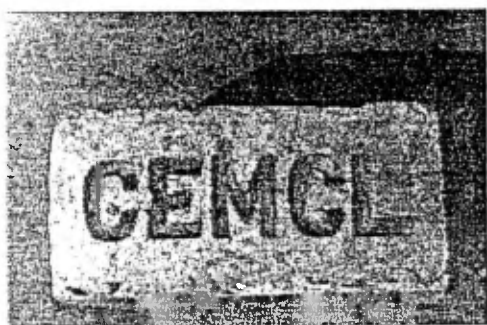
The bricks used were mostly the local red bricks. Each of the twenty-four storehouses used half a million bricks, but the civil officers' houses were built of a light-coloured brick, the nearest sources of which were Fenny Stratford, Bucks., and Brinklow, Warwks. Like the stone for plinths, string courses, sill-bands, cornices, parapets, and doorways, these bricks were delivered to Weedon by canal. At times both red bricks and the light-coloured bricks were in short supply. The storehouse wall took no fewer than three million bricks.

The book is available from Beryl Williams at Sira, Main Street, Whilton, Daventry, Northants., NN11 5NN.

BERYL WILLIAMS (Author's summary, extended)

Identities of Brickmarks and Brick Manufacturers

Can any member help with the identification of the makers of bricks with any of the following marks? Any suggestions please to Mike Hammett, Honorary Secretary, at 9 Bailey Close, High Wycombe, Buckinghamshire HP13 6QA.



TSL

**E SHARD
M
88**

Fig. 1 a. Brick from Vladivostok, Russia
b. Two bricks from a school built in Doncaster, Yorkshire West Riding, in 1866

Three enquiries have been received.

1. The first is from a Russian archaeologist who has found bricks with the mark 'CEMCL' in a fortress at Vladivostok (fig. 1a). The brick is a dull red colour and the initials appear impressed directly into the bed surface. There is no frog.

2. Two red bricks are allegedly from a school built in Doncaster in 1866 (fig. 1b). They are 8.5 inches long by 2 inches thick (width not recorded), solid with no frog. The lettering is indented. The first has the letters 'TSL' and the second has four rows of lettering of which the third is unclear.

3. BBS member Michalis Bardanis requests information about a group of non-Greek bricks (fig. 2) found in various Athenian buildings. All are solid bricks and photographs and sizes connected with each mark can be supplied.

MICHAEL HAMMETT

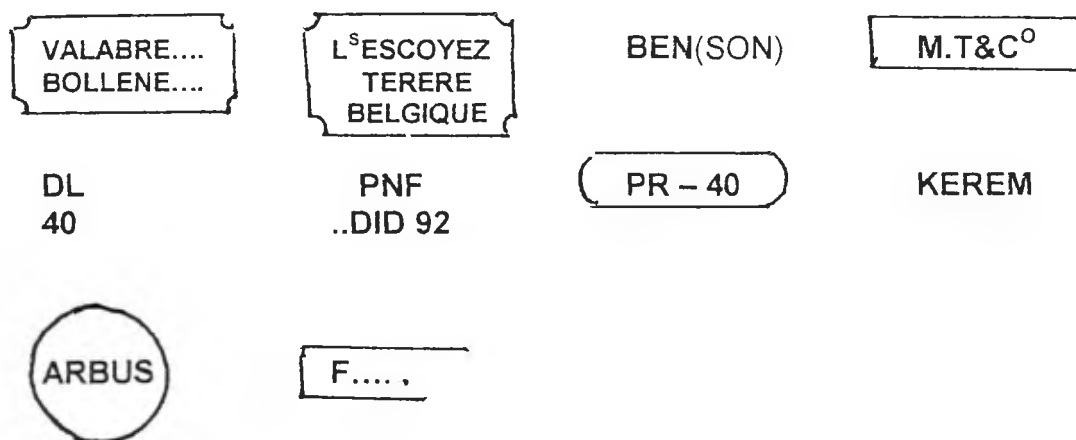


Fig. 2 Marks on non-Greek bricks found in Athens.

Schoolboy Graffiti

In *The Times* on 28 June 2001, the name of a man who later wrote

My boyhood was, I think, as unhappy as a young gentleman's could be was revealed scratched in neat serif capital letters on a brick wall at Winchester College. The letter 'P' is now worn away but the remainder of the name 'A. Trollope' is extremely visible covering much of one brick with the final 'E' on a second. Other, contemporary graffiti record the names of those who were also pupils of the school in the late 1820s.

DAVID H. KENNETT

Victorian Plaques

In *BBS Information*, 86, December 2001, there was an article by Kathleen Clarke on 'Victorian Jubilee Plaques in Hampshire'. A jubilee plaque is affixed to a house adjacent to the market hall in Brynmawr, south Wales.

High up on the wall of the gable end of the former offices of the Midland Railway on Midland Road, Derby, is a plaque bearing the intertwined initials 'MR'. Below this is the oriel window of the former board room of what was in 1905 Britain's largest company. The building is still used as offices for a railway business.

EDWIN J. ROSE

DAVID H. KENNETT

A New Way to look Traditional

I was fascinated to discover that Ibstock have introduced into their product range a "tilebrick".

For centuries we have been used to (and fooled by) tiles masquerading as bricks - mathematical tiling. Now we have bricks masquerading as tiles.

These clay bricks have a slightly sloping and projecting face to create the appearance of tile hanging, but they are built in the traditional manner of bricklaying. The incised club tile

effect is perhaps a little less convincing. Tilebricks come in a variety of shades and finishes.

Personally, I applaud this innovation. It enables a good, solid masonry wall to be built whilst creating the pleasant aesthetic effect of tiling. Tile hanging without the slipped and broken tiles, maintenance problems, and rotting timber framework.

