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BRITISH BRICK SOCIETY

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* *The annual subscription to the British Brick Society is £10-00 per annum.*
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British Brick Society web site:

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

Contents

Cover Illustration:

Reading Town Hall soon after its completion in 1897. The town hall was the final building seen by members of the British Brick Society on the town walk after the 2010 Annual General Meeting.

Editorial:
Small Scale, Long Survival

Some months ago, long-standing British Brick Society member Miss Kathleen Clarke sent the editor some cuttings from the 'Hampshire Heritage' entries in *The Southern Daily Echo* about houses and other buildings constructed by a builder in Southampton and Botley named William Jupe who was born in 1859 and died in 1943. The pieces were based on the work of a local historian, Christine Clearkin of Bitterne, now a suburb of Southampton.

William Jupe, who lived in the era before schooling was compulsory, had begun work at twelve as an agricultural labourer — he is recorded as such in the 1871 census returns. However, ten years later, the 1881 census notes his occupation as bricklayer in Southampton. In 1883, he married Emily Louise Harvey, the nineteen-year-old daughter of a local builder. Soon after his marriage, William Jupe became his father-in-law's site foreman responsible for houses being built on Northlands Road and Westwood Road for prosperous members of Southampton's burgeoning middle class. When first married, the couple lived at a house in on North Road, St Denys, one of the villages absorbed within Southampton in the late nineteenth century: there is still a large and active railway station there.

In 1896, the firm built thirteen houses on Station Road (now Macnaghten Road), Bitterne Park, still within the county borough but across the River Itchen from the majority of the town. William and Emily and their four daughters moved to one of these houses in 1898. A later move was to new house built by the firm on Cobbett Road where William was still living in 1939 when the Second World War began; he and his two younger daughters then moved to Brockenhurst to escape the bombing of Southampton: Emily had died in 1937. Even in war time and in his eighties, the builder still commuted two days a week into Southampton.

As a builder, William Jupe's activities were not confined to building houses, although Christine Clearkin's research makes it clear that housebuilding was the mainstay of the business, as indeed it was of most building firms in Edwardian England and would be of those who flourished in the 1920s and 1930s. These houses have been described as 'well built, with good square rooms, high ceilings and sash windows. They were built to last.' Examples not previously mentioned include terraced houses in Northam Bridge — flat fronted of red brick but with white brick details as jambs and lintels of the arched fenestration — and semi-detached pairs of 1913 in Athelstan Road, Bitterne, with a bay window to the ground floor front rooms, casement windows, and with the stairs rising within a pentice, giving the frontage a not unattractive asymmetrical appearance.

In addition to houses, William Jupe was the builder of at least one church, Bitterne Park Congregational Church (now Bitterne Park United Reformed Church), constructed in 1905. Nine builders were invited to give sealed bids to tender for the work. Jupe's estimate of £2,386 was accepted and he built to time and on budget: the final bill was £2,389 15*s.* 11*d.* The church is a prominent red brick building in the prosperous suburb.

The fate of William Jupe's firm is not known. It seems not to have survived the Second World War. William Jupe had no son who could succeed; at least two daughters, Lillian, a schoolmistress, and Elsie, were unmarried in 1939. Lillian died comparatively young in 1948, certainly before reaching sixty, the retirement age for women teachers.

Christine Clearkin's work has reminded the editor of an early piece of research, begun forty years ago, on the life of the Luton builder, Sir Herbert Janes (1884-1981), which involved examining the work of his predecessor in business, Arthur Cole (1862-1944). At 21, Herbert Janes went to work for his much older church acquaintance. In the early twentieth century Park Street Baptist Church was probably Luton's largest nonconformist congregation, certainly among

the lower middle class and aspirational members of the working class. Arthur Cole started his building business in the early 1890s, and like many small-scale builders used a yard at the rear of his house, built in 1897, on High Town Road, Luton, as his business premises. The yard contained sufficient space for bricks, tiles, wood, bags of cement, and other building materials as well as space for the firm's two carts and one waggon. Above the stables, for two horses, was a room used as the firm's office. Many building firms in the quarter century before the Great War paid little attention to the business side, preferring to concentrate their energies on actual building work. Many firms did not know whether they were solvent or not. Like many small-scale building firms, Arthur Cole undertook repairs, alterations, and extensions to existing premises: it was a re-roofing job which saved him from bankruptcy in 1905.

Arthur Cole also built houses. In 1895, the firm built a terrace of six houses on the south side of High Town Road. In 1907, the firm began to build other terraced houses on the north side of the same street, sometimes four in a year, sometimes three, but each group with a different frontage: successive building campaigns can be traced in the differences found in the treatment of the street frontage. Buying land on the south side of nearby North Street in 1911, there was a change: three terraces, each of four houses, were built between 1912 and 1914. Built of Luton Greys from a brickworks in nearby Round Green, they had commercially- supplied, stone lintels and jambs with identical small capitals for the fenestration.

After the firm had survived the First World War, and many building firms did not, it became a private limited company. Arthur Cole Ltd, had two shareholders: Arthur Cole held five-eighths of the share capital and H.C. Janes, who held the remaining three-eighths. In the 1920s, the firm continued as a small-scale housebuilder, although in the early 1920s the annual total rose and contracts for municipal housing, as opposed to speculatively-built houses, were undertaken. Only after 1927, when Arthur Cole retired, and the firm became H.C. Janes Ltd did it become a mass housebuilder, building houses in other towns in the Chilterns: Aylesbury, Dunstable, and Hitchin. However, Luton remained the firm's main market.

Luton grew wealthy in the two inter-war decades: along with Coventry, Leicester, and Oxford, it was one of the four most prosperous provincial towns in England in the 1930s with up-to-date industries in a diverse local economy — the mass production of motor cars at Vauxhall Motors; the building of commercial vehicles by the same firm and, on the other side of the town, by Commer Cars; the making of household appliances at Electrolux; high-grade chemicals developed at Laporte Industries and Crown Paints; ball bearings were made at Skefco — as well as the then still thriving traditional hat industry. Industrial expansion meant that the town needed and attracted additional workers who came from all parts of Britain. In more than one chapel in Luton the hymns were sung in Welsh and the sermon preached in the Celtic language. To accommodate the newcomers, 5,816 new houses were built in Luton between 1921 and 1931 and a further 10,749 houses between 1931 and 1945. With its increasing prosperity, it is small wonder that the town's population doubled from 49,978 in 1911 to an estimated number, including servicemen absent on war duty, of 112,560 in 1945.

Changes in the scale of some building firms' output occurred between the period before World War I and the inter-war decades. Whereas in the years up to 1914, Arthur Cole had been content to build houses in single figures each year, after 1927, the firm completed up to ten houses a day and certainly in the late 1930s, across the towns of the Chiltern ridge and just beyond, H.C. Janes Ltd had one hundred houses a week in some stage of construction. On Monday 4 September 1939, including all houses where the foundations had been started but excluding those where no bricks for walls had been laid, the firm had more than ninety houses across five sites in three towns needing to be finished.

There were, however, still small-scale builders in 1939, even in thriving towns like Luton. The semi-detached house where the editor of *British Brick Society Information* grew up

was built as one half of three pairs of houses erected in 1939 by a builder who planned in the following year (1940) to construct four large detached houses on the hillside below the house this journal's editor's father had purchased on the eve of the war.

Partly, it was the steep hill but also indicative of the level of capital available, the builder of the editor's childhood home still used a horse-and-cart to transport building materials from yard to site. In the 1930s, large-scale firms owned lorries, including H.C. Janes Ltd and Liangs, and other large-scale housebuilding firms such as George Wimpey Ltd and Taylor-Woodrow Ltd and nascent civil engineering giants such as Richard Costain Ltd. Commissioned biographies of several of the major individuals in the building world of the 1930s, especially of those whose firms grew substantially after taking on big war contracts, such as airfields, have increased our knowledge of the world of the building industry, at least for London and the forty or so miles around, for the four middle decades of the twentieth century.

In contrast, we actually know very little about builders and building firms in Edwardian England. The daily journey on the school bus took in several streets on the western edge of Stratford-upon-Avon. The west side of Grove Road has terraces of three houses and pairs of houses with the doors together at the centre; these have distinctive fronts with false timberwork on the first floor. A terrace of two-storeyed buildings, now with the ground floors converted to shop use, on south side of Greenhill Street were clearly built together. Characteristic use of dentil courses suggest an affinity with houses on the east side of Grove Road. On Albany Road and Alcester Road are further late Victorian or Edwardian terraced houses. The terraces look identical but the identities of the builders remains, for the moment, something of a mystery.

The late John Summerson gave us an indication of large firms in Victorian England in his 1973 essay, *The London Building World of the Eighteen-Sixties,* but this deals with the larger firms. Small firms, often lasting only a few years and liable to insolvency, are much less well-known. Outside of major buildings, where details of the firms involved were recorded in the trade periodicals, the building world of Edwardian England and particularly in towns like Luton or Southampton is much less well-documented: it requires sleuthing in town hall records of building permits to discover who actually constructed the houses and who designed them, if an architect is named. For her hard work in unravelling the work of one firm that lasted from the 1880s to 1943 we must welcome Christine Clearkin's thesis as a valuable addition to the literature of brick building.

Members are receiving two issues of *British Brick Society Information* in the same mailing. *BBS Information,* **115,** February 2011, was almost complete before Christmas 2010. Unfortunately, delays in final production were due to circumstances over which the editor was little control, including illness of the external proof reader. By sending the two issues out together, the rough schedule has been restored so that four issues will be produced in the current calendar year.

Work on *British Brick Society Information,* **117,** July 2011, is well advanced and the next issue of the society's journal should be with members in the middle of July 2011.

It is with deep sadness that the British Brick Society records the death on 5 April 2011 of its former Honorary Treasurer, Mrs Evelyn Hammersley, some ten days before her ninety-second birthday. An appreciation follows.

