

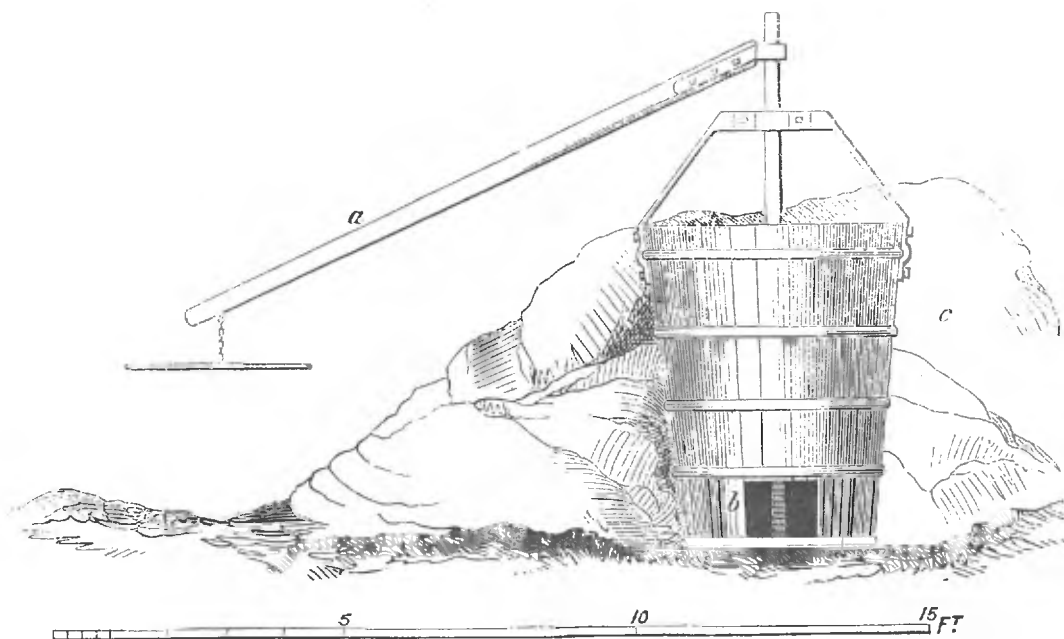
ISSN 0960-7870

BRITISH BRICK SOCIETY

INFORMATION 124

JUNE 2013

FORTIETH ANNIVERSARY ISSUE



OFFICERS OF THE BRITISH BRICK SOCIETY

Chairman Michael Chapman
Tel: 0115-965-2489
E-mail: pinfold@freenetname.co.uk

8 Pinfold Close
NOTTINGHAM NG14 6DP

Honorary Secretary Michael S Oliver
Tel: 020-8954-4976
E-mail: micksheila67@hotmail.com

19 Woodcroft Avenue
STANMORE
Middlesex HA7 3PT

Honorary Treasurer Graeme Perry
Tel: 01889-566107
E-mail: graeme@gjperry.co.uk

62 Carter Street
UTTOXETER
Staffordshire ST14 8EU

Enquiries Secretary and Liason Officer with the BAA Michael Hammett ARIBA
Tel: 01494-520299
E-mail: bricksoc@mh1936.plus.com

9 Bailey Close
HIGH WYCOMBE
Buckinghamshire HP13 6QA

Membership Secretary Dr Anthony A. Preston
(Receives all direct subscriptions, £12-00 per annum*)
Tel: 01243-607628

11 Harcourt Way
SELSEY
West Sussex PO20 0PF

Editor of BBS Information David H. Kennett BA, MSc
(Receives all articles and items for BBS Information)
Tel: 01608-664039
E-mail: dhk5573@btinternet.com

7 Watery Lane
SHIPSTON-ON-STOUR
Warwickshire CV36 4BE

Printing and Distribution Secretary Chris Blanchett
Tel: 01903-717648
E-mail: buckland.books@tiscali.co.uk

Holly Tree House,
18 Woodlands Road
LITTLEHAMPTON
West Sussex BN17 5PP

Web Officer Vacant

The society's **Auditor** is:
Adrian Corder-Birch F.Inst.L.Ex
E-mail: clerk@siblehedinghampc.org.uk

Rustlings, Howe Drive
HALSTEAD, Essex CO9 2QL

* The annual subscription to the British Brick Society is £12-00 per annum.
Telephone numbers and e-mail addresses of members would be helpful for contact purposes, but these will **not** be included in the Membership List.

British Brick Society web site:

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

Contents

Editorial: The British Brick Society enters its Fifth Decade	2
A Mid-Eighteenth-Century Brick Clay Mill?	
by Mike Kingman	6
Love Story: A Brickmaking Family	
by Alan Cox	9
Brick for a Day: The British Brick Society in London, 2009 and 2012	
by David H. Kennett	16
Brick for a Day: Measham Brickworks, Leicestershire	
by Michael Chapman	21
The Red Bank Manufacturing Company, Measham, Leicestershire	
by Michael Chapman	24
Brick in Print	
compiled by Terence Paul Smith	30
Review Article: Brickmaking and the County Historical Atlas	
by David H. Kennett	34
Electronic submissions to <i>British Brick Society Information</i>	40
<i>Cover Illustration</i>	
A Horse-Driven Pug Mill as illustrated by Edward Dobson in <i>A Rudimentary Treatise on the Manufacture of Bricks and Tiles</i> , 1850.	

Editorial:

The British Brick Society enters its Fifth Decade

Amongst the papers in the editor's collection of the earliest issues of *British Brick Society Information* is *BBS Information*, 1, sent to the membership of the nascent society in April 1973. Amongst the new society's future events notified in *BBS Information*, 1, was a series of lectures about brick to be given in Bedford Public Library on 24 November 1973, which appears to have been the first "public" activity of the society, predating the initial Annual General Meeting, held in the rooms of the Society of Antiquaries of London on 23 January 1974, although an Annual General Meeting of the Brick Section of the British Archaeological Association had been held in the same venue in January 1973. Prior to the society's first Annual General Meeting there had been eighteen months of discussion about the objectives of the society and its constitution. The preliminary meetings to discuss the possibility of forming a society whose members are interested in bricks, brickmaking, brickwork, and brick buildings had taken place in Ipswich at the residence of late Geoffrey Hines between Mr Hines, the late Laurence Harley, the late Dr Ronald Firman, and a then relatively youthful Terence Paul Smith, at that time a postgraduate in the Faculty of Divinity in the University of Cambridge but already recognised as one of the leading authorities on medieval brick buildings: his earliest publication, a lengthy article on 'Someries Castle', had been the principal item in *Bedfordshire Archaeological Journal*, 3, 1966.

As *British Brick Society Information*, 1, April 1973, can be taken to represent when the British Brick Society became active, it will be clear that in April 2013 the society is entering its fifth decade. When *British Brick Society Information*, 60, October 1993, was sent to members, Geoffrey Hines wrote to the editor:

It is appropriate to celebrate the sixtieth issue of *British Brick Society Information*.

The anniversary bears this old mind back to the days when I would devote a Sunday to compiling and another to typing the earliest issues on a stencil which, grace to the (then) Norfolk Technical College, it was both reproduced and distributed without cost to the society. Then the Brick Development Association stepped in when I retired from the college. This was thanks to Terry Knight in the first place. It was cool cheek and brinkmanship all the way along!

Neither Laurence Harley nor I anticipated this. The same was true of the then Secretary of the Society of Antiquaries of London, who, when I presented him with the first copy, murmured: 'Ah, yes, they generally run fourteen or twelve numbers before they die out'.

That, *inter alia*, was what determined me to persevere when there was much opposition and some contempt around.

All this makes me, if possible, even more grateful for that which the present officers have achieved and are achieving.

This issue of the society's periodical is *British Brick Society Information*, 124. Doubtless, Geoffrey would have been even more gratified to see the periodical still flourishing and had passed its second sixty issues; in 1994, Geoffrey counted in the Sumerian fashion, adopting their duodecimal system rather than using decimals as the ancient Egyptians had. In keeping with its origins, as noted in Geoffrey's letter, *BBS Information* remains a hybrid between a newsletter, giving information about the society's activities and

BRITISH BRICK SOCIETY ANNUAL GENERAL MEETINGS 2006-2013

2006	Bursledon Brickworks, Hampshire <i>Visit:</i> Bursledon Brickworks	
2007	Sudbury Parish Hall, Derbyshire <i>Visit:</i> Sudbury Hall	<i>BBS Information</i> , 107 , June 2008, pp.33-35.
2008	Angmering Chalk Pits Museum, West Sussex <i>Visit:</i> Angmering Chalk Pits Museum	<i>BBS Information</i> , 108 , Sept 2009, pp.30-31.
2009	Boston, Lincolnshire <i>Visit:</i> Boston - town walk	<i>BBS Information</i> , 111 , Nov 2009, pp.21-25.
2010	Reading, Berkshire <i>Visit:</i> Reading - town walk	<i>BBS Information</i> , 116 , Apr 2011, pp.20-27.
2011	Newark, Nottinghamshire <i>Visit:</i> Newark - town walk	<i>BBS Information</i> , 118 , Oct 2011, pp.2-8.
2012	Faversham, Kent <i>Visit:</i> Faversham - town walk	<i>BBS Information</i> , 126 , forthcoming
2013	Beverley, Yorkshire East Riding <i>Visit:</i> Beverley - town walk	

snippets of information about bricks and brick collections, and an academic learned journal, providing fully referenced papers on bricks, brickmaking, the brick industry, and brick buildings, both individual buildings and those in a town or of a particular type. Both types of article may appear in any one issue, with some issues more weighted to the academic rather than noting contemporary events. The scope of *British Brick Society Information* continues to be both contemporary and historical.

In the past forty years, the society has held Annual General Meetings at thirty-five venues with some places, mainly museums with material of brick interest, being visited more than once, and at various times in the year; for the past two decades this has been in June but in the 1970s it was in months as varied as February and May.

Since 1986, in addition to the Annual General Meeting, during the course of each year the society has organised between one and four visits to brickworks, historic brick buildings, and walks round towns or areas of large cities with much of brick interest. Earlier, between 1973 and 1981 there had been ten Local Meetings, mostly seminars and symposia where members gave talks on research into brick matters in an area.

Listings of venues for the Annual General Meetings, Local Meetings, and Spring and Autumn Meetings have been printed for 1974 to 1993 in *BBS Information*, **59**, June 1993, and for 1993 to 2006 in *BBS Information*, **100**, May 2006, together with a summary arranged by historic English counties. Lists of Annual General Meetings and Spring, Summer, and Autumn Meetings since 2006 appear on pages 3 and 4, respectively, of this issue of *British Brick Society Information*.

At the 2006 Annual General Meeting, Terence Paul Smith ended twenty years service as the society's Chairman, seeking to promote younger persons to ensure that the society was provided with experienced officers as the twenty-first century continued. James Campbell held the office for two years (2006-2008) but because of family and work commitments felt unable to continue. One valuable service provided by James was to arrange for a research student to put all issues of *British Brick Society Information* up to 2007 on the world wide web, making our publication better known and more accessible. Terence Smith resumed the

BRITISH BRICK SOCIETY SPRING AND AUTUMN MEETINGS 2007-2012

2007	Oct	London Piccadilly and Pall Mall; Westminster Cathedral <i>BBS Information</i> , 107 , June 2008, p.35; 110 , July 2009, pp.8-26.
2008	April	Goucestershire: Coleford Brick
	Aug	Warwickshire: Coventry <i>BBS Information</i> , 108 , Sept 2008, pp.31-32.
	Oct	West London: Hillingdon Civic Centre, Harmondsworth Barn and Church; West Drayton Manor and Church <i>BBS Information</i> , 109 , March 2009, pp.18-24.
2009	July	Ibstock Brick Ltd, Swanage Works, Dorset <i>BBS Information</i> , 111 , Nov 2009, p.25.
	Aug	Rugby School <i>BBS Information</i> , 113 , July 2010, pp.31-32.
	Oct	North London: Angel to Farringdon <i>BBS Information</i> , 124 , June 2013, pp.25-27.
2010	July	Essex: W.H. Collier Brickworks, Marks Tey <i>BBS Information</i> , 114 , Oct 2010, pp.24-27.
2011	July	North London: Canonbury to Moorgate <i>BBS Information</i> , 118 , Oct 2011, pp.33-36.
2012	April	Oxford: the St John's College Estate in north Oxford, St Barnabas Church, Lady Margaret Hall <i>BBS Information</i> , 121 , Sept 2012, pp.21-27.
	July	London: South Westminster <i>BBS Information</i> , 124 , June 2013, pp.27-29.
	Oct	Leicestershire: Measham Brickworks <i>BBS Information</i> , 124 , June 2013, pp.16-24

office of Chairman for three years (2008-2011) before Michael Chapman assumed the role in 2011. Mike is active in arranging visits to brickworks for the society.

In the past seven years, four of the officers in place at the 2006 Annual General Meeting have continued in their respective positions: Michael Oliver as Honorary Secretary, Michael Hammett as Enquiries Secretary, Anthony Preston as Membership Secretary, and David Kennett as Editor of *British Brick Society Information*. He also acts as Visits Co-ordinator. The society's Honorary Auditor statutorily cannot be an officer of the society: Adrian Corder-Birch has fulfilled the role throughout the last seven years and acted for the society for a number of years before 2006.

Soon after the 2006 Annual General Meeting, Chris Blanchett assumed responsibility for the printing of *British Brick Society Information* and continues as the society's Printing and Distribution Officer. For this service to the society, its editor is extremely grateful.

Since the last account summarising the society's progress was written, Ann Los resigned as Honorary Treasurer in 2007 having served in that position for eight years. In the previous thirty years, Ann had had several roles in the society's affairs: Bibliographer and Publications Officer to 1999. For several years from 1987 onwards she facilitated the production of *British Brick Society Information*. Graeme Perry has been the society's Honorary Treasurer since June 2007.

Two long-serving officers resigned their posts at the 2011 Annual General Meeting.

John Tibbles was Publications Officer from 1999 to 2011, holding a large stock of print copies of *British Brick Society Information*. Sandra Garside-Neville had been the society's Web Officer for a number of years before her name appeared in the list of the society's officers printed on the inside front cover of each issue of *British Brick Society Information*. She maintained the society's website <http://britishbricksociety.free-online.co.uk/index.htm> throughout her service to the society.

The British Brick Society owes a great deal to the work done on its behalf by its honorary officers, both those who have contributed in past years and those still in post. Thanks are due to all who have enabled the society to progress into its fifth decade.

Although no longer one of its officers — including being Editor of *British Brick Society Information* from 1983 to 1990 — Terence Smith has given twenty-six years formal service to the society. He continues to assist in many informal ways; not least in compiling the 'Brick in Print' column providing notices of publications of interest to members, writing many articles, and, as in *BBS Information*, 123, February 2013, providing an editorial for an issue and in the past editing an issue. For his many contributions to the activities of the British Brick Society, no less than for his long-standing friendship, I thank him.