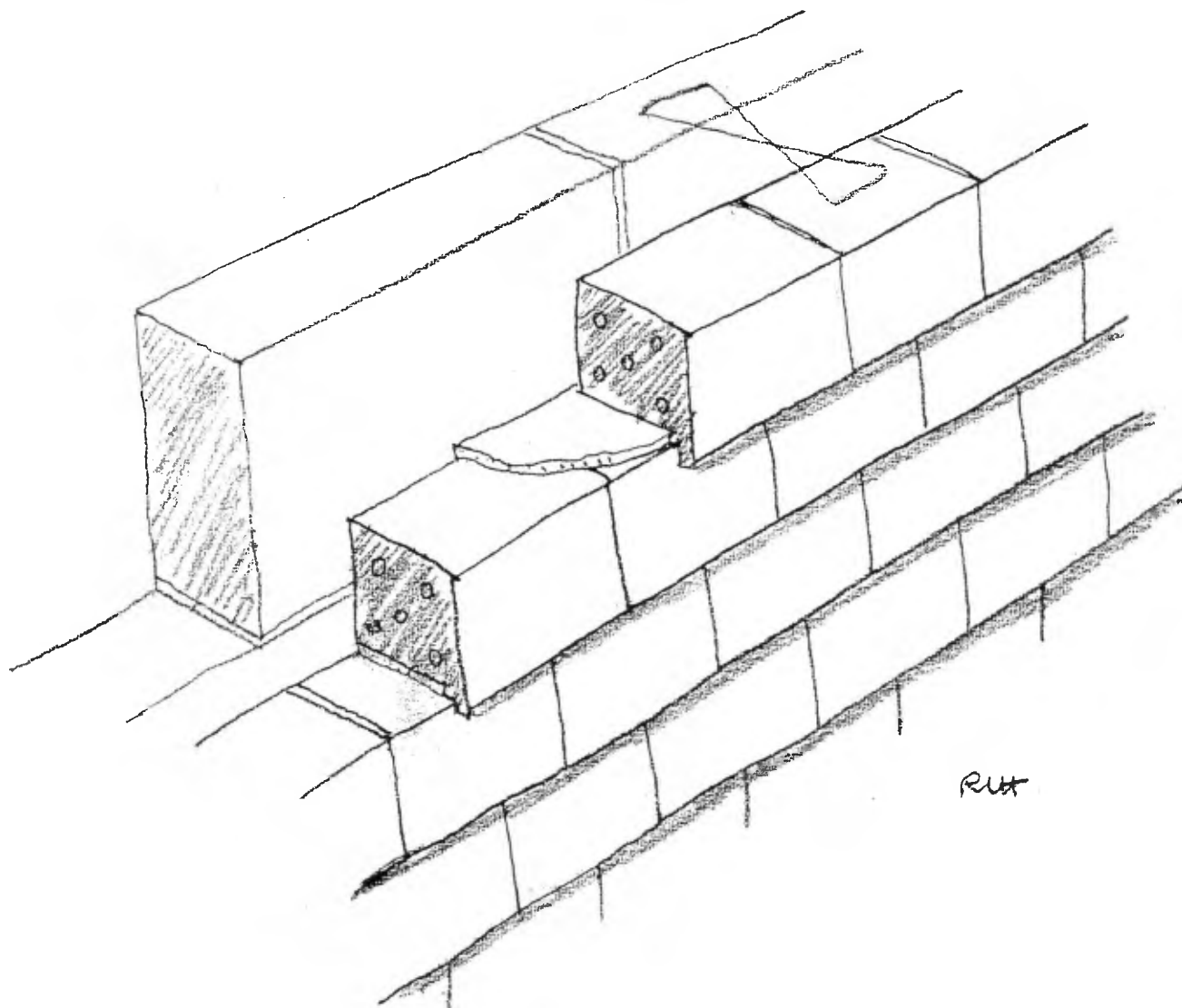


Fig. 1 Brick designed to look like tile, Ibstock 2003

I can imagine many a purist saying that this is "phoney" and unacceptable, but I think they should hesitate before writing off the idea. We readily accept as part of our rich architectural heritage the false impressions of the past such as mathematical tiling, stucco imitating ashlar masonry, plaster decorated to look like marble, and so on.

It will be interesting to see how architects and planning authorities take to this idea, but I say, well done Ibstock, and good luck.

RAY HOLLANDS

**BRITISH BRICK SOCIETY
MEETINGS IN 2004**

a Saturday in March/April 2004
a Spring Meeting
location to be announced

One of Saturday 8 May 2004 or Saturday 15 May 2004 or Saturday 22 May 2004
Northern Spring Meeting
possibly in Boston, Lincs.

Saturday 12 June 2004
Annual General Meeting
Gloucester Docks

a Saturday in mid July or September 2004
a visit to the mausoleum at Castle Howard, open for groups only, in September 2002;
this has a brick vault.

We hope also to be able to see the interior of the burnt out wing, again with brick inside
the stone front.

a Saturday in October 2002
Suggestions which have been made are
The Oval Cricket Ground, with brick statue of Sir Len Hutton
and buildings in the area

Other suggestions which have been made include:

King's Lynn
to include both the South Gate and King Edward VII Grammar School (Basil
Champney's last work)
Worthing
Rye
Tenterden
Guildford
Oxford

Investigation will be pursued as to whether a number of schools with brick buildings, of various
dates, which would be worth visiting, do tours: Harrow, Rugby and Marlborough have been
suggested.

*The British Brick Society is always looking for new ideas for future meetings.
Suggestions please to Michael Hammett, David Kennett or Terence Smith.
We would particularly welcome suggestions as to brickworks to visit.*