DAVID H. KENNETT
Editor, *British Brick Society Information,*
Shipston-on-Stour, Warwickshire
21 April 2011

Obituary:
Evelyn Hammersley, 1919-2011

Members of the British Brick Society will be saddened to learn of the death of Evelyn Hammersley at her care home in Dunstable, Beds., on Tuesday 5 April 2011, following a slight stroke and a subsequent chest infection; she was just ten days short of her 92nd birthday. Evelyn was a devoted member of the British Brick Society, even in her last years — her daughter, Patricia, has told us that Evelyn had a watercolour of a brick kiln on the wall of her room in the care home. Evelyn served as the society's Honorary Treasurer from 1988 to 1998 . It was a position that she accepted with some trepidation, citing her lack of relevant experience and fearing that she would not be equal to the task. In fact, as the society's auditor, Adrian Corder-Birch, had frequent cause to remark, she proved to be an *excellent* Treasurer — meticulous and efficient, her annual accounts always impeccably presented: the British Brick Society was a beneficiary of her early secretarial training and experience. We are most grateful for her decade's tenure of office and for leaving the accounts in such a fine condition when she stood down in June 1998, already aged 79. Her daughter, Patricia Hammersley, comments that Evelyn 'was a lovely lady who had many talents but was above all kind and generous. She ... was loved by just about everyone who met her'. Many members of the British Brick Society can confirm that judgment, and we are fortunate from having benefited from some of those 'many talents' and from her warmth and generosity of character; our condolences are offered to her daughters, Patricia and Susan, and to other members of Evelyn's family. Already greatly missed in her unavoidably less active last years, Evelyn will now be mourned in the British Brick Society, which she served so well. More positively, many, within and without the society, will remember a long, fruitful, and kindly life — as much a matter for celebration as for sorrow.

TERENCE PAUL SMITH
Chairman, the British Brick Society

Evelyn and Brian settled in Downend, Bristol, after being peripatetic as Brian was an R.A.F. officer. Married in 1940, they enjoyed sixty-four years of a happy marriage. Early in her time in Bristol, Evelyn studied Geology at Bristol University where her interest in bricks and clay and quarried materials developed. For many years she was a volunteer at Bristol City Museum where she prepared an exhibit on bricks. She had a particular interest in the returns for the Quarry Acts in the Bristol and Avon area. Later she took a degree in Social Work and worked for ten years with deprived children. Amongst many her hobbies was watercolour painting and it was one of her own paintings which adorned her room in the care home. Her years as a forces' wife had included several years in Singapore in the 1950s, at the time of the Malayan emergency. At least once during this, Evelyn's life and that of her daughters was in severe danger; they were saved by the timely intervention of Gurkha soldiers. Throughout her life Evelyn supported the Gurkha Welfare Trust and it was to this that donations were invited in her memory.

DAVID H. KENNETT

Reviving a Wood-Fired Open Clamp at H.G. Matthews' Traditional Brickworks at Bellingdon, Buckinghamshire, in February and May 2010

Gerard Lynch

INTRODUCTION

Long years of experience and the nature of the author's involvement with historic brickwork in the United Kingdom and on the international stage, which is of record, has allowed him to study the traditional materials and craft practices associated with both brickmaking and bricklaying, and to re-examine certain aspects of both that have fallen from everyday knowledge and use, due to the passage of time and the on-going drive towards modernising both crafts; particularly since the Second World War. The need to be able to repair and restore traditionally constructed brickwork using materials and craft techniques that are empathetic to the historical period has never before been so vital, and this has made it absolutely essential that we should seek to gain a deeper and more meaningful appreciation of historical materials, tools, equipment and how these were properly used if we are to authentically re-create work that can seamlessly fit and honour our country's noble brick-built heritage.

A passion for historic brickmaking, and the desire to be able to offer a range of more authentic products for use within the heritage sector, led Mr Jim Matthews of H.G. Matthews, Bellingdon, in the heart of rural Buckinghamshire, to professionally engage the author to see how this might be best achieved. One such area that both of us felt had long needed to be addressed was to revive the practice of wood-firing handmade bricks, made from the traditionally exploited upper brickearth and clay beds, in order to gain the beautiful range of colours and tones as well as the potash-glazed, or 'flared', headers that fuels and firing techniques used by modern British brickmakers do not achieve; and to incorporate this into the re-introduction of an open clamp for firing, that can be operated as demand dictated, alongside the company's permanent, updraught 'Scotch' kilns.

Through his work in the United States of America and with the Colonial Williamsburg Foundation, Virginia — where they seek to authentically re-create how life was lived in the second half of the eighteenth century at the time of the War of Independence (1775-83) — the author has established a good friendship with Mr Jason Whitehead, in charge of brickmaking at Colonial Williamsburg, and his colleague Mr Bill Neff. Jason and his fellow team of brickmakers use timber and the open clamp to fire all their bricks, and the author enquired if it was possible that, with formal approval from their employers, they might come over to England to both trial and teach the H.G. Matthews' workforce how to erect and fire an open clamp. Both Jim Matthews, who agreed to fund the project, and all at Colonial Williamsburg — recognising the significant educational and cultural value, as well as the obvious commercial benefits for the project — greeted this idea with real enthusiasm. What follows is how this idea was both put into action and the results obtained.

DEFINING BRICK CLAMPS

The use of the temporary clamp preceded the use of the permanent kiln, though the terms clamp [*clampe, clampis*] and kiln [*kyln, kylne, kill*] have been frequently interchanged down through the centuries. Within brickmaking it defines dried, 'green', bricks carefully stacked, or 'set', as

Fig. 1 The open-set bricks abutting the outer, un-mortared, wall or 'casing' of 'burnover' bricks.

the outer 'casing' of brick is simultaneously assembled. After completion of the firing and cooling phases the entire clamp is dismantled and the resultant fired bricks graded for suitability of use within a structure. Historically, clamps were perfect for occasional demand, particularly if erecting a large country mansion, where an itinerant brickmaker might set up on a site where it had been established that the excavated brickearth, or clay, was suitable for making bricks, and clamp-firing was the obvious outcome for the early pioneers wishing to build in brick within a new settlement where, obviously, there were no kilns. There are two types of clamps: the 'open clamp' and the 'close clamp'.

The Open Clamp

Historically, the oldest method of firing bricks, the open clamp has fireholes positioned directly opposite each other along the longest sides, forming fire tunnels, or fire-channels, for the wood (later coal) fuel. The bricks are set on edge, in bonded layers, with slight spaces between them (hence the term "open clamp") as the outside of the clamp is simultaneously constructed with fired bricks — termed "burnovers" — laid to bond, but un-mortared — as a protective casing and plastered in mud to retain heat and provide a degree of weather protection (fig. 1).

The clamp is fired by regularly placing logs into the fireholes in a twenty-four hour a day process over several days. When coal is used it is important to also rake-out all the ash, termed "clinkering-out", to prevent the tunnels becoming clogged and reducing airflow. Once, by both observation and sound, the bricks are deemed to have fired sufficiently .the fires are closed down until extinguished. Once cooled, the clamp is then completely disassembled with the fired bricks

sorted into several grades of ascending quality. By their very nature, clamps are far more affected in the final quality of product by the weather than a kiln, and there can be up to 20% wastage, with what were historically termed "Semels" — meaning 'half-fired' — and usually re-fired in the next clamp.

The Close Clamp

The design for the close clamp began to appear after the Great fire of London (1666), when there was an unprecedented demand for bricks to rebuild the city; the method was recorded as early as 1693 by John Houghton (Hammond, 1984, 3). It was largely the outcome of the discovery that an addition of a defined percentage of the city's rubbish, containing some vegetable matter, but principally domestic ashes of half-burnt coal, if mixed within the London Clay resulted in a well-fired brick, termed a London Stock. The rubbish was called Spanish (possibly because of its Spanish Brown hue) and also as soil or breeze (Dobson, 1893), and latterly as town ash, that was sifted and the finer stuff mixed into the clay during its preparation in the washbacks. It was quickly found that the combination of integral fuel, plus the increased use of sea coal in brick firing, demanded a clamp that was far more stable due to the tremendous heat and expansion that developed. The new clamp design eliminated fireholes, instead off a base of two or thee courses of bricks the residual coarse Spanish material was spread and this fuel layers at the base of the clamp — later by a single layer of crushed coal about 450 mm (18 inches) high — to be lit by kindling placed into a central 'live-hole' or 'transverse flue'. The green bricks are then set on-edge directly off of the fuel, but placed in close contact with one another, and with the outside casing and topping of burnovers, around and over the clamp to conserve heat, protect the green bricks, and carefully tied-in to an overall shape that is sloped, or battered, to prevent a partial, or total, collapse as a result of both dynamic heat expansion and then the slumping of the clamp in its overall height as the base layer, or layers, of fuel burn away.

The close clamp technique spread out from the city to brickmakers in neighbouring shires where non-carboniferous clay would benefit from an integral fuel, and where the Spanish was substituted with crushed coal. Close clamps typically have a capacity of over 100,000 bricks, but can exceed two million bricks, taking from two to six weeks to fire; and unlike the open clamp, the close clamp is left to burn out, and once cooled, is carefully disassembled and the bricks graded for use. Close setting, to gain a secure clamp, does not lend itself to firing the majority of special-shaped bricks and the wide variation in temperature means roof tiles are not set in the clamp. Close clamp firing, for stock bricks, is still successfully employed by a few traditional brickmakers in England today (fig. 2).