The editor apologises for the late delivery of *British Brick Society Information*, 124, June 2013; it was originally planned for distribution to members in May 2013. Unfortunately, as those who attended the society's London Meeting in May were aware, the sixteen-year-old printer attached to the editor's typing computer failed. It had done sterling service starting with *BBS Information*, 74, June 1998; and encompassing many handouts for his students. This problem was then compounded by the almost instantaneous failure of the printer attached to the editor's internet computer. These problems have now been solved.

To ensure adequate time for notice to reach members, the visit to Leamington Spa has been put back until 12 October 2013 and details about this are included in this mailing.

The society held its Annual General Meeting on Saturday 22 June 2013 in Beverley, East Riding of Yorkshire; a report will appear in the next issue of *BBS Information*. At the meeting, the society's officers were re-elected en bloc; however, the honorary secretary has given notice that he will not be standing for re-election at the 2014 Annual General Meeting in Bury St Edmunds on Saturday 17 May 2014.

DAVID H. KENNETT

Editor, *British Brick Society Information*,

25 June 2013.

A MID-EIGHTEENTH-CENTURY BRICK CLAY MILL?

Mike Kingman

In 2001, James Campbell wrote a short article on 'The Myth of the Seventeenth-Century Pug Mill' in which he discussed and dismissed the traditional belief that the pug mill was invented in the seventeenth century.¹ Considerable interest was aroused by the paper and in the following year he produced evidence of the term 'clay mill' being employed as early as 1805.² Further brief notes provided evidence of the use of a 'Horse Mill' in a Sussex estate brickyard in 1791³ and the quotation in the *Oxford English Dictionary* of a reference from 1825 '[the tread of men and oxen] ... has of late been superseded by the clay or pug mill'.⁴ Alan Cox in a more lengthy study concluded that 'only in the 1790s does one begin to get references to pug mills in brickmaking and even then they are often ambiguous or inconclusive'.⁵ Terence Smith provided 'irrefutable evidence' of the use of the pug mill in the Netherlands in the early eighteenth century in the form of a painting on a Delft tile of 1737 (fig.1) but concluded that it may have only been used to produce finely ground clay for the pottery industry.⁶

By happenstance I recently came across an article by Charles K. Hyde on 'The Iron Industry of the West Midlands in 1754: Observations from the travel account of Charles Wood'.⁷ Wood (1702-1774), of Low Mill, Egremont, Cumberland, was an ironmaster visiting the Worcestershire Stour valley and the Severn valley to collect evidence of different methods of ironworking. In 1763 he patented a technique of making bar iron without charcoal.⁸

Wood records in his diary:

Saturday September 7, At Stourbridge ... He [Mr Bowyer] went with us to view their Clay, the best of which is in solid hard lumps, is picked clean from all veins of any other matter. It goes to Glass house pots & is ground and sifted fine. The smaller sort,, which is not picked, *is ground by a Stone and made into Brick* (my italics). This Clay lyes 20 yards under the Surface. Observation - Low Mill clay, if clean picked, seems to be much better for use in bricks than theirs, but not as good as that separated for Glass house pots. The Lowmill method of grinding their clay & preparing it, is in my opinion much better and more expeditious than theirs. The best picked Clay would make excellent Brick, but it is too dear for that use.

The key phrase is, of course, 'ground by a stone and made into Brick', by 'picked' I assume that the word is derived from handpicked and means that the pebbles, stones, soil, and similar materials were removed by hand. Possibly as the clay was 'not picked' the stone was sufficiently powerful that such denser materials were crushed and able to be fired. 1754 is too early for the use of a rotary steam engine so by implication the source of power must have been a horse or mule or some form of water-powered mill. All the nineteenth-century illustrations of pug mills show a vertical tank with internal blade, so whether grinding by stone, possibly like a cider press or a corn mill, allows the machine to be called a pug mill is uncertain. A description of brick manufacturing in Stourbridge in 1903 described how fireclay was initially broken by rollers before being mixed in a pug mill.⁹ Dobson in his *A Rudimentary Treatise On The Manufacture of Bricks and Tiles* of 1850 made a clear distinction between rollers and the pug mill (cover illustration), noting that the pug mill was

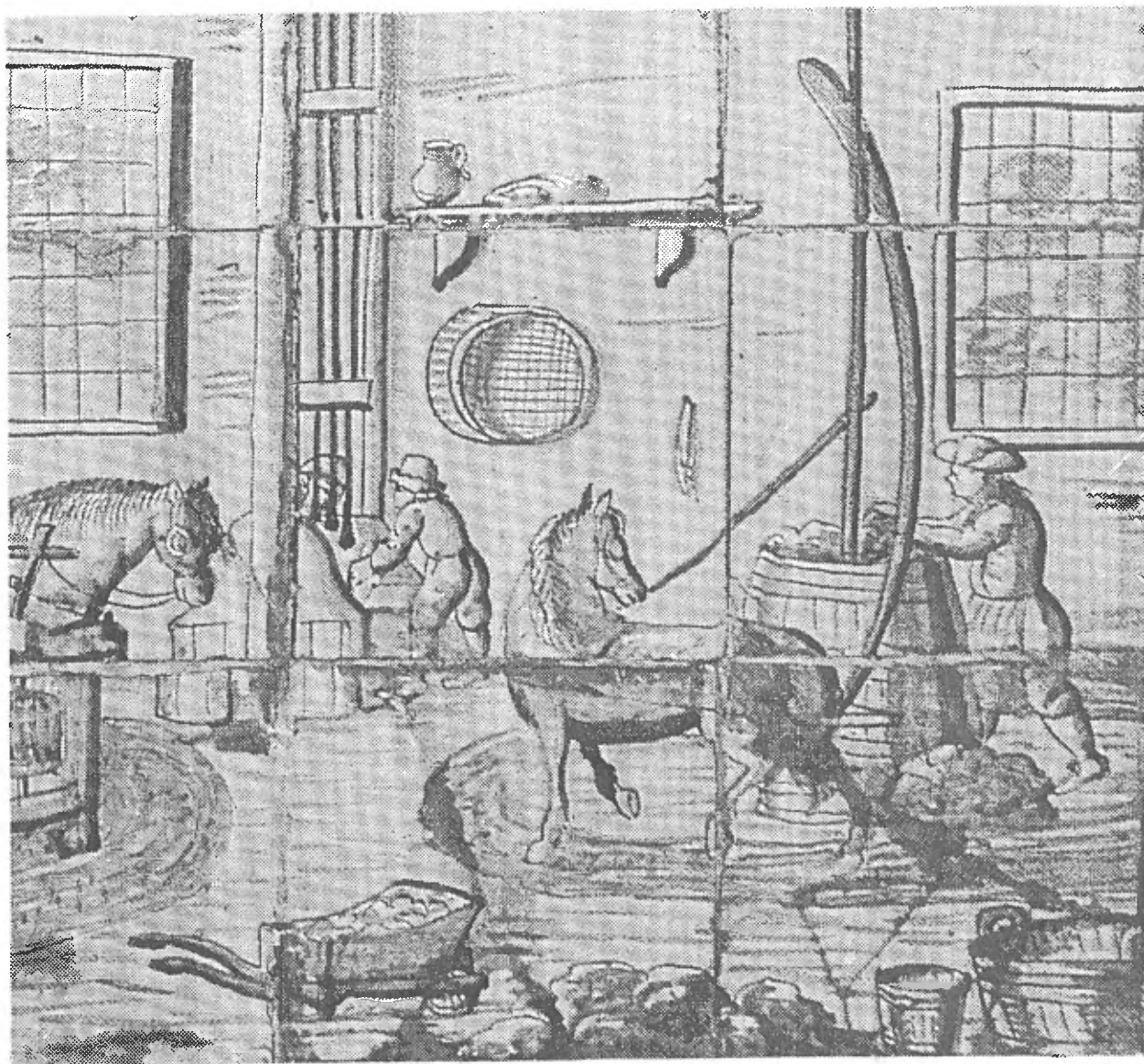


Fig.1 Dutch tile painting of 1737 depicting a pottery and tile works, showing the horse-drawn pug mill.

used where brick earth was of milder quality.¹⁰ Wood particularly emphasizes that brick clay is in 'solid hard lumps'. The grinding of brick clay seems to be an extension of the preparation of refined and high quality clay for crucibles for the Stourbridge class industry and may be confined to that area. Stourbridge clay for crucibles for the glass house at Donnington Wood, Shropshire, was ground in the Coalbrookdale Company's clay mill in 1794.¹¹ Of further interest, but unfortunately not developed, is the early reference to 'the Lowmill method of grinding their clay and preparing it' — presumably the clay was used in some form in Wood's ironworks, perhaps for furnace linings? Although this 'best picked clay would make excellent brick', Wood here implies that the costs of picking would prevent the manufacture of high quality bricks from refined clay.

Whether the grinding of the clay significantly improved the quality and hardness of the brick is unclear and the date of the introduction of this process is also not known, but as

early as 1718 the Coalbrookdale Ironworks purchased 'Sturbridge bricks'.¹² What they were used for is not known but the fact that they are specifically defined by their origin and were purchased from Stourbridge rather than the local brickworks at Broseley suggests that the bricks had particular qualities; probably the bricks were made from fireclay and were consequently more fire resistant. The chronology of the change from refractory stone to firebrick for the construction and lining of iron furnaces is uncertain but Richard Ford used firebrick at Willey as early as 1734.¹³

Alan Cox has quoted several examples of water mills, windmills and steam driven machinery for the preparation of materials for the pottery trade in the seventeenth and eighteenth centuries. he concluded that 'Pug mills of a sort, therefore, existed in this country from the seventeenth century and could have been used for brickmaking'.¹⁴ He agreed with James Campbell that there is a complete absence of any evidence of their use before the last decade of the eighteenth century. Certainly within midland England the only method of clay preparation I have ever met with, before the nineteenth century, is the traditional one of treading the clay by foot and mixing by spade, Wood's evidence of the use of stone-ground clay to make bricks in 1754 may therefore be the earliest documented reference to this mechanical method of preparation in England.

I would be grateful for any corrections or additional information which member may have.

NOTES AND REFERENCES

1. J.W.P. Campbell, 'The Myth of the Seventeenth-Century Pug Mill', *BBS Information*, **86**, December 2001, pp.7-8.
2. J.W.P. Campbell, 'More on Pug Mills', *BBS Information*, **89**, November 2002, p.17.
3. M. Beswick, 'The Pug Mill in Sussex', *BBS Information*, **89**, November 2002, p.15.
4. F. Kelsall, 'Pug Mill in the Oxford English Dictionary', *BBS Information*, **89**, November 2002, p.15.
5. A. Cox, 'The Pug Mill Reconsidered', *BBS Information*, **89**, November 2002, pp.11-14.
6. T.P. Smith, 'An Early Eighteenth-Century Dutch Tile Painting of a Pug Mill', *BBS Information*, **89**, November 2002, pp.5-8.
7. C.K. Hyde, 'The Iron Industry of the West Midlands in 1754: Observations from the travel account of Charles Wood', *West Midlands Studies*, vol. **6**, 1973, pp.39-40.
8. According to Hyde's article, Wood's diary on microfilm was held by Prof. M.W. Flinn of the University of Edinburgh. The same reference is given in D.M. Rees, *Mines Mills and Foundries*, Cardiff: National Museum of Wales, 1967. Wood and a friend, Gabriel Griffiths, visited four blast furnaces, eleven forges, and two slitting mills.
9. A History of E.J. & J. Pearson, www.harrisandpearson.info/strbindustry.
10. E. Dobson, *A Rudimentary Treatise on the Manufacture of Bricks and Tiles*, London: John Weale, 1850, Part I, pp.24-26, quoted Cox, 2002, p.12. Dobson's work, edited by F. Celoria, is reproduced at 4 pages to the page as *J. Ceramic Hist.*, **5**, 1971.
11. Cox, 2002, p.11.
12. Shropshire Archives, 6001/329, 4 31; 6001/330, 37.
13. P. King, 'The Iron Trade in England and Wales 1500-1815: the charcoal iron industry and its transition to coke', PhD thesis University of Wolverhampton, 2003, Chapter 3, 'Making Iron: technology', p.57, ads.ahds.ac.uk/catalogue/adsdata/arch-405-1/.../3_Technology.pdf.
14. Cox, 2002, p.11.

LOVE STORY: A BRICKMAKING FAMILY

Alan Cox

In *British Brick Society Information*, 58, February 1993, John Hill published an article entitled 'William Love, Brickmaker', which this paper seeks to expand into a consideration of the activities across three counties of a family of brickmakers named Love.¹ The Love family operated a number of brickworks in south-west Huntingdonshire, east Northamptonshire, and north and east Bedfordshire from the mid-eighteenth to the early twentieth century.²

In north Bedfordshire there were Loves who were brickmakers in the second half of the eighteenth century, Thomas Love, brickmaker of Keysoe is mentioned in a conveyance of 1756 and his death is recorded in 1777. In the meantime, John Love, brickmaker was married at Riseley in 1770;³ Riseley is the parish immediately north of Keysoe. However, it was only in the nineteenth century that the Loves expanded their brickmaking activities.

James Love, who was born in the parish of Northill, in east Bedfordshire, probably operated the Ickwell brick kiln, situated in that parish, from the 1830s⁴ and he appears in the 1841 census as a brickmaker living at Upper Caldecote, a hamlet in Northill parish. It would seem that some time in the 1840s he was joined by William Love, who had been born in about 1823 at Kimbolton, just over the county boundary, in Huntingdonshire. It is not clear what the relationship between the two men was but William's wife had been born in Caldecote while their son, John William Love, was born in Northill parish in 1849. By 1853, James Love was still living at Upper Caldecote but was by then operating a brickworks not far away in Biggleswade, which produced 'white mingled bricks made from blue clay'.⁵

Meanwhile, William Love had returned to the Kimbolton area in 1850, and entered into an agreement, in April of that year, to operate the Duke of Manchester's Willow Lane brickworks at Stonely, a hamlet in the parish and west of Kimbolton itself. He moved into a house at the brickyard also owned by the duke, who was the largest landowner in the area with Kimbolton Castle as his country seat.⁶ The Willow Lane works was on the north-east side of the modern B645 Kimbolton to St Neots road. Although just in the parish of Great Staughton, it was nearer to, and is subsequently referred to, as being at Stonely.⁷ A subsequent agreement, made in June 1852, stipulated that at Stonely the duke was to allow Love 'the use of all necessary buildings, kilns and tile Machines, Mill [presumably a pug-mill] & also the Land to dig for the clay, no charge being made'.⁸ Nevertheless, Love did pay annual rent for the brickworks: from at least 1855 until 1866, it was £3 6s. 0d., but by the next year, 1867, it had shot up to £25 and was still this amount in 1877.⁹ The works produced a wide variety of bricks and tiles. In 1852 the bricks included stock, slop, round-cornered, tunnel, floor, paving, large and small coping, plinth, quoin, and chimney.¹⁰ Love also produced a patent interlocking hollow brick similar to that patented by the architect Henry Roberts.¹¹ It may well be that Love had obtained a licence to produce these hollow bricks from the patentee, rather than having patented them himself. Tiles produced at Stonely included plain, tunnel, and pantiles. Also made were drainage pipes, in several sizes, and collars for 1½ and 1¾ drain pipes.¹² By 1856 further products had been added, including arch, clinker, fire, and 'sprouting' bricks; hip, gutter, and ridge tiles; junction and sockets pipes; as well as managers [what are they?] and chimney pots.¹³ By the later 1860s, the range of products produced by William Love at the brickworks at Willow Lane and Graffham

(see below) also included corrugated, ogee, corrugate, flanged-ridge, tubular, and garden tiles, plus chimney pots and sea kail pots.¹⁴ This last is a rather unusual item, sea kail grows naturally around Britain's coasts, but it can also be cultivated inland. If a bell-shaped ceramic pot is placed over the young seedling, the plant can be grown in complete darkness. This blanches it and makes it tasty. Sea kale was used in winter salads, and also provided a winter feed for livestock.

Not surprisingly for a rural estate brickworks, the numbers of pipes sold for land drainage far exceeded those for bricks. In the period between 16 December 1854 and 30 December 1857, some 653,582 stock and slop bricks were sold, as against 1,405,563 drain pipes in five sizes from 1½ to 4 inches. The 1½ and 4 inch pipes were most popular and represented the vast majority of those sold in this period.¹⁵ At its height the Willow Lane brickworks is said to have been capable of producing over 90,000 bricks and 250,000 drainpipes plus other wares, per month.¹⁶ As with many estate-based brickworks, it not only supplied the needs of the Duke of Manchester's estate in Kimbolton, as well as Alconbury, Covington, and Ellington, but also sold its wares to outside buyers. These included official bodies, such as the parishes of Houghton, Catworth and Staughton, and Brampton Infirmary, as well as private individuals.¹⁷ Love impressed his Stonely bricks with his name, sometimes as many as three times on a single brick, and several examples of his bricks, characteristically for the area yellowish in colour, have been found in buildings in the locality of Kimbolton.¹⁸

A number of price lists have survived for the Duke of Manchester's brickworks when operated by William Love, giving both the making and the selling prices. For the Willow Lane works in 1852 the cost of making stock bricks was 19s. 0d. per 1,000, and they sold at £1 6s. 0d., representing a mark up of about 38 percent; for floor bricks, the figures were £1 10s. 0d. and £2, a mark-up of 33 percent; for 9-inch paving bricks, £4 and £6, a mark-up of 66 percent; and 3-inch drain pipes, £1 and £1 10s 0d., a mark-up of 50 percent (see below).¹⁹ Love operated the Willow Lane brickworks, Stonely, until at least 1878.²⁰

The Duke of Manchester had another brick kiln at Wornditch, about half-a-mile west of Kimbolton, which was certainly in existence in 1852, although it is not clear that William Love ran it.²¹ On the other hand, he almost certainly operated another brick kiln owned by the duke at Keyston, Huntingdonshire, some seven-and-a-half miles north-west of Kimbolton and about two miles from Raunds railway station on the Kettering to Huntingdon line. This kiln was half-a-mile south of the village,²² and is recorded in the estate records of 1855 and 1856, when the annual rent for it was £3 3s. 0d.²³ In 1863-64 William Love was operating the Graffham brick and tile works, Huntingdonshire, which was, yet again, owned by the Duke of Manchester.²⁴ This works is said to have started in the early 1850s, and while this may be so, no evidence has been found to support this claim.²⁵ Although generally referred to as the Graffham brickworks, in Love's time, it was actually at Ellington Hill, and just in Ellington parish, not far north of Graffham railway station, again on the Kettering to Huntingdon railway line.²⁶ The annual rent for the Graffham works in 1864-65 was £4, but by 1877 this had risen to £22.²⁷ It seems that during the time William Love operated this works he also acted as a carrier for the Midland Railway, ferrying goods from Graffham station by horse and cart or wagon, as well as having a coal yard there.²⁸ In the 1871 census and an 1877 directory he is described as a brick and coal merchant.²⁹ William Love seems to have given up the Graffham works in about 1880,³⁰ and from this date the works was referred to as Ellington brickyard.³¹ William Love was still living in Stonely in 1881, but he

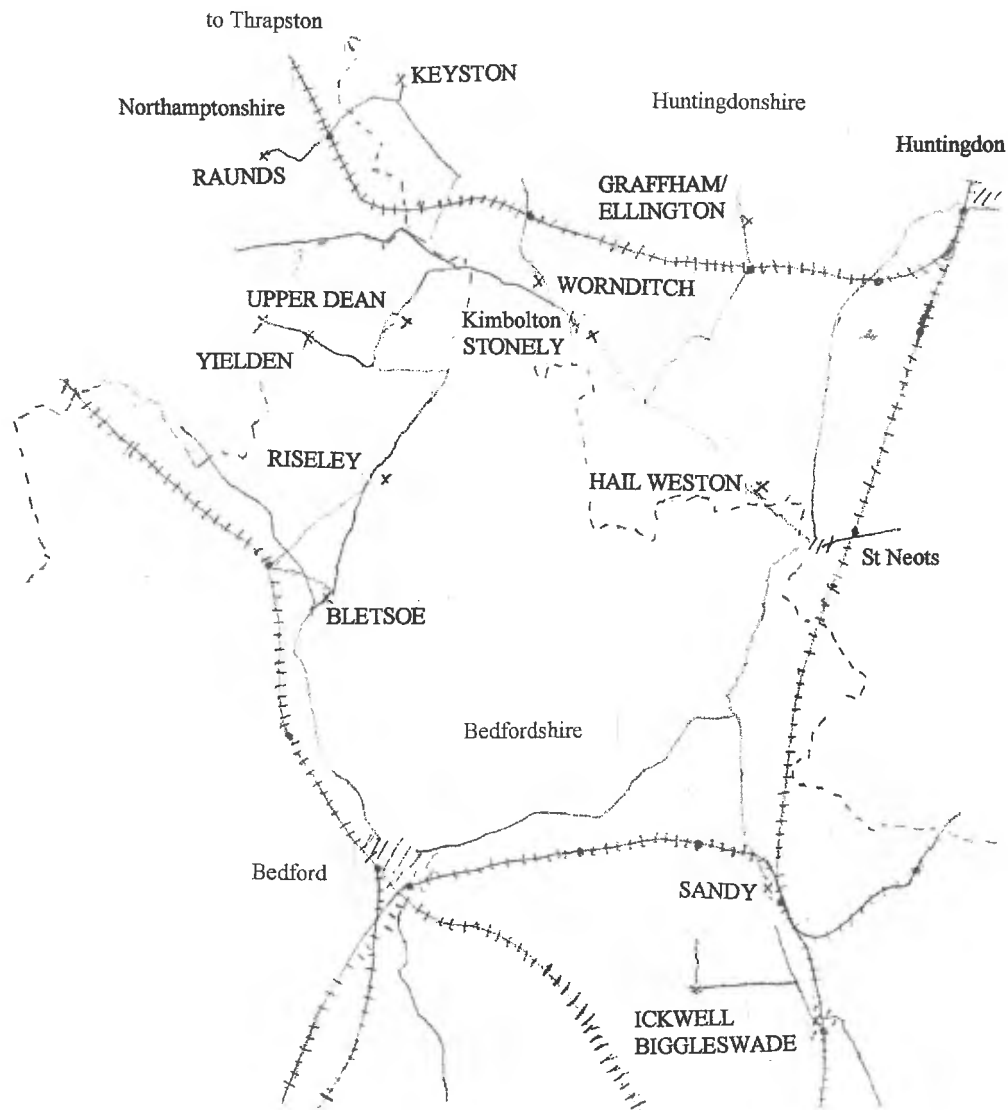


Fig.1 Brickworks in Bedfordshire, Huntingdonshire, and Northamptonshire operated or possibly operated by the Love Family. Brickworks are shown in capital letters; other places in upper and lower case. Dots on the railway lines indicate stations open in 1900. Only roads connecting the brickworks to a railway line are shown.

is only recorded as a coal merchant in the census of that year.

He apparently ran the Stonely and Graffham brickworks in tandem, and no distinction is made in the estate records between the products made and sold at the two establishments. A list of the making and selling prices for three successive years in the early 1870s for the two works have survived, by which time red bricks were being produced by Love at one or both works. According to this document, the mark-ups for building bricks was 30 percent in 1871, 36.4 percent in 1872, and 37.5 percent in 1873. For red bricks the equivalent figures are 20 percent, 50 percent, and 56.25 percent. Remarkably, this resulted in an increase in the selling price of red bricks between 1871 and 1873 of two-thirds, whereas in the same period the selling brick of building bricks increased by a little over one quarter (28 percent).³² Overall, the wide differences in these mark-ups indicate no standard pattern and suggest that figures were calculated on an individual basis for each product.

In 1858, William succeeded James Love at the Biggleswade brickworks, and he may have continued to operate it until 1872.³³ In 1868, William Love purchased a further brickworks at Upper Dean, in north Bedfordshire, on the south side of the road to Shelton, the adjacent parish to the west, and not far from Kimbolton. He bought it from William White for £350 and at that date the brickfield covered 1½ acres and included four tile sheds, kilns, twelve furnaces, and a dwelling house. As well as bricks, drain tiles and red roofing tiles were produced at this works, which William Love continued to operate until about 1890.³⁴



Fig.2 St Peter's Street, Bedford, in 1970, with the former Bedford Provident Dispensary, built 1887, immediately to the right of the now demolished Granada Cinema. Although the front elevation of the dispensary is stone-faced, the bricks in the side gable-end were from Love's Sandy brickworks (no. 11 on the map, fig.1).
From R.Wildman, *Bedford, A Pictorial History*, 1991.

In the meantime, James Love had left Bedfordshire and by 1861, then aged 72, was running a brickworks at Raunds, in east Northamptonshire, with his son, James Love junior. The latter was living with his father, as was a 22-year-old brickmaker's labourer, called Alexander York.³⁵ By 1877 William Love had taken over this works as well, Raunds being on the same railway line as Kimbolton and Graffham.³⁶ However, by at least 1885, he had been succeeded by John Love, possibly the younger son of James Love senior, and John continued to operate it until closure in the mid-1890s.³⁷

In 1877, in addition to works at Stonely, Graffham, Upper Dean, and Raunds, William Love had two further brickworks. One was the Weston Brickworks, at Hail Weston, Huntingdonshire, just west of St Neots, and again not far from Kimbolton, and he continued to run this works until the beginning of the 1890s.³⁸ This was quite a substantial works to the north of the village and on the west side of the modern A45 road.³⁹ The other was at Sandy, in east Bedfordshire, and this was the most important of all of William's brickworks. He leased it together with his nephew, George Chessum, who at the time was living in Biggleswade, from the Pym family of nearby Hasells Hall.⁴⁰ Prior to their marriage, Love's wife Sarah, had been Sarah Chessum, and in 1851, George and his father were both living in Stonely with the Loves.

By 1885, William Love had moved, to live in Sandy, as had George Chessum. Unfortunately, George Chessum died in that year, and the brickworks he had just opened in Ravensden, just north of Bedford, was run by his executors until the very late nineteenth century, and then briefly for a few years into the twentieth century by Albert Chessum.⁴¹ At Sandy, William Love was left as sole operator of the brickworks, probably until his death in 1892. After this his son, Albert Frank Love (born at Kimbolton in 1860), who was living at Sandhill Cottage, Sandy in 1894, carried on the business at Sandy until 1910. A.F. Love made an effort to advertise the works and its products. In 1895, there was a short but fulsome article in *Illustrated Bedfordshire*,⁴² while in April of that year Love inserted an advertisement in the trade periodical, *The British Clay Worker*.⁴³ The article speaks of 'Mr Love's extensive brickyards and kilns, which, with the land attached, cover an area of more than twenty acres'. There, 'a good staff of experienced workmen is constantly employed'. It also lists the various products made at Sandy: 'Mr Love manufactures red and white bricks, common gault bricks, plain pan, corrugated, ridge, gutter and hip, gable and angle tiles, all of which are kept constantly in stock'. The advert mentions drain pipes 'in all sizes' as well as other specialised items produced by the Sandy works: 'Cants, Plinth, Bull Nose, Returns, Flooring Bricks, Pavings, Garden Edging, Copings etc, in all sizes'. Reverting to the article, it goes on:

If Mr Love, whose articles are all first-class, can be said to have a speciality, it is that of roofing tiles, for which he is always in great demand. He has business connections with all the principal builders and contractors, not only in the neighbourhood, but over a large and distant area, the high character of his bricks and tiles having gained an exceptionally wide reputation. Sidings connect his works directly with the Great Northern Railway main line at Sandy, where that line forms a junction with the Oxford, Bletchley and Cambridge branch of the London and North-Western Railway, thus bringing him into easy communication with the Midland and London and North-Western main lines at Bedford and Bletchley, and with the Great Eastern and other lines in the eastern counties. One result of this is that Mr Love sends large supplies of bricks and pipes to the North London districts by the G.N.R. His pipes are largely used for drainage and sewerage on farms and public works.

The article concludes by mentioning a few examples where Love's Sandy bricks or tiles had been used. In Bedford there were two buildings in St Peter's Street, both by local architects: the Provident Dispensary (1887, by Usher & Anthony), which is stone-fronted but has brick in the gable ends as well as clay roof tiles;⁴⁴ and Conservative Club (1889, by James Hull) which has been demolished, but was again stone-clad, although it had a clay-tiled roof.⁴⁵ In Sandy itself, there was the Conservative Club again, in Bedford Road, built

in 1891 and enlarged in 1897, which still survives.⁴⁶ In addition the Sandy works supplied material for the Great Northern Railway's extensions of 1893. The advert adds: 'Goods delivered to any part by Road or Rail at the Shortest Notice and LOWEST PRICES'. The Sandy works was finally carried on by Inns & Company of Stevenage, Hertfordshire, until the First World War.⁴⁷

William Love's eldest son, John William Love, who has been mentioned above, while following his father into brickmaking, set up independently, and chose to confine his brickmaking activities to north Bedfordshire. By 1877, he had a brickworks at Bletsoe (where he was also a limeburner) and Riseley (where he also farmed Grange Farm).⁴⁸ In 1877 he was living in Kimbolton High Street,⁴⁹ but within four years he was resident in Swineshead (then in Huntingdonshire but since 1896 in Bedfordshire), where he also farmed 65 acres: Swineshead is the parish immediately north of Riseley. By the mid-1880s he had added Yelden to his brickworks in north Bedfordshire,⁵⁰ but he ceased operations at all three works in the early 1890s.