PREPARING FOR THE FIRST TRIAL OPEN CLAMP

Initially, a February firing was decided upon by Jim Matthews, after discussion with Jason Whitehead and the Colonial Williamsburg Foundation, in order to fit in both with their timetable and be the least intrusive in their work, and to coincide with H.G. Matthews' plan for two Heritage Open Days at the brickyard. On considered reflection, it was decided to have a trial run in late February 2010, as they had no idea how the clamp would go bearing in mind the differing clay bricks and wood fuel to that used in Virginia; and mindful that firing traditionally rarely began any earlier than March, so the unavoidable February date meant that winter weather could pose a problem. A second firing in May was then planned that would be based on the experience gained from the trial clamp, when hopefully, the weather would be much nicer for the proposed open days as well. It would also provide an opportunity for invited guests to be able to see the resultant fired bricks from the trial clamp and view a recording of key moments from the whole

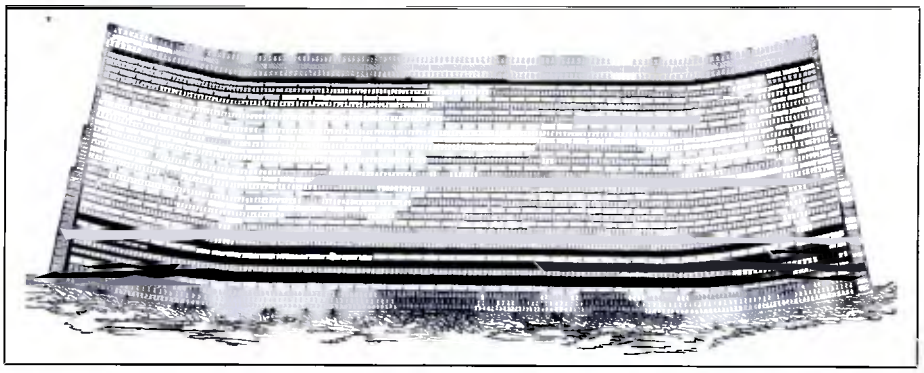

Fig. 2 A close clamp, as depicted by Edward Dobson, *Bricks and Tiles*, London: Crosby Lockwood 1893, p.145;

process caught on video; as well as to meet Jason and see the second clamp in operation.

So, through good planning and communication, with all parties involved, a start date of Monday 22 February 2010 was confirmed, airline tickets and accommodation booked for the men from Virginia, with Bill Neff coming alone for the first week, to be joined by Jason Whitehead in the second and final week. Meanwhile, all the necessary materials were prepared, or ordered, sufficiently in advance, so that all could run to the tight schedule planned.

THE TRIAL OPEN CLAMP

The trial clamp was scheduled to take two weeks, with week one for setting out and erecting the clamp and firing it during the second. It was decided to video this, but to ensure a good professional standard Jim Matthews engaged Mr Peter Austin of Pollywyk Production, who kindly volunteered to record and produce it as he was very interested in the project. Work duly commenced on Monday 22 February 2010, as previously arranged, with Jim Matthews, Bill Neff and the author initially meeting on site to plan things.

After consultation, Jim had chosen the bricks to be fired from the 'Chalfont' range. It was felt that of the four clay types the company utilises within their product range; the Chalfont clay — being an upper level material with a very long history of its recorded use in the area — would be ideal in reviving the historic method of firing bricks, To be truly authentic, however, it was important that they had to be from those bricks that are moulded without a defined percentage of integral body fuel, of crushed coal or breeze, added to the clay that can be used in some of the bricks to add to their colour range.

Thought was also given to the ideal place to position the clamp and how best to prepare the base. That done the rest of the day progressed with Jim providing a number of his workforce with the necessary equipment, to be placed under Bill's direction. The first week of setting out and building the clamp was executed during weather that was both cold and wet, and occasionally the odd flurry of light snow thrown in for good measure!

Establishing and Setting up Base for the Trial Clamp

The clamp was sited on a section of open land, adjacent to a ditch to assist in draining away groundwater, and providing ample space for stacking all the logs required to fuel the clamp; it was also directly opposite the covered drying sheds from where the green bricks to be fired could be easily transported. The ground was skilfully scraped level and finished with some hogging

Fig. 3 The completed open clamp.

over hardcore to form a solid, elevated, base for the clamp by H.G. Matthews' clay-digger, Stuart Brown, using a JCB.

The Selection and Erection of the Timbers and Tarpaulin Protective Covering

Bill and Jim and H.G. Matthews' day digger and engineer, Stuart Brown and Keith Batchelor, went off into a wooded area of Matthews' adjacent farmland, to select and cut down several straight Fir trees to be used for erecting the frame for the protective covering above the projected height of the clamp. The poles obtained for the uprights, or standards, were cut at one end to form points with a chainsaw and then lifted and pounded into the ground using the large bucket of the digging machine. Once all the standards were erected a framework of horizontal and inclined poles were positioned and tied at the top in order to create a lean-to roof. A large tarpaulin was then spread across and tied down.

Setting Out the Clamp

The overall footprint, or plan, of the clamp was one entirely based on the historical evidence and dimensions used successfully at Colonial Williamsburg. As Jim Matthews had already stated that he wanted to fire 12,000 bricks, Bill simply worked on four tunnels and an overall width that was of sufficient internal dimensions for setting that number of dried, green bricks. Jim supplied "seconds" to be the burnovers that would be used for the external casing. Accurate setting out ensured the overall length, width and regular spacings for the green bricks, between each of four, parallel fire tunnels was carefully established (fig. 3).

The Second Week — Completing and Firing the Open Clamp

By the beginning of the second week, Jason had flown in from Virginia and worked alongside

Bill and the selected H.G. Matthews' men to complete the setting of the green bricks. All were set on-edge, with small finger-width, gaps between them, with their heads faced directly into the fire tunnels to maximise the number of glazed headers produced. With the four tunnels constructed to the desired height, the sides were gradually corbelled , or 'gathered-over' to bridge their tops; and the remaining courses then set across the full length and width of the clamp as alternating header and stretcher courses; with each consecutive course of the bricks and the outer sides stepped-in to resist heat expansion and minimise the amount of cracking. Once the green bricks were all stacked, the fired brick casing was completed up to the full height; and the top of the clamp was finished with two layers of burnovers placed as a 'splatting'. The casing was then completely daubed with a layer of mud, sand and ashes to conserve heat and give a degree of weather protection.

Fig. 4 The wood fuel placed at the mouth of the fire tunnel.

It is important to realise that all the very hard work of setting out and erecting the open clamp was executed at a commercial pace that is several times faster than Jason and Bill would be used to, working within the educational atmosphere so wonderfully created by the Colonial Williamsburg Foundation. Yet, though very tired, they both worked valiantly throughout to ensure the work ran to the two-week timetable allotted to undertake the trial clamp firing.

The Wood Fuel and Firing the Clamp

The amount of wood — selected from a variety of hardwoods such as Oak, Beech, Sycamore and others — deemed necessary to fire 12,000 bricks was worked out by Jason and Bill using their American (and old English) system of 1 'cord' to fire 1,000 bricks: a 'cord' is an old English imperial measurement for a stack of timber 4 feet wide by 4 feet high by 8 feet long and thus has a volume of 128 cubic feet. With all ready, the completed clamp was finally lit on the morning of Wednesday 3 March 2010 at around 11.00 a.m. This was achieved by creating what are termed 'small fires' at the mouth of each of the eight tunnel openings in order to create the draught, or draw, and slowly upgrade the fire and heat within the cold, green bricks. In commencing this firing phase of the open clamp, the initial concern on the first day is always

about creating a good heat and carefully completing the drying-out of the green bricks to prevent them bloating and bursting once the clamp is fully up to temperature, typically between 850 and 950 degrees Celsius across the entire clamp, but touching 1,000 degrees within the fire tunnels where the fuel is (fig. 4).

The firing process for an open clamp obviously requires someone to be there all the time tending the fires regularly over 24 hours, as well as preparing the next charge of wood by splitting logs and stacking them close to the fire holes. The second day of firing was the usual challenge for Jason and Bill, as they sought to build up the all-important coal bed of red-hot embers at the mouth of the tunnels: vital to spread into and unite across the full length of the tunnel. Gradually, however, the fire took hold as they desired and soon a good and consistent heat was achieved. The poor, late winter, weather was clearly an issue in the early phases of firing, as most days were very cold and damp; all of which affects the clamp's performance.

Through the skill and experience of the burners, this was overcome and the fires became well established; indeed the steel doors used to close each of the eight tunnel openings began to very slightly warp out of shape due to the heat created, and because they were a little thinner sectioned steel than that used back in Virginia.

The Final Day of Firing

By the fifth and final day of firing, with the heat well up and consistently maintained, Jim, Bill and Jason declared that they were satisfied, and with that decision the last stoking was undertaken and then the clamp was sealed off. All who had been involved in this trial clamp were present and assisted in applying the mud coating around the steel doors, to cut off the air supply, as well as patching-up any of the inevitable cracks around the casing. Group photographs were taken, more video footage shot, and with beers and lagers passed round, a toast was raised to the success of the trial firing; and big thanks expresses for the efforts of Jason and Bill, who would return home a few days after. On cue, a glorious sunset developed to provide a deeply evocative backdrop, just as the last of the smoke died and flames suddenly came out of the topmost splatting course. Wonderful!

Dismantling the Clamp

The following week, once the clamp had cooled sufficiently, two of H.G. Matthews' men were assigned to begin taking down some of the casing in order to allow it to fully cool in readiness for complete dismantling. This was done following the age-old tradition of 'grading' the bricks, based on quality of firing and aesthetic appearance, as course-by-course, they were removed and placed on to their appropriate pallets. As each layer was unloaded, it was pleasing to see the wide range of handsome coloured bricks produced. There was clear delight in Jim Matthews' face when, as the author had predicted, the heads of the bricks along the four firing tunnels were all found to have a beautiful silver grey colour. This is a direct result of the combination of their heads becoming stained by the potash given off from the adjacent timber fuel and the melting of the silica which forms a protective glaze, referred to as 'potash glazed', but historically termed 'flared' headers, and frequently utilised by bricklayers down the centuries to form diapers and chequer-board patterns, contrasting with the surrounding orange- and red-coloured bricks on so many historic façades (fig. 5).

The unloading and grading took two days, but with a 90 percent success rate, in terms of quality, saleable, bricks produced, and all neatly stacked on pallets for all to see, this could only be regarded as a wonderful result. The success was entirely due to the collaborative result of the Colonial Williamsburg Foundation's commitment to the initiative, Jason and Bill's

knowledge, skills and experience, honed in the brickfield of Colonial Williamsburg, combined with their willingness and enthusiasm to go along with the initial ideas from the author, the collective efforts of H.G. Matthews' workforce, and the all-important, wholehearted commitment and financial support given to undertake the wood-fired trial clamp by the owner, Jim Matthews; Jim did all possible to ensure the project was as pleasurable as it was educational.

Fig. 5 A view through one end of the clamp after dismantling commenced where one can clearly see the potash-glazed headers that lined the fire tunnel at its base.

THE SECOND FIRING OF AN OPEN CLAMP

The selected H.G. Matthews' men now had to properly utilise all that Jason and Bill had brought and taught them for erecting the next, main, clamp firing, for lighting it in the week commencing 10 May 2010, in readiness for the company's two Heritage Open Days set for 14 and 15 May. The intention of these open days was for H.G. Matthews to invite a broad range of professionals from the various national bodies — such as the National Trust, English Heritage, Historic Royal Palaces and the Society for the Protection of Ancient Buildings — as well as architects, surveyors, conservation officers, leading craftsmen working within the heritage sector, together with discerning owners of historic brick-built houses, to alert them to this revival in wood-fired open clamp firing, see it in operation, and view all the graded bricks from the trial clamp nicely presented. This would take place along with a guided tour of the brickyard to see the full range of products and services currently available and learn of new products in the developmental pipeline. To add further interest to each day, several acknowledged master craftsmen from Buckinghamshire were invited to demonstrate and to give presentations. Everyone who could attend would also be well catered for with a delicious hog-roast, salad, fine wines, real ales and deserts.

Clearly there had been lessons for all to benefit from, as a result of the invaluable experience gained throughout the setting-out, erecting, setting, firing, cooling, and unloading the trial clamp, of what changes would be necessary to put in place for the second clamp, and this

was particularly true for the selected H.G. Matthews' men who now had to build and set this clamp entirely on their own. At Jim's invitation, Jason Whitehead, from the Colonial Williamsburg Foundation, would arrive over from the USA later in the week ready to commence and oversee the firing; and actively to be part of, and participate in, the two open days, along with H.G. Matthews' employee Tony Gonzalez.

Tuesday 4 May 2010

Commencing after Bank Holiday Monday, the H.G. Matthews' men simultaneously erected and set the clamp as described earlier; there being no need to set it all out again as the casing of the trial clamp, up to the plinth level, remained in situ on three sides. Everything was just as before, except that this time Jim Matthews decided to set the bottom two-thirds using the bricks made from the company's 'Dundridge' clay, setting the top third only with the 'Chalfont' clay bricks that had been used in the trial clamp. Again the breeze, sometimes added to this range of bricks to assist the bricks in kiln firing, was omitted to suit the open clamp method. The main reason that Jim changed from using all Chalfont bricks to Dundridge bricks was because he was of the opinion that this clay might be even better suited to stand the weight at the bottom of the clamp and the direct heat in the fire tunnels. The week ended with the clamp finished and ready to fire.

Monday 10 May 2010

Jason duly arrived on the Sunday, ready to commence and take charge of the clamp firing. Arriving on-site his initial assessment was that it had been built and set to a good standard but made the observation that the end walls could have been slightly more tapered or battered.

The wood necessary to fire this clamp had all been delivered and place a little distance away from the site of the clamp, prior to it being built, ready to split down and neatly stacked next to the fireholes — yet leave sufficient room for 360 degree access. The remainder of that day, and the first part of Tuesday, was spent plastering the daub of mud, sand, and wood ash over the casing, then the site was tidied and made ready for lighting up the next morning.

Tuesday 11 May 2010

The men gathered at the clamp placing in the kindling and, around 9.30 a.m., lighted the small fires in readiness, to gradually commence loading the larger split logs; and all were pleased with the good 'draw' that soon became apparent. By early afternoon the fires were well established and gradually being spread as coals across the full widths of the fire tunnels; and steam was clearly visible coming out of the top of the clamp, as residual water within the green bricks was being slowly driven out. On this first day of firing an organised pattern of two shifts commenced and once Jason was satisfied that all was progressing satisfactorily, he left the clamp at 6.30 p.m. and handed over to Darren Pacey who worked from 6.00 p.m. to midnight, being relieved by Matt Reynolds who worked through the night until 6.00 a.m. the following morning. At each handover the clamp's overall behaviour during each respective shift was discussed, what had been done and the current status, in terms of what should be the next most important action for the new man to commence with on his shift.

Wednesday 12 May 2010

This was a critical day as the 'slow-fire' to heat up the clamp and drive-off the residual moisture within the green bricks would now be gradually upgraded to a proper fire to begin the actual

firing. Jason arrived at the clamp around 5.30 a.m. to relieve Matt and was pleased how well he had tended it overnight. Fires were still at the fireholes, building up the required bed of coals with good heat, as the last of the steam exited the top of the clamp. Jason's first task was to load up one more charge of larger sized wood — which Matt had correctly split and placed alongside the clamp — into all fireholes, which later burned down to coals that allowed him to commence spreading them across each tunnel.

By noon all was progressing nicely and Jason was closely monitoring the overall behaviour of the clamp, and once he had carried out his tests to check that there was no longer any steam, Jason had the doors placed to each of the fireholes and a good draw soon developed. The cycle of checking and tending the fire tunnels carried on at regular intervals; and satisfied, Jason retired back to his hotel for a well-earned rest. Marcus Reynolds, Matthew's father, worked up to 10.00 p.m. splitting a huge amount of logs to create sufficient stock for the entire next 24 hours, while Darren continued tending each of the fireholes, balancing the draw to maintain an even temperature across the clamp, raking and adding sufficient logs each time, so that everything was in readiness for handing over to Matt around midnight for his overnight shift, which he commenced again at midnight working through to 6.00 a.m.

Thursday 13 May 2010

Around 5.30 in the morning Jason return to the clamp and Matt expressed slight concern that the fires had gone down a little, but was baffled as to why, as he had clearly tended them diligently all through the night! Jason's experience quickly spotted the culprit as being variations within the moisture content of the logs. Some were dry whilst others were quite damp, and Matt had, unwittingly, been feeding the latter in, because the previous evening, just before he commenced work, these had been placed near the fireholes for him to use. Jason's emphasis, therefore was to build up the required heat again by loading extra, dry, logs into each tunnel, and by midday this had clearly worked and a good heat was building up within the clamp, and with coals spread evenly across the middle of the fire-tunnels, the pace of tending the fire tunnels quickly picked up. By early evening, he was very pleased with how the clamp was performing having achieved a good, balanced, heat. Like all experienced brick-burners, as he was teaching the H.G. Matthews' men, he listened to the clamp as well as read and judged the firing by observing the fires and noting the colour of the flames, so was heartened with a good glow at the base and a hint of the same developing at the top.

Gradually as the evening lengthened, the clamp began to glow throughout, with some small flames licking-out through the cracks at the front and returns at the quoins; Jason, satisfied, left to get some much needed rest. Whilst all this was going on, Marcus again busied himself with the large axe, splitting a lot more wood, whilst his son, Matt, tended the fires. Just after midnight, the fire was making a distinctive roar to announce that it had travelled right up throughout the clamp, and soon flames could be clearly seen exiting the top splatting. As can happen, however, due to wind direction, it was favouring one side — the right-hand side — so the emphasis became to try to balance the fire and get it evenly across the entire clamp.

Friday 14 May 2010

For the fourth day, Jason, dressed in the eighteenth-century clothes he wears at work in America, came in extra early, at 04.00 a.m., because this was the first of two 'Open Days', carefully planned by H.G. Matthews, intended to show invited people, from all disciplines within the world of building conservation and restoration, the open clamp firing and the resultant wood-fired bricks, and, as stated earlier, to provide a tour of the overall brickmaking operations. So

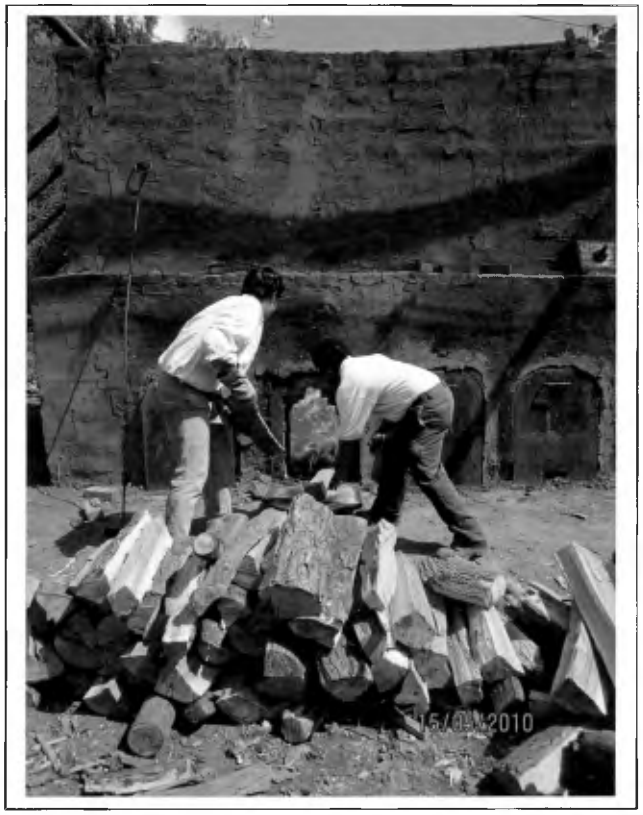

Fig. 6 Jason Whitehead (left) aided by Tony Gonzalez of H.G. Matthews placing wood into the fire tunnels.