Thus during the nineteenth century, the Loves operated between them at least eleven brickworks: Biggleswade, Bletsoe, Graffham, Hail Weston, Ickwell, Raunds, Riseley, Sandy, Stonely, Upper Dean, and Yelden, as well as possibly Keyston and Wornditch. Their involvement in brickmaking can be traced over a much longer period for over 150 years, from 1756 to 1910.

NOTES AND REFERENCES

ABBREVIATIONS

BLARS

Bedfordshire and Luton Archives and Records Service.

HALS

Huntingdonshire Archives and Local Studies.

1. J. Hill, 'William Love, Brickmaker', *BBS Information*, 58, February 1993, pp.7-10. For the sake of completeness, some details about members of the Love family given there are repeated herein.

2. Unless otherwise noted all biographical details are based on two online genealogical websites, www.ancestry.co.uk and www.FamilySearch.org

3. BLARS, refs. X121/12, X194/3, ABP/W 177/33. BPR XXVIII/B24 (Riseley Marriage Register, 11 Dec 1770).

4. Alan Cox, *Survey of Bedfordshire: Brickmaking, A History and Gazetteer*, Bedford: Bedfordshire County Council in association with RCHM (England), 1979, p.91, gazetteer entry no.119. Upper Caldecote is between Ickwell and Biggleswade.

5. Cox, 1979, p.79, gazetteer entry no.22.

6. BLARS: ref P99/2/1/25b(2); HALS refDDM55/13/2. *History, Gazetteer and Directory of the County of Huntingdon*, Huntingdon: James Hatfield, 1854. *Commercial Directory of the County of Huntingdon and the Town of Cambridge*, Nottingham: Craven & Co, 1855. *Kimbolton Local History Journal*, 1991, pp.2-7.

7. Ordnance Survey, 25-inch map, 1st edn, sheet XX.12, 1883-85.

8. HALS: ref DDM55/13/2.

9. HALS: refs DDM55/7/1 and 10a and 11 and 7 and 21 (folio 4).

10. HALS: ref DDM55/13/2.

11. *Kimbolton Local History Journal*, 1991, p.7; Hill, 1993, p.12; see also M. Hammond, 'Bricks with Sunken Margins', *BBS Information*, 52, March 1991, pp.7-10 for bricks made by Henry Roberts.

12. HALS: ref DDM55/13/2.

13. HALS: ref DDM2, vol: 'Brick Yards I: An Account of Bricks and Tiles ... Commencing 14 December 1854'.

14. HALS: ref DDM50/12/1.

15. HALS: ref DDM2, vol: 'Brick Yards I: An Account of Bricks and Tiles ... Commencing 14 December 1854'
16. *Kimbolton Local History Journal*, 1991, p.5.
17. *Kimbolton Local History Journal*, 1991, p.7.
18. *Kimbolton Local History Journal*, 1991, p.5. Hill, 1993, p.12.
19. HALS: ref DDM55/13/2.
20. BLARS: ref. P99/2/1/25b(2). *History, Gazetteer and Directory of the County of Huntingdon*, Huntingdon: James Hatfield, 1854. *Commercial Directory of the County of Huntingdon and the Town of Cambridge*, Nottingham: Craven & Co, 1855. *Kimbolton Local History Journal*, 1991, pp.2-7.
21. HALS: ref DDM55/7/22.
22. D.J. Tilbury, 'An Introduction to Brick and Tile-Making in Huntingdonshire', a dissertation submitted for a BA (Hons) degree in Ceramics at Bristol Polytechnic, April 1985, unpaginated gazetteer section, entry 42. Copies available the Library, University of the West of England, Frenchay, Bristol, and HALS.
23. HALS: ref DDM55/7/1 and 2.
24. HALS: ref DDM55/7/8b and 10a.
25. Tilbury, 1985, unpaginated gazetteer section, entry 5.
26. HALS: ref DDM55/7/21, folio 4. Ordnance Survey, 25-inch, 1st edn, Hunts Sheet XXI.2, surveyed 1887, published 1888.
27. HALS: ref DDM55/7/10a; DDM55/7/21 folio 4.
28. John Rhodes, *The Kettering-Huntingdon Line*, The Oakwood Press, 1984, p.47. where the name is given as William Lane but I can find no trace of anyone of that name who was also a brickmaker and coal merchant in the area. This must, therefore, refer to William Love.
29. Kelly's *Directory of Huntingdonshire*, 1877, under Kimbolton.
30. HALS: ref DDM55/13/1.
31. HALS: ref DDM2, vol ., 'Brickyard Sales of Bricks and Tiles January 1 1864 folio 186 and following folios.
32. HALS: ref DDM50/12/3.
33. Cox, 1979, p.73, gazetteer entry no.22.
34. Cox, 1979, gazetteer entry no.58.
35. 1861 census.
36. Kelly's *Directory of Northamptonshire*, 1877.
37. Kelly's *Directory of Northamptonshire*, editions of 1885, 1890, 1894. *Bulletin of Industrial Archaeology in Council for British Archaeology Group 9*, no.13, July 1970, p.21.
38. Kelly's *Directory of Huntingdonshire*, editions of 1877, 1885, 1890.
39. Ordnance Survey, 25-inch map, 1st edn, surveyed 1888, published 1889.
40. Cox, 1979, p.96, gazetteer entry no.140.
41. Cox, 1979, p.93, gazetteer entry no.130.
42. *Illustrated Bedfordshire*, Nottingham: Forman & Son, 1895, p.75.
43. *The British Clay-Worker*, vol. iv, no. 37, Supplement on The Building Trades Exhibition 1895, p.xxxii.
44. Richard Wildman, *Bedford, A Pictorial History*, Chichester: Phillimore & Co Ltd, 1991, illustration 106.
45. Victor J.F. Farrer, *Bedford 50 years Ago: The Architecture of a County Town*, Bedford: Old Bedford Modernians Club, 2007, p.56.
46. *Sandy Town Guide*, Sandy: Sandy and Potton Jaycees, 1987, p.23.
47. Kelly's *Directory of Bedfordshire*, 1894. Cox, 1979, p.96, gazetteer entry no.140.
48. Kelly's *Directory of Bedfordshire*, 1894. Cox, 1979, p.73, gazetteer entry no.25 and p.95, gazetteer entry no.137.
49. Kelly's *Directory of Huntingdonshire*, 1877.
50. Cox, 1979, p.90, gazetteer entry, no.113.

Brick for a Day: The British Brick Society In London, 2009 and 2012

Since 2007, with the exception of 2010, the British Brick Society has held one of its meetings in London; references to accounts of meetings in 2007, 2008, and 2011 appear above on page 4 of this issue of *British Brick Society Information*. In preparing that list of meetings and visits, The editor noted that no report on it had appeared on some of the recent visits in London held by the society. The notes on the Finsbury visit on 3 October 2009 and the South Westminster visit in August 2012 attempt to rectify this lacuna. An account of the society's visit to Soho in May 2013 will be included in a future issue of *BBS Information*.

FINSBURY: FROM 'THE ANGEL' TO FARRINGDON

On Saturday 3 October 2009, a group of small members assembled at the crossroads outside 'The Angel', the public house on the site of a coaching inn which was the first change of horses for coaches going north on the Great North Road. The group walked downhill from there to Janet Street Porter's house on Britton Street, near Farringdon Station. These notes record the most significant brick buildings viewed on the day.

Sadlers Wells Theatre was rebuilt in 1997-98 to designs by Renton Howard Wood Levin (RHWL) but the exterior brick walls are by Nicholas Hare Associates. The site is wedge-shaped with a long wall of a pale pink-red brick rising from the broad pavement on Rosebery Avenue; this terminates in a broad expanse of glass fronting the foyer and access to the circle, rising the full height of the building. The new theatre, with a much larger auditorium, replaced one of 1930-31 designed by F.G.M. Chancellor (c.1865-1940) of Frank Matcham & Co, a practice specialising in theatres, cinemas and other auditoria; this was the successor to Music House opened in 1683 by Thomas (or Richard) Sadler, which was beside chalybeate springs.

From Rosebery Avenue two buildings for the Metropolitan Water can be seen across the former ponds of the New River Head, which terminated here in reservoirs now dry; the conduit from Amwell, Hertfordshire, were completed in 1683 by contractors working for Sir Hugh Myddleton (1556-1631). Both buildings were converted into flats in 1997-98 by Broadway Maylan. The one further down the hill was the office for the Metropolitan Water Board, designed in 1914 by H. Austen Hall (1881-1968). In red brick with much stone trim, it was on the grandest scale: the sense of Edwardian opulence was to the fore, supplementing the water board's pride in its success in the provision of clean water to London, if not yet any hope of eliminating squalor and disease. To the north of the ponds is the Laboratory Building (fig.1) by John Murray Easton (1889-1975) of Easton & Robertson. The building curves round the fringe of the North Pond; a staircase hall at the east end is lit by vertical panels of glass bricks. The three-storey building with a semi-basement in pale red bricks is given ample light by tall individual windows on the ground floor and strips of windows on the first and second floors.

In the 1930s and before, Finsbury was one of London's most deprived and poorest boroughs. Its Borough Offices, on Rosebery Avenue, were not grand. In 1895, C. Evans Vaughan (d.1900) was commissioned to design the Clerkenwell Vestry Hall which was extended to his design in 1899. The modest but attractive building in red brick without too much stone as quoins echoes the brief fashion for Art Nouveau of the years around 1900. On the west side, on Rosebery Avenue, the main entrance is marked by an iron and glass canopy, a rare survival.

The first building for City University on Northampton Square and St John's Street was built as the Northampton Institute; named after the Marquess of Northampton on whose land the

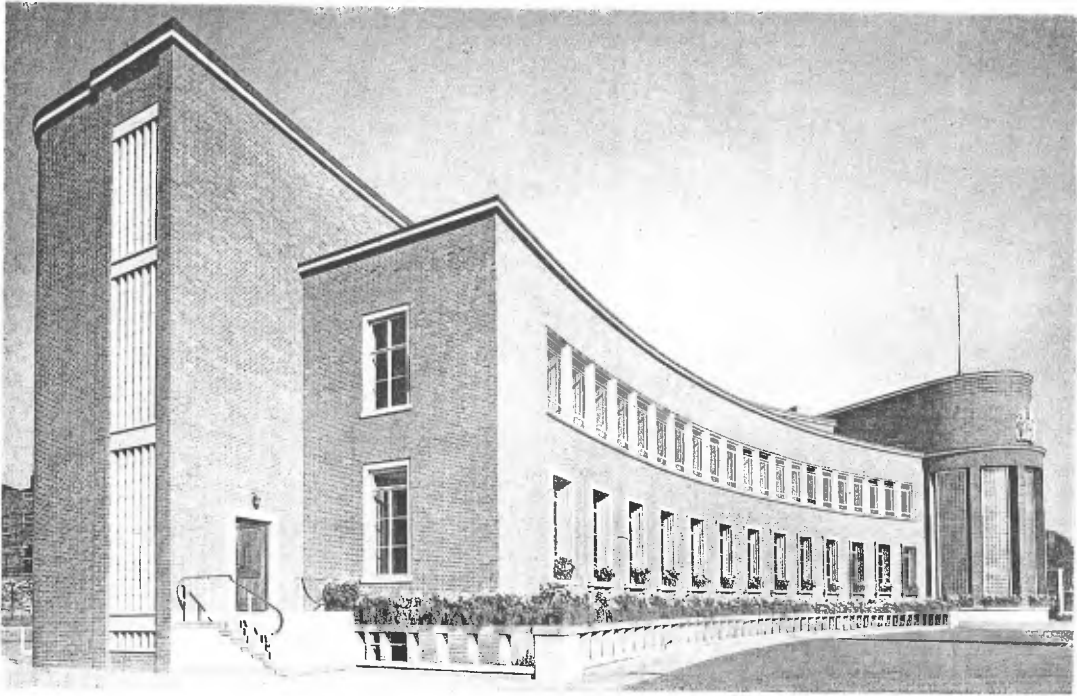


Fig.1 The concave façade of the Laboratory Building of the Metropolitan Water Board (1938: John Murray Easton of Easton & Robertson) overlooks the original reservoirs of Sir Hugh Myddleton's New River of 1683, one of the earliest attempts to bring in clean water to London.

new institution was built. It specialised in industrial and technical subjects relevant to Finsbury and the City of London. After an architectural competition in 1893, the design prepared by Edward Mountford (1855-1908) of Battersea was chosen and the substantial building of red brick with stone dressings was built over the next five years. The original building suffered war damage and was reconstructed in the 1950s. To the playful exuberance of Edwardian England was added a brutalist concrete and dark, almost black, brick addition of unrelieved misery: such do little to endear students to learning.

Exmouth Market is a lively pedestrianised street whose chief point of architectural interest is the church dedicated to the Holy Redeemer. Designed in 1887 by J.D. Sedding (1838-1891) and completed after his death by Henry Wilson (1864-1934). The church took eight years to build and is novel in its construction. The stripped brickwork, alternately multiple courses of red and yellow, appears to be load-bearing but actually hides a steel frame. The (ritual) front on Exmouth Market is plain yellow brickwork at the lower level and striped above with the latter pierced by a central round window. To the right of the front is Wilson's bell tower of 1906 which incorporates the clergy house. The latter is the first four storeys of the tower with arched fenestration picked out in red brick. The side wall of the church fronts a small garden: the striped brickwork can be seen here.

The other church viewed on the day was St James, Clerkenwell Green, a stock brick box by a local builder and architect, James Carr (c. 1742-1821) constructed between 1788 and 1792. It sits on the site of the choir of the former St Mary's Nunnery, one of several medieval religious institutions around Clerkenwell Green.

Between the two churches are first the best-known building in Finsbury, the Finsbury Health Centre on Pine Street, of 1935-38 by Lubetkin and Tecton, the borough's valiant attempt a decade before anyone else to combat the twin evils of disease and squalor, two of Beveridge's

five giants, and second various schools. The Finsbury Health Centre is primarily a building of steel and glass and sadly when viewed by members of the society was showing the ill effects of insufficient maintenance.

Schools for the London School board most decidedly are of brick and very solid in their construction. An early one is that of 1873-75 at the east end of Bowling Green Lane by E.R. Robson (1836-1917), the first architect to the London School Board. His successor from 1881 was T.J. Bailey (1844-1910); an example of the latter's work is the Hugh Myddleton School of 1893, now Kingsway College. Designed on an H-plan with three storeys, it looks as fine from the rear when viewed from Skinner Street as it does from the formal frontage on Sans Walk. In the façade much yellow terracotta was used. The building occupies the site of the Clerkenwell House of Detention; the prison cells from the building of 1845-47 by William Moseley (c.1799-1880) remain as the basement to Bailey's building.