Jason listened attentively to what Matt had to tell him about his night's work, trying to maintain the balance with the fires, and to check the overall status of the clamp. His first action, therefore, was to stoke each of the fireholes, spreading out an even coal bed, load in more logs, and then seal up the doors on the left side of the clamp with mud, to encourage more heat across to that side. From then on it was a case of stoking-up the opposite fireholes and loading sufficient logs before sealing these doors too (fig. 6).

With, thankfully, a warm summer's day in the offing, and guests beginning to arrive after 10 a.m., the doors to the fireholes were opened up on the left-hand side to throw heat to the opposite side and restore the balance. Climbing the ladder up to the top of the clamp Jason could discern the tell-tale slump beginning to occur as the bricks began shrinking in size during this latter stage of firing. The fires on both sides were now regularly attended to with raking and additional logs, and this continued for a further six hours until 4.00 p.m., when with the final stoking, all the doors were sealed and the fire allowed gradually to burn itself out over the next 24 hours. Being in charge, as an experienced demonstrator in brickmaking at Colonial Williamsburg, Jason was within his element talking to all those people who gathered around the clamp, eager to have the whole process explained to them. All were fascinated with the sight of a wood-fired open clamp in full operation and were further impressed when shown all the bricks from the first, trial, clamp; especially they were enthralled with all the potash-glazed, vitrified, headers that they were at liberty to handle and closely examine.

Throughout the day, Jason, along with several acknowledged masters from various crafts, all of whom hail from Buckinghamshire, both displayed their mastery of wood carving, blacksmithing, flint walling, stone carving, gauged brickwork, and other crafts, as well as giving formal lectures to people at selected times throughout the day, seated within the large marquee,

where, at midday, all in attendance were treated to a superb lunch.

Saturday 15 May 2010

The second of the two 'Open Days' was, thankfully, blessed yet again with very good weather, and though over one hundred people had come to the brickyard on the Friday, even more came to visit on the Saturday. With the clamp still alight and Jason once more dressed in his Colonial Williamsburg attire, he enthusiastically guided groups all through the firing process, as well as elaborating on wood-fired open clamps, and his work at Colonial Williamsburg within his formal presentation to a larger audience within the big marquee.

Conclusions

The next week, which saw Jason's departure back to Virginia and the clamp being left to cool down, began with the clearing away of the marquees and other things related to the open days. The focus then returned to the normal day-to-day running and business affairs of the brickworks, that had, understandably, been disrupted by it. Jim and the rest of the Matthews' family were delighted with the success of the two open days, and this pleasure increased when the results from the overall firing of the bricks was seen not only to match the success rate of the trial clamp, but in the overall aesthetic quality of the fired Dundridge bricks too.

Jim has no doubt that the response to the bricks produced from both wood-fired open clamps has revealed that there is considerable demand not just for these bricks but also for more to be clamp fired; and these can command a premium price. So this will definitely be developed by the company, but put on to a more commercial scale with larger clamps to optimise value from the high labour costs incurred to achieve a sensible balance between retaining the all-important necessary traditional aspects of firing, that creates the desired aesthetics of the bricks, yet linked to adopting modern aspects of loading and unloading to make the bricks less expensive to produce and retail. In this respect Jim has this to say:

> Having seen the bricks which came out of the clamp it is obvious that the extra effort of wood-firing was well worth it because of the sensational results. I definitely wanted to produce wood-fired bricks commercially as I agreed with Gerard that there must be a demand for them in the conservation sector for the authentic repair of historic buildings and I am convinced that there will also be a niche demand at the very top end of the new build sector as there is really nothing else to compare with the beauty and character of bricks that have been wood fired.
>
> The environmental benefits of firing with sustainably grown local timber instead of oil are a positive feature of this method.
>
> In order to retain the essence of wood-fired bricks while at the same time making the process as efficient as possible we have decided to building a clamp-kiln incorporating a few "modern" designs such as insulated doors and a semi-permanent casing. The new clamp-kiln should hold around 25,000 bricks and will enable us to produce around 250,000 bricks a year if there is sufficient demand to do so, which I am confident there will be.

As a result of this, a new clamp-kiln was built (fig. 7) and this was fired between Monday 7 March and Friday 11 March 2011. Allowing the clamp-kiln to fully cool, drawing the fired bricks began on Monday 21 March 2011 and the result were , in the words of Jim Matthews, "absolutely incredible". A 95 percent success rate, better than from their Scotch kilns, with

Fig. 7 The new clamp-kiln completed .

delightful potash-glazed headers (fig. 8), and rubbing bricks too; all the bricks being graded and stacked on to pallets. This method of firing will now be incorporated into the company and undertaken to meet the demand, as and when required.

A major learning outcome from reviving a wood-fired open clamp is that it has served to enhance our understanding of this long-forgotten method of traditional brickmaking, along with its associated knowledge and skills. Also, it emphasised that this past method of brickmaking is very hard and labour intensive work, but that has provided a truly empathetic appreciation of just what really went into the manufacture of the majority of bricks that play a significant part in creating the aesthetics of our historic brickwork and which is a cherished contribution to our nation's built heritage. Yet another learning outcome is that it has also served to provide the ability to faithfully re-create bricks that, laid with due craftsmanship, will be entirely in harmony alongside those originally made using this exact process, which is essential for those tasked with repairing, restoring and extending traditionally constructed brickwork, of all historical periods, following the accepted principle of 'truth to materials'.

Jim's overall reflection on undertaking this project is expressed on several levels. Firstly, he is pleased that it more than lived up to the author's expectations. Secondly, that it fulfilled his long-held ambition to see this historic process in action, and made extra special by being able to have it undertaken at the family brickyard, using H.G. Matthews' materials. Yes, he concedes, it was very hard work and took an enormous amount of planning, organising, and running to achieve, but the overall success rate and the on-going response has made it all entirely worthwhile. Finally, he is extremely grateful to the Colonial Williamsburg Foundation for facilitating this project, and in particular to the hard work of Jason Whitehead and Bill Neff in helping to educate and train his workforce to be able to revive and continue this historic firing technique. As he stated: "It couldn't have been done without them and their uncomplaining hard work and enthusiasm for the project, as well as the good fun had, made it 100% successful".

The short DVD, commissioned by Jim Matthews, to record this historic event is now available to enjoy on the company's website *www.hgmatthews.co.uk*

Fig. 8 The fired bricks from the wood-fired clamp-kiln displaying the potash-glazed bricks around one of the fire tunnels.

REFERENCES

E. Dobson, 1893, *A Rudimentary Treatise on the Manufacture of Bricks and Tiles Containing an Outline of the Principles of Brickmaking,* London: Crosby Lockwood and Son, 9th edition.

M.D.P. Hammond, 1984, 'Brick Kilns: an Illustrated Survey - II Clamps', *British Brick Society Information,* **33,** pp.3-6.

G.C.J. Lynch, 1994, *Brickwork: History, Technology and Practice,* Shrewsbury: Donhead Publishing

ABOUT THE AUTHOR

Dr Gerard Lynch is an internationally acclaimed expert in historic brickwork, master bricklayer, educator, and author; he is a former Head Lecturer in Trowel Trades and Bedford College. Awarded the Silver and Gold Trowels from the Brick Development Association and a Licentiate of the City and Guilds of London Institute (LCG), he is the author of *Gauged Brickwork: a Technical Handbook*; the two volumes of *Brickwork: History, Technology and Practice*; and *The History of Gauged Brickwork, Conservation, Repair.* Dr Lynch holds an MA in 'Conservation of Historic Brickwork' from De Montfort University, Leicester, and a PhD in 'Historic Brickwork Technology'. He runs a successful international consultancy practice; has trained craftsmen in traditional skills; and worked on and advised on many significant historic English brick-built properties, as well as important colonial brick-built buildings in the U.S.A. and Europe. A Winston Churchill Fellow, a Viscount De L'Isle award winner, a Harold Higham Wingate Scholar, as well as an honorary 'Kentucky Colonel' and an IPTW Askins Achievement Award Winner, in 2009 he was elected to the Board of Directors of the Preservation Trades Network (*www.ptn.org*).

Reading Brickwork

Terence Paul Smith and David H. Kennett

Following the British Brick Society AGM at Reading on the morning of Saturday 12 June 2010, and a break for lunch, members were treated to a brief but informative illustrated talk on Reading brick by James Ford. Thereafter, we were conducted on a tour of some of the town's brick buildings led by BBS member and Reading resident Adam Sowan. Reading has a rich heritage of brick building, and Thomas Hardy (1840-1928) must have been impressed by it since he used the town as the model for his fictional, and significantly renamed, Aldbrickham in *Jude the Obscure* (1896). But surprisingly perhaps, for an author who began as an architect and in 1863 won the essay prize of the Royal Institute of British Architects writing about polychrome brickwork, he never gives a description in the novel.[1]

The greater part of our perambulation was along some of Reading's nineteenth-century streets to view the distinctive polychrome brickwork of the town's late Victorian houses: the richness of effect is often augmented by the use of decorative ridge tiles and finials.[2] Not that such houses are *ubiquitous* in the town: some are much simpler, including those which we examined in Rat Trap Bond using extruded and wire-cut red bricks; it is a pity that much is painted black. We also saw some large red brick Victorian school buildings. The perambulation included Field Road, where in January 2000, and as James Ford had told us, the brick fronts of some houses and the road in front of them collapsed into the underlying chalk mines.[3] They have now been repaired; but one can only imagine the horror of a couple who came home to find their house-front no longer there!