The penultimate building viewed was the orange brick of the former Offices for Holborn Union Board of Guardians designed in 1885-86 by H. Saxon Snell & Sons, a practice which specialised in workhouses and hospitals. The classically-inspired design includes blue brick in the lower courses. The building was converted to apartments in the 1990s. It was presumably then that repointing took place, using cement mortar not lime mortar, something which was also apparent at the brick building for City University.

The group was able to benefit from the knowledge of mortars and the effects the use of the wrong mortar in repointing of BBS member Andrew Langridge and the organiser is grateful for his contributions to the discussion at several buildings.

DAVID H. KENNETT

SOUTH WESTMINSTER: VINCENT SQUARE, ROCHESTER ROW AND AFFORDABLE HOUSING

A small group of members met outside the church of St James the Less, Pimlico ((1859-61: G.E. Street), on Saturday 18 August 2012. Though the good offices of members of the church working on its lighting we able to view both the exterior and the interior, both of which show the advantages of polychrome brickwork when handled by a first-class exponent of its use.

The principal focus of the morning visit was the buildings on and around Vincent Square. In 1810, the Rev William Vincent (1756-1815), Dean of Westminster and Rector of Islip,, outside Oxford, paid a ploughman to mark out part of Tothill Fields for the use of the boys of Westminster School, of which he had been the headmaster before 1802. The 10 acres in the centre of the square remain the playing field of the school, with the greenkeeper's house in the north corner, with the timber-framed cricket pavilion to its south (1888-89, Richard Creed). The school has taken over the former Grosvenor Hospital for Women and Children (1896-98, Roumieu & Aitchison). Renamed Adrian House, the building at the south end of the south-east side, was built in a hard-surfaced red brick with orange terracotta around the big porch, serves as the Westminster Under School, its preparatory school.

Only two pairs of the earliest houses, as shown on Critchley's map of 1829, numbers 3-4 and 84-85, remain. All houses facing the square are built of brick; numbers 84-85 have a single pediment to the street frontage. Much of the south-east side was rebuilt between 1866 and 1878 with terraced houses; those occupying the western half of the south-west side, built in 1881-84, employ a straw-coloured brick with red brick around the fenestration.

Hospitals and former hospitals are a feature of the square and its environs. On the south-west side, at numbers 46-47, is the still functioning Gordon Hospital, designed in 1939 by

hospital specialists Young & Hall; this was built in a neo-Georgian style using red brick. At number 56 and with buildings either side of Udall Street is the former Infants' Hospital by Read & Macdonald, the northern block of 1907 and the southern one of 1913. Again in red brick, the buildings were converted into flats in 1994; their former use is indicated by majolica roundels in the style of those on the Foundling Hospital in Florence. On the north-west side is the former Empire Hospital for Officers (1912-13: W.E. Hazell), where the lower floors and the basement are in a grey brick — of a very friable nature and low quality, so probably neither Luton Greys nor the characteristic grey brick produced in Reading — with a red brick trim and the top three floors executed in a lighter, more chalky brick. The building was used as a nurses' home before becoming an hotel. On Rochester Row is the former Grenadier Guards Hospital of 1859, by William Munt, presumably an army man, which is in white brick with a yellow brick used round the fenestration: the windows are particularly large on the first floor. It is now used as an Army Careers Office with depots for the Army Cadet Force and the RAF Cadets.

The northern part of the north-east side houses two institutions: the Royal Horticultural Society and Westminster Kingsway College. E.J. Stubbs designed the buildings for former in 1903-04; they house the Lindley Library, Lecture Rooms, and the First Exhibition Hall. In 2000, Rick Mather Architects carried out a major reconstruction. The Second Exhibition Hall (1926-28: J. Murray Easton of Easton & Robertson) is on a corner site between Elverton Street and Greycoat Street. Chiefly known for being the first building in Britain to use concrete curves as the means of spanning a wide area, the outer walls are in a narrow brown brick. This building is being converted for use as a gymnasium for Westminster School.

Westminster Kingsway College was founded by Angela, Baroness Burdett-Coutts in 1890; the first building was by Thomas Bashill, architect to the London County Council. Extensions on Vincent Square of 1907 and 1930-33 were likewise designed in the LCC Schools Department. For the third extension, of 1950-57, Harry Goodhart-Rendel was the architect. He used a yellow brick but cleverly interspersed it with diamonds in red brick, matching the diagonal glazing of the windows.

On the southern half of the north-west side of Vincent Square, is the former Rochester Row Police Station, out of use since 2002. The earliest surviving portion is the former magistrates' offices of 1845, on Vincent Square, designed by Charles Reeves; this and the adjacent part of the contemporary police station have been converted into housing. Facing Rochester Row in the centre is the police stable block of 1867-68 by Thomas Charles Sorby, which includes stables, hayloft, married quarters and single men's quarters on individual floors. This is faced in white brick. Flanking this are the new façades of 1901 for the police station to the north and 1904 for the magistrates courts to the south by John Dixon Butler. Like others of the 150 buildings he designed as Surveyor to the Metropolitan Police from 1895 to his death in 1920, these are in red brick with much stone trim.

An addition to the provisional programme took the party to Cowley Street, Lord North Street, and Smith Square, the latter with Thomas Archer's St John's church of 1713-28 in the centre; it has a brick undercroft. The early houses in both locations were erected in the 1720s; the builder was John Mackreth. Among the twentieth-century intrusions two stand out: on Cowley Street, the London offices of the North Eastern Railway (1904-05: Horace Field) is a smaller version of the company headquarters in York, and on Smith Square no 32 (1956: Gunton & Gunton). Both are red brick, neo-Georgian in inspiration and have stone quoins; the earlier one expresses the exuberance and self-confidence of the empire on which the sun never set, the later one is almost a weak apology for hanging on to the concept of empire. Both, incidentally, had been used as headquarters of a major political party: the Liberal Democrats on Cowley Street, the Conservatives on Smith Square.

The final part of the afternoon session concentrated on affordable housing. The houses on

Lord North Street and Vincent Square clearly do not qualify as “affordable housing” as the term is understood in the twenty-first century. South Westminster has a whole range of bodies — philanthropic, employer and municipal — which have provided blocks of flats for families at rents which workers on modest wages could afford to pay. Since the mid nineteenth century, those providing such housing have included the Army using the Office of Works, the Church Commissioners, the Crown Estate, Greycoat Hospital School, the Grosvenor Estate, the Improved Industrial Dwellings Company, the London County Council, the Metropolitan Police, the Office of Works for army housing, Watney’s Brewery, and Westminster City Council. On certain projects two or more bodies have worked together. Those seen on the day are noted in order of their construction.

The first to be constructed was the Millbank Estate of 1897-1902, the second estate begun by the London County Council. It occupies western third of former Millbank Penitentiary site (eastern two-thirds is Tate Britain). Blocks are named after famous British artists. The first block of 1897, Hogarth House, on west edge of the site, was designed by R. Minton Taylor, who supervised or designed all other blocks except one, Gainsborough House, of 1900, for which C.C. Winnall (1865-1945), signed the drawings. In 1941, there was bomb damage to Ruskin House and Turner House and these were rebuilt after 1945. Most blocks are in red brick with white render used on the uppermost floor; a darker brick was employed on Hogarth House. Within the Millbank Estate is the former Board School on Boundary Street, of 1901, for which the architects of London School Board were responsible; it is still in use. This is two buildings on either side Hogarth House, with the Infants School to north, and the Junior School to south. They are in red brick; much decoration embellishes the Infants School.

In 1902, Joseph & Smithern began work on three blocks of flats running north-south from Page Street to Vincent Street, which are linked by screens on both street frontages. Built over the next two years for Westminster City Council they were the first multi-storey flats built by any metropolitan borough.

East of these in 1926-27, Ashley & Newman built Schomberg House, a single block in red brick, with ends on both Page Street and Vincent Street. Also between Page Street and Vincent Street but extending north to Horseferry Road between 1929 and 1931, the Grosvenor Estate in association with Westminster City Council; provided 616 flats in seven blocks, two of which are on the north side of Page Street. These U-shaped blocks are five or six storeys, and in contrast to the other blocks have deck access not walk-up staircases with flats off alternate landing. They were built after Thames flooded in 1928 and a whole area of poor-quality housing was removed. These are distinctive buildings in a silver-grey brick in oblongs, alternating in diagonal pattern with oblongs rendered white. The architect was Sir Edwin Lutyens. The flats on the north side of Page Street were built on the site of the yard, including more than one brickworks, of Alexander Copland, one of the earliest large-scale building contractors, operating at the end of the eighteenth and the beginning of the nineteenth century. There is a neat irony in the location of Lutyens’ only foray into mass housing. In his youth he had worked in a builders’ merchant’s yard for two years.

DAVID H. KENNETT

Brick for a Day: Hanson Building Products' Factory, Measham, Leicestershire



Fig. 1 British Brick Society visitors to the Hanson Building products factory at Measham, Leicestershire, with part of the Red Bank Manufacturing business in the background.

The British Brick Society was very pleased to have been able to visit this factory on Saturday 6 October 2012 (fig.1) as it provided an opportunity to view this large and complex soft mud brick manufacturing operation, employing the very latest manufacturing technology. This has been successfully achieved as a result of a very significant investment made by Hanson Building Products, supported by their German parent company, Heidelberg Cement, and made as part of a modernisation and rationalisation of Hanson's brickmaking interests. The plant was opened on 30 September 2009 (see fig.7 on page 23).

Efficiency, low cost, high quality, and sustainable development were all key factors in the overall design with the actual soft mud process chosen as the manufacturing method as being seen to be a market leader for the future. With a designed output of 90 million bricks per year, and a capability, with further invest, of this number being increased makes the Measham plant the largest such investment for the UK brick industry in the twenty-first century.

The site was chosen as being adjacent to substantial reserves of excellent quality clay supplies, a suitable "brownfield development site" and having the benefits of the existing Red Bank Manufacturing Company's existing site infrastructure (pp.20-24, below), which is a wholly-owned Hanson Building Products subsidiary.



Fig. 2 The conveyor bridge is designed to give the impression of an canal aqueduct.



Fig. 3 (left) View of the main crushing rollers. This view of the equipment, open as it was undergoing maintenance, shows two of the quadruple roller arrangement, which is unique in the UK.

Fig.4 (right) Clay storage bunkers, holding 10,000 tonnes of mixed clay.

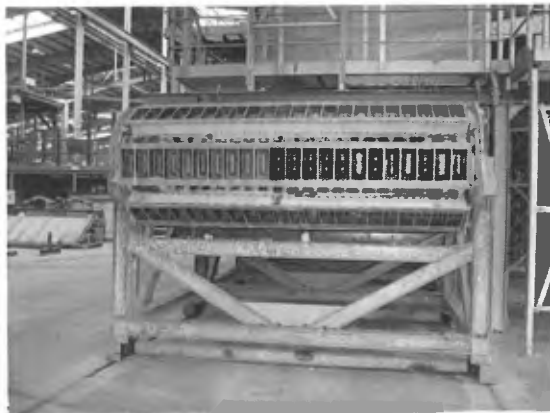


Fig. 5 (left) The 22 mould chain ready in a spare unit to minimise product changeover time.

Fig. 6 (right) Progress through the DeBoer machine, with pre-sanded moulds waiting to be filled with clay, thrown through the vertical rollers and ensuring accurate mould fill.

The factory building was constructed to “best available” environmental and sustainable criteria and has attracted a number of key awards in this respect. The manufacturing process incorporates both sound brickmaking technology and innovation to achieve the desired outcomes of high volume and quality of product, together with key advancements in energy usage and the efficient use of both raw materials and other resources such as water.

Overall, the brickmaking process was designed and installed by Lingl UK Ltd., with other specialist suppliers completing the manufacturing system. The brickmaking process begins with the raw material, principally “Keuper Marl”, being won from a quarry separated from the factory by a public road. The raw material is supplied by a conveyor belt, crossing the road. The conveyor bridge required to achieve this has been “camouflaged” by brick panels, all designed to give the impression of an canal aqueduct (fig.2).

The clay, together with additives, is then prepared using primary and secondary crushing and grinding machinery (fig.3), with then onward feed to a massive bunkering facility of a type more common in Continental Europe (fig.4). This allows the clay to be

thoroughly blended before being automatically re-won and delivered to the brickmaking machine. The actual “soft mud” brick machine is a “DeBoer” 22 mould machine (fig.5), designed by DeBoer of Holland to give the required output. The clay goes through the DeBoer machine, with pre-sanded moulds, which await being filled; the clay is “thrown” through vertical rollers, which ensure accurate mould fill (fig.6).



Fig. 7 (left) Robots building the packs of dry bricks; other robots placing the packs on the kiln cars.



Fig. 8 (right) Packs of dry bricks placed accurately on the kiln furniture.



Fig. 9 (left) A robot hard at work moving fired bricks.



Fig.10 (right) The finished article.

After drying in chamber dryers, the bricks are marshalled and “set” on to kiln cars. This process is achieved by the use of robotic technology. With the robots building the packs of dry bricks, other robots placed the packs on the kiln cars, 32 per car, giving a load of 16,896 bricks per car (fig.7). The packs of bricks are accurately placed on the kiln furniture (fig.8), which itself is lifted and vacuum cleaned of sand prior to the setting process. The cleaning process is important to the longevity of the kiln car refractory design.

The “heart” of the factory is a 200 metres (650 feet) long tunnel kiln. This contained 32 kiln cars in a “train”, with the overall firing process taking 36 hours to complete. As the cars of fired product exit the kiln, they are marshalled to the deacking area (fig.9), where, once again, robots carry out this process though to the final brick pack (fig.10).

MIKE CHAPMAN

Chair British Brick Society, April 2013

The Red Bank Manufacturing Company, Measham, Leicestershire



Fig.1 The stockyard of Red Bank Manufacturing Company Ltd, with the name just discernable on the buildings in the background of the photograph.

Following the visit around the Hanson Building Products' Measham brick factory, on the 6 October 2012, the group were fascinated by the huge array of terra cotta products in the stock yard of the adjacent Red Bank Manufacturing Company Ltd, the name being just discernable on the buildings in the background of the photograph in figure 1. Whilst we were not able to see the manufacturing process, the article on the overall visit would not have been complete without including a brief history of Red Bank and its product range.

The original business was founded in the late nineteenth century, with earliest reference found being Kelly's Guide of 1895 which refers to the Red Bank Brick Co, Brick and Terra Cotta manufacturers, and the schedule of deeds shows the origins of the works site around 1885 to 1890. The works used the local Keuper Marl clay, hand selected in a local quarry. The proprietor appears to be a William Massey who lived in Red Bank Villa, which adjoins the current main offices and was until recently still part of the premises.