Reading had a vigorous brickmaking industry in the Victorian period, at Katesgrove, Coley and Calcot to the south-west, Tilehurst to the west, and Caversham to the north. Many of the bricks used for the polychrome brickwork were locally supplied, although for the darkest tones, 'blue' (in fact virtually black) engineering bricks were brought in, probably from Staffordshire, whilst some at least of the pale yellow bricks were obtained from north Wales.[4] Especially characteristic of the town are silver greys, the effect appearing mostly on headers and achieved, in the Victorian period, by adding rock salt during firing. The raw materials in and around Reading, derived from the clays of the Lambeth Group (comprising the former Reading and Woolwich Beds), was particularly suited to manipulation of the brick colour by the use of additives and/or different firing conditions. House builders in Reading clearly could not resist exploitation of the different products, whether locally made or imported, to create lively patterning, beyond the period when the structural polychromy of more prestigious architecture, in the 'High Victorian' Gothic Revival of the 1850s and early 1860s, had ceased to be fashionable.

Occasionally, as we witnessed on our peregnation, a date might be included. But more frequently the different coloured bricks are used to create patterns — sometimes overall carpet-like effects, sometimes individual motifs against a plain background. They include diaper patterns, Vs and inverted Vs, and Greek or Latin crosses, although it is unlikely that the last had any religious significance. One of the most distinctive examples that we saw is in the red brick gable of a terrace of the late 1890s in River Street: a ring of 'blue' headers surrounds a much wider circle of alternating red and yellow radial bricks, itself enclosing a roundel of red and yellow bricks in a basket-weave pattern.

This exuberance is at its most striking in curving and descending streets, as we witnessed in Pell Street (fig. 1). Here because of the form of the street, the individual houses, though joined one to another, are staggered, allowing each to be perceived individually but without dislocating

Fig. 1 Houses on Pell Street, Reading, built *c.*1890 in red brick with yellow brick used for decorative effect.

the overall composition. Built predominantly of red bricks, these houses, which date from *c.*1890, have decoration in yellow bricks. The patterns include straight and zig-zag surrounds to the windows; a zig-zag in one (but not on the opposite) door jamb; three-course bands at floor levels, above bay windows, and beneath the eaves; simple crosses (one header above and below a stretcher) in the gables; and some other patterns. Doorway heads, lintels and scrolls flanking the dormers are probably of reconstituted stone. Curiously perhaps, in view of all this display, the slate roofs do not have decorative ridge tiles or finials. Perhaps it was felt that enough was enough!

It would be interesting to know who devised the various patterns — the entrepreneurs who were responsible for the erection of the houses or the bricklayers who actually built them? The visual evidence is ambivalent. The more consistent examples, as on Pell Street, where there are only the slightest variations from house to house, seem to imply a design decision from the outset.[5] But the more random motifs — a cross here, a V there — suggest the whim of individual bricklayers (or gangs of bricklayers) given a free hand. I suspect that the evidence to settle this matter simply does not exist. I would like to be proved wrong!

Viewed *de haut en bas* — from the Parnassus of the 'higher criticism' (to filch a term from biblical scholarship) — it would be easy to consider these strikingly polychrome houses as meretricious — vulgar, even. Seen as a sort of folk art, they cannot be regarded as other than enjoyable, and it is difficult to imagine that the residents of late Victorian Reading did not appreciate them. A century and more on, we *certainly* can.

In this connection it is fitting that our AGM was held at RISC (Reading International Solidarity Centre), an inspiring venue where Fair Trade folk-art products — and appropriate food and beverages — are available. It is worth (and worthy?) eating there, at 35-39 London Street, before exploring Reading's rich heritage of brickwork.

After examining these houses, we made our way to the town centre, past houses constructed of the Bath stone or stuccoed on Castle Hill: the eleventh-century motte-and-bailey castle was destroyed before 1151. Crossing the roundabout over Reading's inner ring road, the group arrived at Castle Street, dominated on its north side by buildings in an orange-red brick using Stretcher Bond for both the Police Headquarters of 1976 and Magistrates Court erected in 1968. These comparatively low buildings, respectively of four storeys and of two on a raised podium replaced an assortment of much older buildings, some brick, others timber-framed.[6] Castle Street retains two timber-framed buildings on its south side, nos 15 and 17 — both three-storeyed and double-jettied and the former with the ground floor infilled with machine-made bricks painted over — and the two on the north side are both public houses: the 'Sun and Lion Brewery' and the 'Horn', the latter on the north-west corner of Castle Street and St Mary's Butts.[7] The brickwork at least one house on Castle Street, no.13, is clearly a brick facing to a much earlier timber-framed house, whose owner sought to improve and up-date (see below).

Our small group walked from west to east along the south side of Castle Street, against the numbering system: subsequent comments follow the order in which the buildings were viewed. Beside the roundabout is Holybrook House, no. 63 Castle Street, a five-bay, three storey house in red brick in Flemish Bond; at the rear is a full visible basement, no indication of which appears on the street façade where the bays are of regular width. At the rear there is a wide area of plain brickwork beyond the four levels of windows for the eastern bay. Both front and rear have a bracket cornice. At the front the straight lintels employ gauged brickwork. Holybrook House is noteworthy for its elaborate doorcase which beneath a triangular pediment has Tuscan columns 'mightily blocked' in the manner of Claude-Nicolas Ledoux at the Director's House at the Saltworks of Arc and Senans, near Besançon, France, of 1775-79;[8] Holybrook House may therefore be later than the 1750s suggested as a date for Holybrook House. John Spicer, three times mayor of Reading, and a man with commercial connections to the City of London, is thought to have been its building patron.[9]

The adjacent pair of yellow brick houses, nos 59-61, each three storeys and three bays wide with the doors at the extremities and built in the early nineteenth century, are amongst the earliest buildings to use gault bricks in Reading. A subsequent pair, nos.47-49, similarly serve as an early use of Bath stone in the town.[10]

Between these pairs are the Vachel Almshouses, built in 1863-5 to the designs of W.H. Woodman.[11] Two rows, now giving accommodation in twenty flats, were built in red brick with grey brick accents, both horizontal and in small diaper patterns. Secure their own space with attractive gardens, in neat steps these Victorian houses, converted into one-bedroom flats in 1960-2, lead down to the Holy Brook. The original end houses have gables facing each other using mainly red brick but with the neat tumbling in grey brick. In 1870, each row was extended northwards by two units on each side which face Castle Street; these have lost their original steep-pitch roofs. In 1861, almshouse charities in Reading were consolidated into a single endowment. Building of 28 units, sixteen on Castle Street and twelve elsewhere, in the mid-1860s cost £3691 3*s.* 0*d.*; expenditure in 1870 on four additional units at Castle Street was a further £598 2*s.* 10*d.* To finance the new building, the old building was sold, for £510, and £4,232 16*s.* 5*d.* was collected through an appeal in the town. At less than a penny over £134 per unit, the investment for individual's final years — and the almshouses have recorded a centenarian — has been money well spent. The original almshouses were founded on the same site by John Vachel in 1634 for "six aged and impotent men without wives" and had an endowment of £40.[12]

Originally people's houses but now given over to the offices of solicitors and other professional practices, the other buildings on Castle Street with interesting brickwork exhibit variations on a theme: grey brick in Header Bond with the fenestration picked out in a red brick

and vertical accents in the red brick with alternate rows a stretcher face and a header face. The shade of red for the red brick varies between the houses, suggestive of different dates, maybe only by a year or two, for the brickwork. From the west, they are numbers 39, 37 also known as Kennet House, 19, 13, 9, and 7. Gauged brickwork is used on some lintels; no. 45, has rubbed red bricks; at nos.39, 37, and 19, the vertical edges of the windows picked out in red brick are alternately a full stretcher and a header with a closer outside it. The use of brick has been suggested as early eighteenth century at no.13 but, as noted, this is a brick facing to a three storey timber-framed structure, albeit a quite tall one; as *c.*1780 for no.9 where the windows are curious oriels; and as *c.*1750 for no.7, four bays with a Rococo fanlight above the door.[13]

From Castle Street, the party moved north to the more central area of the town. The group emerged on to the former to see a distinctive former Burton's building dominating the north-east corner of Broad Street and West Street. Externally totally clad in black "Vitrolite",[14] a material more often used by the building department of the clothier to mask the steel stanchions separating the large plate glass windows. The Reading building has date stones recording a visit by members of the Burton family in 1936, the year before other members of the family were at the smaller Stratford-upon-Avon store which was also clad in the same material.[15] As with another former Burton's store, further east on the south side of Broad Street, Reading, faced in the firm's more conventional material, concrete, the building is now in other hands.[16]

Reading has two principal shopping streets, running east-west and roughly parallel to one another: Broad Street and Friar Street. Both were crowded with people using their Saturday afternoon for shopping; due to the number of shoppers, the group did not linger over either street, both of which have many interesting buildings faced with brick and/or terracotta.[17]

Our short tour ended at Reading Town Hall (fig. 2).[18] This late-nineteenth-century building incorporates an earlier town hall, a red brick building designed in 1785 by Charles Poulton (1747-1819)[19] as a public hall with an attached meeting room for the town council. Around the west and south sides of this earlier building, Alfred Waterhouse (1830-1905)[20] built a new council chamber and a block containing accommodation for the town clerk and his department, a large committee room on the first floor, and five rooms for the town hall keeper and his family in the attics. Designed in 1872, and built over the next four years, its materials — mostly grey brick, locally made at Colliers' brickworks but not dissimilar in colour to Luton Greys, with accents of red brick and terracotta — set the tone for the whole. Grey and red bricks were laid in English Bond, which the succeeding portions followed. The terracotta came from "a works near Norwich", which is most likely to have been the pottery and terracotta works at Costessey.[21] For the first part of the building, the contractor was Parnell of Rugby.[22]

Within a year of its opening, Reading Borough Council determined on providing more accommodation and additional facilities. After a "a most unsatisfactory competition" from which "all the premediated designs [were] set aside",[23] Thomas Lainson (*c.*1824-1898)[24] of Hove was engaged to design three new sections of the building: a large public hall; a free library, reading room and museum; and schools of science and art; but a planned art gallery was omitted on cost grounds.[25] Lainson produced a highly competent plan.[26] On the principal front, his work, executed between 1879 and 1882, had a sandstone base and used locally-made dark blue brick laid in English Bond as the main walling material, with bands of single rows of red brick and a wide band of mostly plain dull red-brown sandstone blocks, only one of which has the decoration initially proposed. Above the canted porch to the free library, reading room and museum, are three decorated panels. The fenestration is outlined in red terracotta, from the Pent-y-bont range made at J.G. Edwards' works at Ruabon, Flintshire.[27] The contrast between Waterhouse's grey brick and Lainson's harsh, almost industrial, shade of blue brick is most marked on the Blagrave Street frontage. The red brick appears to be the same as that used by Waterhouse, likewise the two terracotta finials on the gables. Lainson's design on Blagrave Street uses triangular and

polygonal buttress in dark grey-blue brick with red brick in contrast to use of only triangular ones in Waterhouse's section. Whereas Waterhouse choose to have one architectural accent on Blagrave Street: the lancet windows of the new council chamber, Lainson could not resist the temptation to flamboyance. The polygonal porch tower with three decorative terracotta panels have already been mentioned; they stand out from the plain sandstone panels to the south of them. In addition there are two gables, one above an oriel window and the ceremonial entrance to the large public hall, and some very red terracotta window surrounds.

In contrast, another part of the structure is extremely plain, even to the extent of eschewing the buttresses seen elsewhere: the 1879 buildings facing north on to Valpy Street were for the Reading Schools of Science and Art, both of which have long since departed, but the original intention of the building is most apparent in the structure. The three storeys are distinctly irregular in having a low ground floor, even lower in height than the average house, originally used for kitchens and a scullery for instruction in cookery — with access to the new hall, the kitchens could be used for the preparation of banquets.[28] The schools' building has very tall first and second floors, both lighted by big and tall, wooden-framed windows set within protruding red brick surrounds. In the gable at the east end is a date roundel for 1879; the west end has a tower giving a third storey studio whilst the fenestration makes it clear that beneath the east gable were offices and a staffroom. Teaching provision was eight classrooms and two laboratories.[29] Perhaps it is the shadow cast the modern building opposite aided by the north elevation of the Valpy Street frontage, but the grey brick used here seems even darker than that used on the Blagrave Street façade but appears also to be of a less harsh tone.

In the angle behind the portions facing Blagrave Street and Valpy Street is the large public hall, externally visible only from the churchyard of St Lawrence's church; a big building in a dull red brick. The hall is 97 ft (29.6 m) long by 60 ft (18.3 m) wide and is 50 ft (15.25 m) high with balconies on three sides and a broad stage under which are dressing rooms for performers and a supper room the full width of the building. The case for the Willis organ was designed by Lainson's son and carved by J.T. Chappell. For the portion designed by Thomas Lainson, Reading Corporation used John Chappell of Pimlico as the contractor.[30]

The final portion to be built was an Art Gallery and extension to the public library. constructed in 1896-7 on a corner site on the south side of Valpy Street unavailable to Reading Corporation in the late 1870s. A local competition was held by the corporation in 1894, from which the members of the council chose the design[31] of the Reading-based practice of Cooper & Howell:[32] unlike the competitors of seventeen years before Cooper & Howell went on to build the extension in 1896-7.[33] They made the corner of Blagrave Street and Valpy Street into a wide canted bay decorated at its mid-point, the top of the ground floor, with terracotta panels of the various arts. The upper part of the Valpy Street frontage and the canted bay is a plain brick wall executed in a very light grey brick, whose high chalk content makes it appear as close to white as it is possible to get (see fig. 2). The windowless walls were designed to hang pictures on and the top lighting became the norm in purpose-built art galleries from the 1850s onwards.[34] The work of 1896-7 was executed by a Reading building firm headed by Mr McCarthy E. Fitt and the estimate for the construction costs was £8,000. The work also included extensive modification throughout the complex of heating and lighting systems.[35]

With the inception of the Civic Precinct on the western edge of the town centre in the 1970s, the town council, both as a debating forum and in its administration moved out of the Town Hall. The interior of the old Town Hall was reorganised to be Reading Museum and Art Gallery. there is a display about the local brickmaking industry. Also remaining in their original uses are Lainson's large hall, now the concert hall, and Poulton's building, now renamed the Victoria Hall.[36]

Fig. 2 Reading Town Hall, a photograph taken soon after the complex was completed in 1897. This photograph brings out the very light colour of the bricks used on the first floor of the Art Gallery, erected 1896-7, centre left, in contrast to the much darker brick used on the 1879-82 portions, centre right and extreme left. As can be seen, economy was exercised by not filling the niches at the corners of the canted bay and leaving uncarved the band of sandstone blocks on the Blagrave Street front.

The building suffered bomb damage in 1943, destroying the south tower of Waterhouse's build. It was restored in 1988-9 during the rebuilding above the ground floor supervised by the Architects Design Partnership.[37] Whilst they were able to match the original grey brick for colour, they had less success with the red and, wisely, the brickwork around the three-light, double-height window makes no pretence at a match. At the top of the tower, the new terracotta roundel displaying the borough arms neatly complements the terracotta surround to the clock on the larger, west tower, a key element in Waterhouse's part.

As a brick-built town, Reading has much to commend itself; walking round on a visit to check details for this article, one of the authors was struck most forcibly by the strength of the brick heritage of the town. Three periods, none of which is discussed in much depth herein, seem particularly well represented: the Edwardian decade and its predecessor; neo-Georgian buildings of the 1930s, although in Reading the style is used as early as 1902; and the last thirty years. Each would make a good individual study for a future issue of *British Brick Society Information.*

The 2010 Annual General Meeting is the second time the British Brick Society has visited Reading; a rather early Autumn Meeting was held in the town on 31 August 1991.[38] Our previous tour of the brick buildings of the town took in the remains of Reading Abbey, the famous — or should that be infamous? — Reading Goal, houses and other buildings east of the town centre, the Swansea Road Board School, now called the E.P. Collier School, north of the railway line and the big McIlroy Store. Only the town hall overlapped with the buildings seen in June 2010.

This fascinating visit underscores the point that members who have not attended our AGMs — and attendance in 2010 was disappointingly low — are often missing a real treat. We are grateful to James Ford for his introductory talk and to Adam Sowan for organising and conducting our tour. [39]

NOTES AND REFERENCES

ABBREVIATION

DBA A. Brooks, A. Felstead, J. Franklin, L. Pinfield, and J. Oldfield, *Royal Institute of British Architects Directory of British Architects 1834-1914*, London and New York: Continum, 2001, 2 vols: A-K, L-Z, separately paginated.

1. Thomas Hardy trained as an architect from 1856 to 1860 with James Hicks of Dorchester, Dorset, before going to work for Sir Arthur Blomfield (1826-1899) in 1862; later he worked, again in London, for T. Roger Smith (1830-1903). In summer 1867, Hardy returned to Dorset to work for Hicks and on Hicks death in 1869 for G.R. Crickmay, his successor in practice, until 1872. Hardy's early novel, *A Pair of Blue Eyes* (1873), is a fictionalised account of some of his architectural work for Crickmay. Hardy's architectural notebook has been published in facsimile, ed. and introd. C.J.P. Beatty, as *The Architectural Notebook of Thomas Hardy*, Philadelphia, PA: George Macmanus Co. for the Dorset Natural History and Archaeological Society, 1966. See also C.J.P. Beatty, *Thomas Hardy: Conservation Architect: His Work for the Society for the Protection of Ancient Buildings*, Dorchester: Dorset N.H. & A.S., 1993. A useful summary of Hardy's architectural career is given in M. Millgate, 'Thomas Hardy: the biographical sources', in D. Kramer, ed., *The Cambridge Companion to Thomas Hardy*, Cambridge: Cambridge University Press, 1999, pp.1-18, esp. pp.6-7 with nn.9-19 for additional references. There is an interesting account of a visit to the elderly Hardy in 1924 by the architect Sir Albert Richardson (1880-1964) in S. Houfe, *Sir Albert Richardson: The Professor*, Luton: White Crescent Press, 1980, pp.80-83.

2. There are good photographs, some in colour, of some Reading brick buildings in S. Muthesius, *The English Terraced House*, New Haven CT and London: Yale University Press, 1982, pls. 171, 172, and colour pls 29, 30; and in R. Field, *Geometric Patterns from Tiles and Brickwork*, 2nd edn, Stradbroke, Diss: Tarquin Publications, 1996, pp. 28, 34, 62 (ridge tiles), and cover illustration. Brief comment on them is provided G. Tyack, S. Bradley and N. Pevsner, *The Buildings of England: Berkshire*, New Haven and London: Yale University Press, 2010, p.474 with pl.99.

3. The chalk from the mines was used, *inter alia*, as a flux in brickmaking, reducing shrinkage during drying and combining with the silica in the clay (and thus affecting the colour) during firing: C.N. Edmonds, 'Engineering Hazards and Remedial Solutions Associated with Instability of the Lambeth Group', in Geological Society - Group Details - The Engineering Geology of the Lambeth Group, 2002, http://www.geolsoc.org.uk/template.cfm?name=L a mbeth, p.8 [accessed October 2003].

4. J.W. Wight, 'The Case of the Reading Brickmark', *BBS Information*, **37**, Nov. 1985, p.3.

5. You have to observe attentively to notice the variations, as with those popular 'Spot the Difference' puzzles: look careful beneath the dormer windows in fig. 1. The variation may point to the houses being constructed in different years or at different seasons in the same year.