Mr W.H. Lisney, who had an interest in a local sanitary pipe company called Moore and Sons, purchased the concern in 1919, also involved in this early partnership was Mr Carey Moore and Mr Lisney's two sons. The newly formed Red Bank swallowed up the adjacent Measham Terra Cotta Company. As an aside, Moore & Sons, having gone through many changes, still exists as a trading business within Ibstock Brick Ltd.

The company grew in strength and was incorporated in 1931 as the Red Bank Manufacturing Company Ltd, with the first board meeting held at The Midland Hotel St Pancras on 17 July that year. The Minutes of that first meeting list Mr W.H. Lisney as Chairman of Directors, and Messrs. W.A. Lisney, John Lisney, and J. Carey Moore as Directors, with Harry Kennard as Solicitor. The Company's bank account was to be held by Midland Bank Ltd., at their Palmers Green branch. The minutes also confirmed the purchase by the Red Bank Company of the brick, tile, pipe and stoneware business owned by the persons shown as directors above, thus completing the consolidation of the business.

The adjacent Coronet Brick Co. (fig.6) was clearly seen as an acquisition opportunity, with board reports of 1952 considering options available, together with a shareholding in Coronet being built up.

Red Bank Manufacturing Co. Ltd. became a specialist producer of all the items which had previously been produced by local brickworks as a sideline and therefore gained a national and international reputation as a supplier of quality Terra Cotta Ware, principally Chimney Pots, Roof Tiles and Fittings, handmade Briquettes for Fireplaces, Firebricks, Air



Fig.2 Some of Red Bank's products from their catalogue of 1963.

Bricks and later in the twentieth century flue linings and cavity wall bridging ducts and building up a considerable reputation for bespoke and enriched architectural pieces. Land drainage pipes and a range of facing bricks were also produced, with the latter comprising Leicestershire Wirecut and Pressed red facings, machine made sand stocks and "Tapestry" Rustic Facings, a registered Red Bank trade name. A few of Red Bank's products from their catalogue of 1963 are shown in figure 2.



Fig.3 The bank of coal-fired downdraught kilns at Red Bank.

The production facilities continued to expand, with all the firing done in a bank of coal fired round downdraught, or "bee-hive" kilns (fig.3), with products being loaded directly into railway wagons.

The success of the company was enhanced through the Lisney family's London based builders merchants business, Turner and Lisney Ltd.

Due to the widespread use of coal domestically the company enjoyed an extremely prosperous time and was entirely dominant in its market for many decades. The other brick and pipe manufacturers specialised in their core products leaving Red Bank to specialise in the high value wide product range which continues to the present day. The works site was

gradually expanded with the addition of more coal fired round down draft “beehive” kilns and a railway siding from the adjacent Nuneaton line was introduced to load directly on to wagons in the yard. Adjacent to the sidings were the buildings of the firm with the Red Bank name as a prominent advert for all rail passengers to see (fig.4). The writing is still there, but the rail lines long gone.



Fig.4 A section of the huge stock always kept at the ready by Red Bank. The coal-fired downdraught kilns and their chimneys can be seen behind the stockpile of pipes and other products.



Fig.5 The railway sidings with the Red Bank name as a prominent advert for all rail passengers to see.

Various quarries were used and back filled during the years and much of the site is built on those areas including the New Measham Brickworks.

The company continued to expand and modernise and after the closure of the Nuneaton line, subsequently its neighbour from across the tracks, The Coronet Sanitary Pipe works (fig.6), was acquired in the late 1970s and four oil fired “Low Thermal Mass Kilns were built on the land.

The Lisney Family ownership took a change of direction in the early 1980s when J. C. Bianco, a family member who had been working previously in Europe arrived on the scene and subsequently became, Chairman and Managing Director taking over from Mr Raymond Lisney.

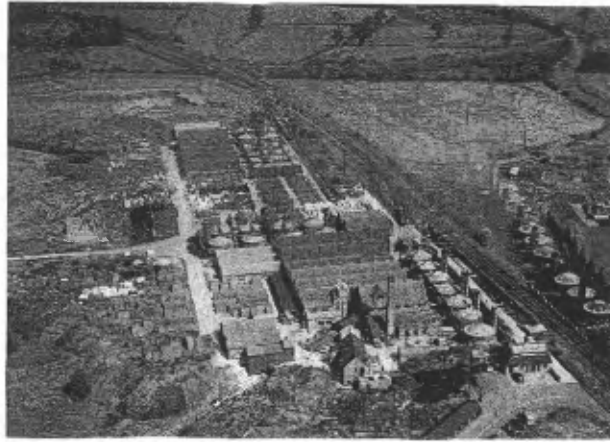


Fig.6 Aerial view of the site, showing the Coronet Works to the right of the railway line.

A major investment and expansion programme took place in the late 1980s during the boom years with investment in automation of Terra Cotta production and a complete Soft Mud Brick Factory in 1990, which once again brought brick making back onto the site.

Stanley Brothers of Nuneaton (for which see Alan Cox's article in *BBS Information*, 114, October 2010) was a small but significant rival which the company was able to acquire in 1987; it was subsequently closed and production moved to Measham in 1988. The shareholders had by now become quite an interesting and impressive group through marriage and inheritance. Branches of the wider shareholding family were resident of Greece, USA, Italy, and Switzerland as well as the UK. It comprised members of the Guinness Family including the Lord and Lady Moyne and all their children. This often made for "interesting" company AGMs.

In 1994 Jeremy Capo Bianco succeeded his father and along with his brother Anthony, Ken Russell and finally Peter Cobb and Tim Barnett made up the board of directors who successfully steered the company through the many challenges presented by the end of coal as the preferred domestic fuel and the onset of new materials and methods for construction. As well as the successful "Soft Mud" facing brick operation, the Company introduced "Lockclad" a rain screen cladding system, and further diversified into specialised concrete flue linings to meet the demands of both gas and solid fuel heating systems.

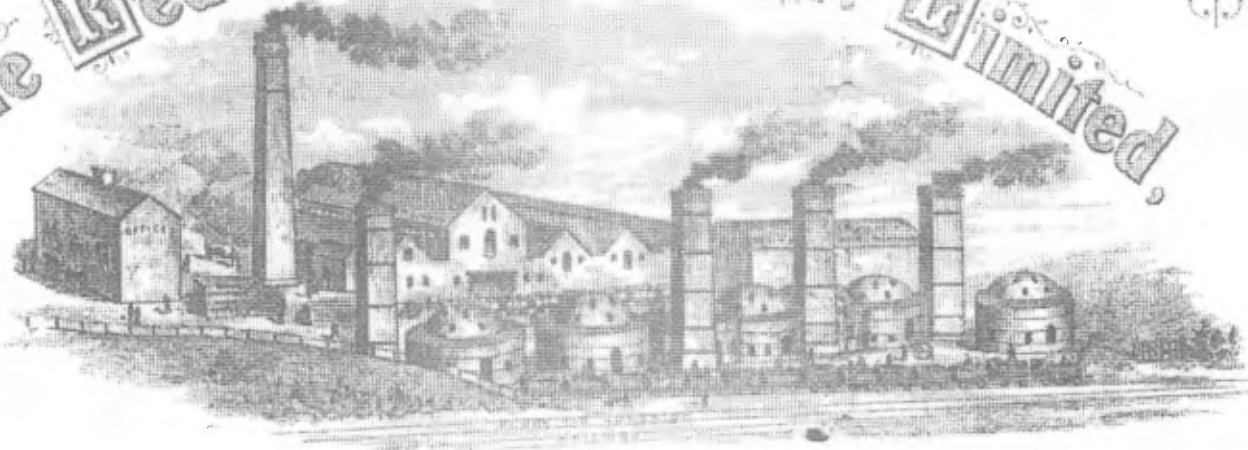


Fig. 7 The commemorative plaque recording the opening of the new Hanson Measham plant on 30 September 2009. It was built on part of the original Red Bank site.

LETTERS.
MEASHAM. NEATHERSTONE.

TELEGRAMS.
REDBANK, MEASHAM.

The Red Bank Brick Co Limited



Brick & Terra Cotta Works.

MEASHAM Dec 4 1906

Fig.8 Letterhead of the Red Bank Brick Company, brick and terracotta makers at Measham, Leicestershire

In a deal with Hanson Building Products in 2002 Hanson acquired Red Bank Soft Mud Brick works which then ran in harmony within the site, with Red Bank concentrating on their special products interests. Faced with shareholder pressure and a lack of succession it was decided to sell the Company in 2005 and Hanson made a successful bid taking ownership in January 2006. A strategically significant acquisition due to the large area under ownership, the tradition of clay manufacture, and the extensive clay reserve, it became the location for the flagship Measham Brickworks which commenced production in 2009. A Commemorative Plaque records the opening of the new Hanson Measham plant, built on part of the original Red Bank site (fig.7).



Fig.9 The large format “Wilkes’ Gob” or “Jumbo” brick made by local brickmaker Joseph Wilkes between 1784 and 1803 in an attempt to outwit the Brick Tax as seen in a cottage in Measham. A typical brick measured $9\frac{3}{4} \times 4\frac{1}{2} \times 5$ inches.

No article on the Measham area would be quite complete without at least a brief mention of a local entrepreneur and brickmaker, Mr Joseph Wilkes. In a valiant attempt to outwit the Brick Tax, levied between 1784 and 1850, he introduced the large format “Wilkes’ Gob”, or “Jumbo” brick. These were made between 1784 and 1803, and there are still some fine examples to be seen in the older buildings around the town (fig.9). One in the author’s collection measures $9\frac{3}{4}$ inches long, by $4\frac{1}{2}$ inches high by 5 inches wide.

I wish to acknowledge the assistance of Tim Barnett, who kindly supplied much information and the photographs, and made possible part of this article.

MIKE CHAPMAN
Chair British Brick Society
April 2013

BRICK IN PRINT

During the latter part of 2012, the compiler and the Editor of the British Brick Society received notice of a number of publications of interest to members of the society. 'Brick in Print' has become a regular feature of *BBS Information*, with surveys usually two or three times a year. Members who are involved in publication or who come across books and articles of interest are invited to submit notice of them to the editor of *BBS Information*. Websites may also be included. Unsigned contributions in this section are by the compiler.

TERENCE PAUL SMITH

1. Anon., 'AR Products',
Architectural Review, 1382, April 2012, page 16.

'AR Products' is a regular feature of *Architectural Review*, blurring the distinction between article and advertisement: certainly in the final paragraph of this piece self-promotion is all too clear on behalf of the brick and paver manufacturer Wienerberger, a multinational company whose headquarters are in Austria. On the other hand, the feature is of interest in stating the purpose of the Wienerberger Brick Award, which has been presented 'every two years since 2004'. (It is thus, incidentally, *biennial*, not, as the feature states 'biannual'.) The purpose of the award, as we are told in none too elegant English, is 'to cast a spotlight on how innovative and versatile brick can be used as a construction material in architecture today'.

The feature is illustrated by colour photographs of the first, second and third winners of the 2010 award: the Liechtenstein State Forum and Parliament Building by Hansjörg Göritz Architecture Studio, with its impeccably laid bricks; the South Asian Human Rights Documentation Centre, New Delhi by Anagram Architects, with twisted columns defining textually complex panels, all in diagonally set projecting standard bricks; and the Morjan-Poeten house (location not stated but at Hüttingen-am-Kyll, Germany) by Nikolaus Bienefeld, with bonding patterns and pointing creating irregular vertical zig-zags in the wallfaces.

The Liechtenstein brickwork is admirable; but that of the two other buildings smacks of effect for effect's sake — rather like over-enthusiastic use of multiple fonts when word processing: yes, you can do it — but why should you *want* to?

2. Anon., 'Simply Divine'.
Johnian News, 31, Michaelmas Term 2012, pages 14-17.

As a young postgraduate student in the early 1970s at St John's College, Cambridge, whose alumni magazine *Johnian News* is, I was a frequent visitor to the Selwyn Divinity School (fig.1): I was studying the philosophy of religion and my supervisor was a lovable eccentric professor (a dying breed, alas), the philosopher and theologian Donald MacKinnon (1913-1994). The Divinity School, opposite the Great Gateway (1511-16) of St John's, was designed by Basil Champneys (1842-1935) and built in 1878-79.

No longer used for its original purpose, it was fully acquired by St John's in 2001. Various suggestions were made with regard to its future; but in 2007 it was decided to convert it to 'a multi-purpose venue ... of offices, teaching rooms, an auditorium and a central hall' (p.16). This work, by the architects Annand & Mustoe, involved a good deal of modification but without (at least completely) destroying the integrity of the original.

For the Divinity School, Champneys specified his favourite red brick, used here with stone dressings, echoing St John's College on the opposite side of the road. Also consonant

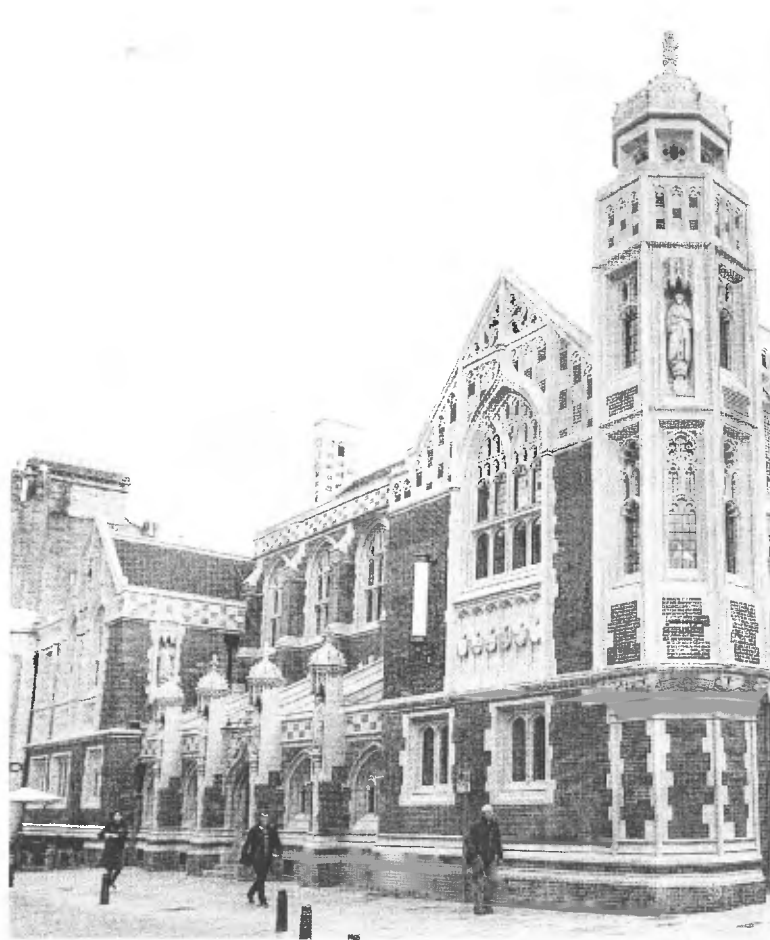


Fig.1 The St John's Street (originally the entrance) frontage of the former Selwyn Divinity School, Cambridge.

with the college is the use of an early Tudor brick style, although the bricks are laid in *Flemish* rather than in the ubiquitous Tudor *English Bond*.

Champneys' interpretation of the style is 'lively and not at all pedantic' (N. Pevsner, *The Buildings of England: Cambridgeshire*, 2nd edn, Harmondsworth: Penguin Books, 1970, p.205). On the contrary, at times it is over-elaborate, notably in the fussy tracery of the upper windows on the south (All Saints Passage) façade. The front (west) face is almost symmetrical, though with an octagonal turret at just one (the south-west) angle.

'Champneys had estimated that the building would cost £11,523, [but] in fact it cost £15,074 12s. 7d.' (T. Rawle, *Cambridge Architecture*, London: Trefoil Books, 1985, p.192).

Internally there is a mixture of stone and red brick, with some impeccable brick vaulting. But the interior was always dour, and it is no small achievement to have transformed 'what was once described as a "dark and gloomy maze" into the [now] light and mainly open-plan building' (p.16). Yet whilst welcoming this transformation, one wonders why it was thought necessary and/or desirable to close the original entrance on St John's Street — sensibly located in the centre of the front face — and to punch a new one in the All Saints Passage elevation.

3. Raymond Betz, 'A Salvage Project: The Belgian Dighouse in Elkab', *Ancient Egypt*, 13, 3 (issue 75), December 2012/January 2013, pages 16-22.

The English architect and archaeologist George Somers Clarke (1841-1926) did important

archaeological work in Egypt, where he developed ideas about the use of mud bricks. To test those ideas he proposed mud bricks for a new Anglican church, to be dedicated to St Mark, at Aswan. Begun in 1899, it was, sadly, destroyed in the mid-1980s. Photographs show that it comprised, as a not entirely perspicuous statement puts it, 'several hemispheric dome, [each] supported on four arches which rely on columns or piers ... coupled to make a large building' (p.17).

In 1906, the same constructional system was used for the architect's own house near the village of Nasrâb, by ancient Elkab: Bayt Clarke — *bayt* being the Arabic for 'house'. Of 26 domed rooms, it is built of traditional mud bricks on stone foundations. Since 1937 the house has been occupied on a seasonal basis by the Belgian Archaeological Mission, serving 'as a very comfortable *pied-à-terre* for the archaeologists who are working only a few kilometres away' (p.20) — the 'Belgian Dighouse' of the title.

When Raymond Betz first visited the house in March 2009, dangerous cracks were visible in the fabric; and later that year 'parts of the north side of the house fell down, including the main staircase' (pp.20-21). Consolidation work was rapidly begun and rebuilding is now taking place, the plan at p.17 showing what is needed. Colour photographs show the damaged fabric, the fallen north side, and, at p.22, the impeccable replacement work in new mud bricks.

This well-illustrated article, which includes useful references for those wishing to know more, ends with an appeal to help raise the 100,000 needed for further work. No postal addresses are given, but (a sign of the times!) e-mail addresses are: hjwarner@uncegypt.edu (Egypt) or d.huyge@mrah.be (Belgium).

4. Michael Hall, 'Oxford Sees Red: Keble College, Oxford',
Country Life, 12 September 2012, pages 88-94.

A double-page spread (pp.88-9) showing the exterior of the college library with the college's large chapel in the background introduces the range of polychrome brickwork to be found in this, the *first* brick-built college to be inserted into nineteenth-century Oxford: until then buildings for the university and its colleges were of stone. Keble was intended as a "middle-class" college: widening university participation was of equal concern in the 1860s no less than it is in 2013. What has changed in the intervening period is the social basis of this wider participation.

John Keble (1792-1866) had preached the Oxford Assize Sermon in 1833, which launched the idea of "a return to holiness", meaning the principles of "one Catholick and Apostolick Church", to quote the phraseology of *The Book of Common Prayer* of 1662, and interpreted by Keble, John Henry Newman (1801-1890) and Edward Bouverie Pusey (1800-1882) as the return of the Church of England to Catholic principles, doctrine, and liturgy. Keble's death on 29 March 1866 gave the promoters of the new college the perfect opportunity for fund-raising: the new college would be his memorial. Money poured in: of the projected £50,000 cost, three-fifths had been raised when the builders, Parnell of Rugby, started work in May 1868.

The building committee had chosen William Butterfield (1814-1900) as architect. Better known for his church work in brick — All Saints, Margaret Street, St Marylebone (1850-59) being the best-known — Butterfield had previously built in Oxford in stone: at Merton College — restoring the chapel and the new Grove Building — and for Balliol College a new chapel. At Keble, he worked in brick; however, as the caption (p.90) reminds us, this was not the red brick of high intensity which he had hoped to use: this proved to be beyond the college's budget. Plans were approved in December 1868; the college opened for the Trinity Term 1870 'minus chapel, library, and hall' as Lady Frederick Cavendish — sister

of the wife of the first warden, the Rev Edward Talbot — remarked. These came later: William Gibbs of Tyntesfield, Somerset, gave £40,000 (Pevsner says £50,000) for the chapel, built between 1873 and 1876. From the family fortune — made from transporting guano from northern Chile which in turn provided the capital for a bank — Gibbs' two sons paid for the library and the hall buildings. The latter is of great size, sufficient for all college members — warden, fellows, undergraduates — to dine together; Will Pryce's photograph of its interior (pp.90-1) emphasises this.

His other photographs show the brickwork of the chapel (p.92), the chapel staircase (p.92-3), and the library (p.93). Interiors at Keble are as patterned as the impression gained from the buildings' exterior. In the staircase and the library there is red brick with a light-coloured stone used in bands, with in the uppermost portion diaper patterns using lozenges of white brick headers against the red brick; each of the intersections of the lozenges is marked by a black brick header. More complex patterns adorn the chapel interior.

For undergraduate accommodation, Butterfield used corridors, not staircases; to have rooms off a corridor was novel in the late 1860s even if it became standard in Oxford women's college from the 1880s and universal in post-1945 halls of residence elsewhere.

Elsewhere in this issue of *Country Life* attention was drawn to the exhibition 'Pre-Raphaelites: Victorian Avant-Garde', held at Tate Britain from September 2012 to January 2013. Matthew Hall's text notes the absence of architecture from the exhibition (p.90) and seeks to relate the work of Butterfield and others, not least G.E. Street (1824-1881), to the painters: 'in the 1850s, the radical young architects who wanted to develop Gothic into a modern style declared that they, too, were Pre-Raphaelites', and '[i]n its hard-edged forms, brilliant use of colour and emphatic modernity, Keble College ... achieves in architecture everything that the Pre-Raphaelite Brotherhood had sought in art' (p.90).

For other accounts of the architecture of Keble College, see N. Pevsner and J. Sherwood, *The Buildings of England: Oxfordshire*, London: Penguin Books, 1974, pp.225-9 and pl.112; and G. Tyack, *Oxford, An Architectural Guide*, Oxford: Oxford University Press, 1998, pp.229-232.

D.H. KENNETT

5. Carly Hilts with Chris Thomas,
'Raising the Curtain: Excavating Shakespeare's Lost Playhouse',
Current Archaeology, 269 (XXIII, 5), August 2012, pages 10-13.

When I worked for Museum of London Archaeology Service, one of the more interesting projects with which I was involved was a study of the building materials from the excavations of the Elizabethan and early Stuart Rose and Globe theatres. In 2011, as this article explains, test excavations by my former colleague Chris Thomas revealed remains of what may confidently be identified as The Curtain. Situated in Shoreditch, this theatre opened in 1577. Between demolition of the nearby playhouse, known simple as The Theatre in 1597 and the opening of The Globe on Bankside in 1599, the Lord Chamberlain's Men — the company to which Shakespeare belonged — used The Curtain as their base.

'Sections of the brick inner wall ... still stand to their full height. This would have separated the yard, or "pit", where standing audience members known as "groundlings" could watch performances for a penny, from the galleries where more affluent theatre-goers could pay another penny for a seat and one more for a cushion' (p.11). Also found were brick floors and brick piers to support the piers of wooden seats. From the colour photographs it seems clear that the bricks are the red, fairly soft products typical of pre-1700 London.

The excavations, we are told, also recovered 'tiles that may have topped the galleries ..., although the roof itself was probably thatched' (p.13). I do not pretend to understand this:

what 'roof itself'? I suspect a misunderstanding of a professional archaeologist's remarks by an archaeological journalist. Doubtless the full report will, in due course, make all clear.

Further excavations are planned; and 'with site owners Plough Yard Developments keen to preserve the archaeological remains *in situ* and open them to the public, the playhouse is set to take centre stage at the heart of the local community once more' (p.13).

As a coda, one may add that the background to The Curtain and other London playhouses is explored in a work by another of my former colleagues, Julian Bowsher, *Shakespeare's London Theatreland: Archaeology, History and Drama*, London: MoLA, 2012. (Sadly this fascinating study is marred by some inexcusable slips: 100 marks is £66 13s. 4d., not £66 5s. 4d.: p.78; and 'm²' means 'square metres' not 'metres square': pp.98, 133. As M[ike] P[it]ts laconically comments in a review, 'editing could occasionally have been tighter': *British Archaeology*, November/December 2012, p.257. The same issue of the magazine includes, at pp.28-35, a summary account of the material: J. Bowsher, 'Entering the Real World of our Greatest Playwright').

Review Article:

Brickmaking and the County Historical Atlas

Joan Dils and Margaret Yates (editors), *An Historical Atlas of Berkshire*, Reading: Berkshire Record Society, 2nd edition, 2012, xiii + 173 pages, 78 pages of maps, ISBN 0-9548716-9-3, price £20-00, paperback.

David Short (editor), *An Historical Atlas of Hertfordshire*, Hatfield: Hertfordshire Publications, 2011, xx + 204 pages, 82 maps, ISBN 978-0-9542189-6-6, price £27-99, paperback.

Kate Tiller and Giles Darke (editors), *An Historical Atlas of Oxfordshire*, Chipping Norton: Oxfordshire Record Society, 2010, being *Oxfordshire Record Society*, 67, xii + 192 pages, 102 maps, 15 town plans, 5 photographs, ISBN 978-902509-63-4, price £20-00, paperback.

Since 2010, historical atlases has been published for three further historic English counties, each in the south midlands: a second edition of the one for Berkshire, and first editions for Hertfordshire and Oxfordshire. These volumes bring to sixteen the English counties or their post-1974 equivalents with an atlas: East Yorkshire and North Yorkshire are the latter. Some counties have been done together: Cambridgeshire and Huntingdonshire and a volume on south-west England covers Devon, Cornwall, and the Isles of the Scillies. Otherwise the volumes cover the area of a single historic county: Cheshire, County Durham, Kent, Lincolnshire, Norfolk, Staffordshire, Suffolk, and Sussex, together with Montgomeryshire in Wales. Sponsoring bodies vary. Both Berkshire and Oxfordshire were issued by the county record society. Local societies were also responsible for Cheshire, County Durham, Montgomeryshire, the early editions of the Norfolk one, and Suffolk. Both Norfolk in its earliest edition and Suffolk had support from their county council. A commercial publisher produced the latest edition of the Norfolk one and those for Kent and Sussex. Like Hertfordshire, the volumes for Cambridgeshire and Huntingdonshire, south-west England,

Lincolnshire, Staffordshire, and East Yorkshire were produced by the local university and/or its press.¹

Sponsorship matters. This is particularly the case with county boundaries. A county record society can keep to the traditional county boundaries as with Oxfordshire and Berkshire; the Vale of White Horse District is treated in Berkshire, not as it has been since 1974 in Oxfordshire. The Durham volume is based on the historic county including its county boroughs. But the North Yorkshire volume is both more than the former North Riding of Yorkshire as it includes parts of the former West Riding and less than the old North Riding as it excludes Middlesbrough and Saltburn and Redcar on the northern coastal fringe and to the west, Startford Rural District now in Teesdale District in County Durham..

Format of individual volumes varies. To some extent this may be determined by the shape of the county. Pre-1974 Berkshire was much longer in the east-west dimension than in the north-south one. The horizontal format provided by A4 landscape was obviously judged to be the most appropriate. The maps have a defining border. Hertfordshire is not quite square: it is slightly wider on the east-west axis than on the north-south one but not excessively so. Its volume is produced at American Large Quarto, slightly wider than A4 but the same height. County maps are set within a border. Oxfordshire is the opposite of its southern neighbour: much more from north to south than from east to west. Also, its boundaries produce an irregular shape, one essentially confined within an irregular quadrilateral, with the north-west boundary as the longest side. The editors and publishers adopted A4 as the sensible format, with the county maps left without a border.

Among the recent county historical atlases, both Oxfordshire and Berkshire have a map devoted to brickmaking. Berkshire is a county where brick was a major building material from the seventeenth century onwards; its production is well-documented. Rural Oxfordshire has so much good building stone that brick as a major building material as opposed to individual elite housing is a nineteenth-century intruder. It is mainly an urban phenomenon. On the Worcester Turnpike north from Oxford (now the A44), the writer can only think of one brick building whose date is before 1870, a house on the east side of the road as one descends the hill north from the centre of Woodstock. Even in the last third of the nineteenth century brick is rarely used. Estate houses, basically of stone, but with window jambs and lintels picked out in red brick, in Woodstock were built by the Marlborough estate in the late 1870s and an isolated house in Staffordshire blue brick stands isolated beside the modern dual carriageway in Kidlington.²

Map 67 in the Berkshire volume (pp.134-5) has the text revised by James Ford from the contribution by the late Michael Dumbleton in the first edition of the atlas. Michael Dumbleton had previously produced a small volume on the eastern part of the county, *Brickmaking: a Local Industry: Ascot-Bracknell-Wokingham*.³ Within the confines of a single three-column page, the article provides a useful summary of brickmaking in Berkshire from the fourteenth century to 1992, when the Star Works at Knowl Hill, west of Maidenhead, closed. The text charts the movement from small-scale works to the major enterprises of Colliers, Wheeler Brothers, and Poultons in and around Reading and the move of kilns from Reading to Tilehurst. The map shows 'Brick and tile makers in Berkshire since c.1800'.

The final paragraph of the Berkshire text notes some famous London buildings on which the products of individual brickmaking enterprises were used. The latter include Thomas Lawrence and Sons' Eastheath Works at Wokingham whose facing bricks were employed at Westminster Cathedral, and the handmade bricks made at Warfield, near Bracknell, used in restoration work at Hampton Court Palace and 10 Downing Street; the works closed in the 1980s.



Fig. 1 England and Wales: counties with a county historical atlas.

Note: Modern boundaries are indicated where the atlas covers a modern administrative county but otherwise the area covered by an atlas is an historic county, even where boundaries of the modern administrative county differs from that of the historic county. County boundaries, indicated by dotted lines are of historic counties; national boundaries are shown by a dashed line; solid lines indicate areas covered by a county historical atlas.

Sources: see note 1 and publication data given at the head of this review article.

Kate Tiller and her team have produced maps and town plans covering 74 topics from topography to twenty-first century tourism in Oxfordshire. The county is not always thought of as a brick one, although the publication over thirty years ago of James Bond, Sarah Gosling, John Rhodes, *The Clay Industries of Oxfordshire: Oxfordshire Brickmakers* probably helped to dispel the superficial impression.⁴

Within the county historical atlas, of greatest interest to members of the British Brick Society is topic 50, 'Industrial Oxfordshire: the mid 19th Century' contributed by Barrie Trinder (pp.118-19). The text accompanying Trinder's map uses information from the census return for 1861. The map has eight instances of his brick symbol for 'Ceramic works, principally brickmaking', emphasising the point, made in *The Clay Industries of Oxfordshire*:



Fig. 2 England and Wales: counties with a brick making gazetteer. Filled circles indicate an area for which there is a gazetteer which is only part of a county.

Sources: Listed in notes 6-11 inclusive

Oxfordshire Potters that brickmaking was combined with the manufacture of pottery, and also with farming.⁵ The map is confined to industrial activities of the 1850s and 1860s.

Surprisingly, Hertfordshire does not have map about brickmaking. The group of maps on 'Industry and Work' (pp.78-105) cover mills, papermaking, agricultural trades in the nineteenth century, bellfounders 1570-1825, malting and brewing, straw-plaiting and hat-making, watercress growing, the silk industry, printing, the pharmaceutical industry, film and television studios, and sand and gravel quarrying. The lacuna is strange, given that BBS member the late Lyle Perrins did much work on brick buildings and brickmaking in his adopted county, including a gazetteer of brickworks and a list of brick churches.⁶

The production of the county historical atlas may be compared with that of a survey of brickmaking in a county. Hampshire and Bedfordshire were the earliest gazetteers in 1971

and 1979 respectively; the latest is Nottingham in 2011.⁷ Overlap between the historical atlas and the brickmaking gazetteer is sparse. Of those counties with a brickmaking gazetteer covering the whole county, only Cornwall, Lincolnshire, Oxfordshire, and Suffolk also have a county historical atlas.⁸ Amongst other counties with an atlas, there is a gazetteer for the part of east Berkshire.⁹ A specific industry in south-west Staffordshire, the making of refractory bricks, has been the subject of a monograph.¹⁰

We may hope that when further county historical atlases are contemplated, the editors appointed will do well to remember that brickmaking gazetteers exist for all or part of ten historic or modern English counties: Bedfordshire, Buckinghamshire, part of Cumbria, Essex, Hampshire, part of Middlesex, Nottingham, Somerset, Surrey, and Sussex; and for Denbighshire and Flintshire in Wales.¹¹

DAVID H. KENNETT

NOTES AND REFERENCES

1. T. Kirby and S. Ooshuizen, eds, *An Historical Atlas of Cambridgeshire and Huntingdonshire*, Cambridge: Anglia Polytechnic University Centre for Regional Studies, 2000; D. Sylvester and G. Nulty, eds, *The Historical Atlas of Cheshire*, Chester: Cheshire Community Council, 1958 and 1966; A.D.M. Phillips and C.B. Phillips, eds, *The New Historical Atlas of Cheshire*, Chester: Cheshire Community Council, 2005; R.J.P. Kain and W.D. Ravenhill, eds., *Historical Atlas of South-West England*, Exeter: Exeter University Press, 1999; T.H. Corfe, ed., *An Historical Atlas of County Durham*, Durham: Durham County Local History Society, 1992; T. Lawson and L. Killingray, eds., *An Historical Atlas of Kent*, Chichester: Phillimore, 2004; S. Bennett and N. Bennett, eds, *An Historical Atlas of Lincolnshire*, Hull: University of Hull Press, 1993; P. Wade-Martins, ed., *An Historical Atlas of Norfolk*, Norwich: Norfolk Museums Service in association with the Federation of Norfolk Historical and Archaeological Societies, 1994; T. Ashwin and A. Davison, *An Historical Atlas of Norfolk*, Chichester: Phillimore, 2005; A.D.M. Phillips and C.B. Phillips, eds, *An Historical Atlas of Staffordshire*, Manchester: Manchester University Press, 2008; D.P. Dymond and E. Martin, eds, *An Historical Atlas of Suffolk*, Ipswich: Suffolk County Council and the Suffolk Institute of Archaeology, 1988 and 1989; revised ed., Sudbury: Suffolk Institute of Archaeology, 1999; K.C. Leslie and B.M. Shirt, eds, *An Historical Atlas of Sussex*, Chichester: Phillimore, 1999; S. Neave and S. Ellis, eds, *An Historical Atlas of East Yorkshire*, Hull: University of Hull Press, 1996; R.A. Butler, *Historical Atlas of North Yorkshire*, Settle: Westbury Press, 2003; D. Jenkins, *The Historical Atlas of Montgomeryshire*, Welshpool: The Powysland Club, 1999.
2. Field observations by the present writer.
3. M. Dumbleton, *Brickmaking: a Local Industry*, Ascot-Bracknell-Wokingham, Bracknell: Bracknell and District Historical Society, 1978; 2nd ed., Bracknell: the author, 1990 and 1993.
4. J. Bond, S. Gosling, J. Rhodes, *The Clay Industries of Oxfordshire: Oxfordshire Brickmakers*, Woodstock: Oxfordshire Museum Service Publication 14, 1980.
5. N. Stebbing, J. Rhodes, M. Miller, *The Clay Industries of Oxfordshire: Oxfordshire Potters*, Woodstock: Oxfordshire Museum Service Publication, 13, 1980.
6. L. Perrins, 'Hertfordshire Brickworks: a gazetteer', *Hertfordshire Archaeology and History*, 14, 2004-5; L. Perrins and T.P. Smith, 'Brick in Churches: II Hertfordshire', *BBS Information*, 45, July 1988, pp.12-15. I owe the former reference to the kindness of T.P. Smith.
7. W.F.C. White, 'A Gazetteer of Brick and Tile Works in Hampshire' *Proc. Hampshire Field Club*, 1971, pp.81-97; A. Cox, *Survey of Bedfordshire, Brickmaking: A History and Gazetteer*, Bedford: Bedfordshire County Council and the Royal Commission on Historical Monuments, 1979; J.A. Sheard, *Clay Stealers to St Pancras Station: A History of Nottingham's Brickmakers*, Nottingham, Russell Press, 2011.
8. J. Ferguson and C. Thurlow, *Cornish Brickmaking and Brick Buildings*, St Austell: Cornish Hillside Publications, 2005; D.N. Robinson, *Lincolnshire Bricks: History and Gazetteer*, Heckington: The Heritage Trust of Lincolnshire, 1999; for Oxfordshire see notes 4 and 5. C.J. Pankhurst, 'A Gazetteer of Suffolk Brickworks', *Suffolk Industrial Archaeology Society Newsletter*, 1988. Mr Pankhurst's gazetteer was produced in conjunction with the map of brickworks in 1885 in the 1988 and 1989 editions of Dymond and Martin, *An Historical Atlas of Suffolk*. I am grateful to the late Mr

Pankhurst for sending me a copy of his listing many years ago. BBS Hon Treasurer, Graeme Perry is working on a revised gazetteer of Suffolk brickworks, utilising Mr Pankhurst's material and the extensive notes of the late Bill Blowers.

9. See note 3.

10. J. Cooksey, *Brickyards of the Black Country: A Forgotten Industry Refractories*, Cradley: the author, 2003.

11. Bedfordshire, see Cox, 1979; A. Pike, *Gazetteer of Buckinghamshire Brickyards*, Aylesbury: Buckinghamshire County Museum, 1980, 2nd edn, 1995; G. Brooks, 'Cumbrian brick and tile works: North Cumbria', *The Cumbria Naturalist*, **3**, 2000, pp.49-59; P. Ryan, *Brick in Essex from the Roman Conquest to the Reformation*, Chelmsford: the author, 1996, and P. Ryan, *Brick in Essex; the Clayworking Craftsmen and Gazetteer of Sites*, Chelmsford: the author, 1999; in addition to White, 1971, for Hampshire see also T. Wright, *Brickworks: A Gazetteer of Brick and Tile Manufacturing Sites in North East Hampshire*, Fleet: privately published, 1980 and 2003; Hertfordshire, see Perrins, 2004-5; A. and T. Harper-Smith, *The Brickfields of Acton, being Acton Past and Present*, **26**, 1991; for Nottingham see Sheard, 2011; B.J. Murless, *Somerset Brick and Tile Makers: A Brief History and Gazetteer*, supplement to *Somerset Industrial Archaeology Society Bulletin*, **58**, 1991, and B.J. Murless, *Somerset Brick & Tile Manufacturers: A Brief History & Gazetteer*, being *Somerset Industrial Archaeology Society Survey*, **13**, 2000; brickmaking is one of the industries covered in the series of guides to industrial history of individual local government districts published by the Surrey Industrial History Group (SIHG) since 1979: R.G.M.

Baker, *A Guide to the Industrial Archaeology of the Borough of Elmbridge*, Guildford: SIHG, 1989; G. Cocker, ed., *A Guide to the Industrial Archaeology of Surrey*, Surrey: SIHG, 1990; G. Cocker, *A Guide to the Industrial History of the Borough of Waverley*, Guildford: SIHG, 2003; F.A. Haveron, *A Guide to the Industrial Archaeology of the Waverley Area*, Guildford: SIHG, 1995; F.A. Haveron, *A Guide to the Industrial History of Guildford and its Borough*, Guildford: SIHG, 1993; J. Mills, *A Guide to the Industrial History of Runnymede*, Guildford: SIHG, 1991; J. Mills, *A Guide to the Industrial History of Spelthorne*, Guildford: SIHG, 1993; J. Mills, *A Guide to the Industrial History of Surrey Heath Borough*, Guildford: SIHG, 1995; D. Stidder, *The Industrial Archaeology of Reigate and Banstead District*, Guildford: SIHG, 1979; D. Stidder, *Guide to the Industrial History of Reigate and Banstead*, Guildford: SIHG, 1996; M. Tadd, *A Guide to the Industrial History of Tandridge*, Guildford: SIHG, 1999; P. Tarplee, *A Guide to the Industrial History of Mole Valley District*, Surrey: SIG, 1995; P. Tarplee, *Guide to the Industrial History of the Borough of Elmbridge*, Guildford: SIHG, 1998; P. Wakefield, *Guide to the Industrial History of Epsom and Ewell*, Guildford: SIHG, 1997; I. Wakeford, *A Guide to the Industrial History of Woking and its Borough*, Guildford, 1995; G.A. Payne, *Surrey Industrial Archaeology*, Chichester: Phillimore, 1977, pp.37-40, lists brick and tiles works; M. Beswick, *Brickmaking in Sussex: A History and Gazetteer*, Midhurst: Middleton Press for the Sussex Industrial Archaeology Society, 1993, 2nd edn, 2001; A. Connolly, *Life in the Victorian Brickyards of Flintshire and Denbighshire*, Llanrwst: Gwasg Carreg Gwalch, 2003. Notice of any omissions to this list and of forthcoming publications of brick gazetteers would be gratefully received by DHK.

Electronic Submissions to *British Brick Society Information*

For the past six months, the Editor of *BBS Information* has been able to receive contributions electronically. But he would be obliged if members observe the following notice.

The internet/e-mail computer reads only *.doc*. It does not read *.docx*. So please no items in *.docx*.

Secondly, text should be sent separately from any illustrations.

Thirdly, each illustration should be sent as a separate attachment. Ideally, image width should be less than 6.5 inches (160 mm), and image height a maximum of 8.5 inches (215 mm) to allow for a caption at the bottom of the page. For illustrations to be page landscape, the maximum width is 9.5 inches (240 mm) and height not more than 5.5 inches (140 mm) so as to incorporate a caption beneath the illustration. Illustrations submitted in colour will be reproduced in *British Brick Society Information* in black-and-white.

Illustrations of red bricks are best shown against a white or pale yellow background; red brick on green grass does not show up well when reproduced in monochrome.

If you wish to indicate the position of illustrations in your contribution, by all means send an extra attachment with text and illustrations combined. As far as possible wishes will be observed.

An attachment combining text and illustrations should be additional to that containing only the text.

The editor's e-mail address is *dhk5573@btinternet.com* by which he can answer queries.

The editor looks forward to receiving contributions electronically or by post.

DAVID H. KENNETT

Editor, *British Brick Society Information*

Changes of Address

If you move house, please inform the society through its Membership Secretary, Anthony A. Preston at 11 Harcourt Way, Selsey, West Sussex PO20 0PF.

The society has been embarrassed by material being returned to various officers from the house of someone who has moved but has not told the society of his/her new address.

BRITISH BRICK SOCIETY

MEETINGS in 2013 and 2014

Saturday 7 September 2013

Brickworks Visit

Northcott Brick, Blockley, Gloucestershire

With tour of Shipston-on-Stour, Warwickshire, to follow.

Saturday 12 October 2013

Autumn Meeting

Note the **new date**.

Leamington Spa

The Pump Room, Town Hall, Museum/Public Library (now in educational use), cinemas, and St Mark's church and former vicarage by George Gilbert Scott the younger.

Saturday 17 May 2014

Annual General Meeting

Bury St Edmunds

To be followed by tour of the brick buildings of the town.

Details of the September and October meetings are included in this mailing.

Further ideas for 2014 include a London Meeting — either Lambeth or Mayfair — and possibly Oxford, South and West. There is projected visit to the Tilbury Forts in August 2014, which may be a midweek visit for which details have yet to be finalised. Preliminary details to be given in the next mailing.

The British Brick Society is always looking for new ideas for future meetings.

Suggestions of brickworks to visit are particularly welcome.

Offers to organise a meeting are equally welcome.

Suggestions please to Michael Chapman, Michael Oliver or David Kennett.

Changes of Address

If you move house, please inform the society through its Membership Secretary, Dr Anthony A. Preston at 11 Harcourt Way, Selsey, West Sussex PO20 0PF.

The society has recently been embarrassed by material being returned to various officers from the house of someone who has moved but not told the society of his/her new address.