6. D.S. Sherborn, 'Buildings of Architectural Interest in Reading', Typescript in Local Studies Section of Reading Central Library, 1958, page 5 lists buildings on the north side of Castle Street.

7. Tyack, Bradley and Pevsner, 2010, pp.470-1 with drawing on p.471..

8. A. Braham, *The Architecture of the French Enlightenment*, London: Thames & Hudson, 1980, pp.180-4 with pl.242A.

9 Tyack, Bradley and Pevsner, 2010, p.471; Sherborn, 1958, suggests 1750s as its date.

10. Tyack, Bradley and Pevsner, 2010, p.471,

11. William Henry Woodman (1821 or 22-1879), *DBA*, **II**, p.1054

12. Tyack, Bradley and Pevsner, 2010, p.471 gives a brief description; for endowment and building history is given N. Blandy, 'The Almshouses, Castle Street', in M. Casey, ed., *Bricks and Mortals Stories of Reading Buildings*, Reading: Corridor Press, 1994, pp.13-15.

13. Sherborn, 1958, pp.5-7

14. The material is described as "black-marble" by Pevsner (ref. in note 15), as "emerald granite" by K. Morrison, *English Shops and Shopping An Architectural History*, New Haven and London: Yale University Press, for the Paul Mellon Center for Studies in British Art, 2003, p.223; Her illustration of the store at Hull, opened in 1934, describes the material as "black granite", *ibid.*, fig.229 on p.224.

15. N. Pevsner and A. Wedgwood, *The Buildings of England: Warwickshire*, Harmondsworth: Penguin Books, 1966, p.417. The three date stones, all of 1937, were missed by Pevsner

16. Morrison, 2003, pp.219-228 for a discussion of Burton's stores.

17. These include buildings designed by Frank Morris such as McIlroy's Store and others on Station Road as well as the buildings on Queen Victoria Street with return façades to both Broad Street and Friar Street by S.S. Stallwood and C. Smith & Son: Tyack, Bradley and Pevsner, 2010, pp.466-470 gives further details. The crush of shopping crowds made examining these not possible.

18 Tyack, Bradley and Pevsner, 2010, pp.451-2. This account draws on an early draft of a forthcoming paper, 'Brick, Terracotta and Controversy: Building Reading Town Hall, 1872-1897' but omits detailed consideration of the abortive competition of 1877.

19 For Charles Poulton see H.M. Colvin, *A Biographical Dictionary of British Architects 1600-1840*, New Haven and London: Yale University Press, 4th ed., 2009, p.827; correcting *ibid.*, 3rd ed., 1995, p.777. There is a list of Poulton's works in S.M. Gold, *A Biographical Dictionary of Architects at Reading ... to 1930*, Reading: privately published, 1999, pp.135-6.

20. C. Cunningham and P. Waterhouse, *Alfred Waterhouse*, Oxford: The Clarendon Press, 1992; S.A. Smith, 'Alfred Waterhouse: civic grandeur', in J. Fawcett, ed., *Seven Victorian Architects*, London: Thames & Hudson for the Victorian Society, 1976, pp.102-121; *DBA*, **II**, pp.923-5 with portrait.

21. Cunningham and Waterhouse, 1992, p.241. *Builder*, **35**, 3 February 1877, p.111, with illustration of Waterhouse's building on p.109. H.G. Arnold, *Victorian Architecture in Reading*, Reading: Reading Civic Society, 1976, p.6 notes the use by Waterhouse of Colliers' red and grey brick at the Town Hall.

22. *Builder*, **35**, 3 February 1877, pp.111 reports the name of the contractor, whence Cunningham and Waterhouse, 1992, p.241.

23. *Builder*, **38**, 7 February 1880, p.171, reporting a lecture to the RIBA on 20 January 1880.

24. Thomas Lainson is noted *DBA*, **II**, p.4, which also gives notice of his son, Thomas James Lainson (*fl.*1869-1910). Gold, 1999, p.103, notes both men.

25. *Builder*, **36**, 27 April 1878, p.437.

26. *Building News*, **38**, 30 January 1880, p.130 with plate showing the Blagrave Street frontage as intended with decorative scenes in the sandstone band; the illustration includes a small-scale plan.

27. *Building News*, **38**, 6 February 1880, p.178.

28. According to local legend, the 1882 Town Hall in Great Yarmouth, was constructed to facilitate corporation banquets, for which its principal room, the Assembly Hall, is highly suitable; *Builder*, **37**, 1879, pp.205-8, with illustration of exterior and plan.

29. *Builder*, **37**, 15 November 1879, p.1270.

30. *Builder*, **37**, 26 July 1879, p.828; *ibid.*, **37**, 15 November 1879, p.1270

31. John James Cooper (1850-1920) does not appear in *DBA*, but see Gold, 1999, p.44; for William Roland Howell (1867-1940), see *DBA*, **I**, pp.963-4, and Gold, 1999, pp.92-94 The partnership lasted from 1891 to 1905. Gold, 1999, pp.46-7 has a list of the works. Howell was in independent practice after 1905.

32. *Builder*, **66**, 16 June 1894, p.464; *Building News*, **66**, 15 June 1894, p.836.

33. *Building News*, **66**, 13 March 1896, p.381 with drawing of whole building on pp.396-7.

34. The earliest purpose-built civic art gallery in England is that in Salford; see C. Hartwell, M. Hyde and N. Pevsner, *The Buildings of England: Lancashire: Manchester and the South-East*, New Haven and London: Yale University Press, 2004, p.621, which had top lighting from the outset.

35. *Building News*, **66**. 13 March 1896, p.381.

36. Tyack, Bradley and Pevsner, 2010, p.452.

37. Tyack, Bradley and Pevsner, 2010, p.451.

38. M. Hammett, 'Reading, 31 August 1991', *BBS Information*, **57**, November 1992, pp.13-15.

39. T.P. Smith wrote the introduction and the account of brickmaking and the houses; D.H. Kennett provided comment on Castle Street, central Reading and Reading Town Hall. Consideration of brick buildings in Reading *not* examined by the BBS group has been omitted.

Brick Queries

From time to time, the British Brick Society receives enquiries about bricks, brickmaking, other ceramic building materials, and brick buildings. These are printed when space is available in *British Brick Society Information.* Responses are also included when these are forthcoming. Two different brick queries has been received recently.

DHK

A BRICKMAKING FAMILY IN WARWICKSHIRE AND KENT

Owen Wilks, a brickmaker, had been living with his family at or near Brailes, Warwickshire, until about 1920 when he moved from there to Kent to work at the brickworks at Chiddingstone in the Penhurst/Tonbridge area. The British Brick Society have visited Chiddingstone Brickworks at least twice.

At some point Owen Wilks went to work at the Redleaf Brickworks where he was employed until after 1964. In addition to bricks, Redleaf Brickworks produced fireplace bricks and drainage pipes. When they closed their pug mill went to Bore Place Brickworks, another brickworks in Kent.

I was wondering whether any BBS member could supply any information about Owen Wilks or the Wilks family, either in Kent or in Warwickshire.

JOHN V. PHILLIPS
e-mail: *johnvphillips@btinternet.co.uk*

BRICK INCLUSIONS

In my work as a sculptor and artist using brick I cut into the inner surfaces of bricks and I am puzzled by their appearance. I am looking to make contact with any artists and/or sculptors in the British Brick Society who work in brick or with bricks. I am also seeking advice on the recognition of inclusions. I am based in south Warwickshire.

ANT PIPE
e-mail: *ant@theoldshed.f2s.com*
telephone: 01789-748224

A Brickmaking Family in Southern England and in Canada

Peter A. Earwaker

THE EARWAKER FAMILY IN SOUTHERN ENGLAND

My interest in bricks, brickmaking and buildings generally began after I discovered that my grandfather and two or three of his brothers had been involved in brickmaking.

My grandfather was named Ashley Earwaker. His parents lived in Hampshire on the Gosport peninsula in the mid 1800s where there was Saltern's Brickyard with a quay on the riverside. I have not been able to find out much avout this brickyard but would very much like to. I have some recollection of Fareham, which is nearby, and of Fareham Bricks being well-known: I believe they had a yellowish inclination but have yet to discover where they were made and when they became well-known.

In the 1870s, we find Ashley Earwaker and his brother Samuel living on the Garth Estate in Morden, Surrey, and presumably working in the estate brickworks. In April 1875, Samuel Earwaker married Sarah, the daughter of a Metropolitan policeman, and shortly afterwards left for Canada (see below). When Ashley's wife, Ann, gave birth to my father on 2 January 1876 she named him Samuel Ashley Earwaker. One imagines that brickworks being incredibly busy at this period with the demand there was for bricks in the London area at that time: houses, railways, both above and below ghround, industrial and office buildings. However, it seems that Garth's Brickyard did not last, although I have not been able to discover much about the estate history.

Perhaps that is why Samuel and his wife left for Canada, where they settled in Ontario, initially in Toronto, and he set up his own brickworks which must have flourished to provide an alternative material to timber buildings. It was eventually sold as a going concern. In the meantime other members of the Earwaker family were involved in brickmaking in the Midlands and Ashley moved to Beckenham, Kent, where I have no knowledge of brickmaking going on. Then he spent some time near Guildford, working at a brickworks. Eventually he and his wife, Ann, returned to Beckenham, where I was born some years after Ashley's death. As my father, too, died when I was quite young, I never heard anything about brickmaking until I started family history research some thirty years ago.

Now I find it to be a fascinating subject, particularly going back in time. I know little of the brickmaking process except that it was labour intensive and, I believe, quite localised, due no doubt to the problems of transportation. That in itself is quite interesting, for how did someone know that a certain location had the right sort of clay to start making bricks and who were these people? Having found a suitable place one had to find the right people to engage in a physically demanding job, with the right equipment and knowledge to produce good quality bricks.

SAMUEL AND SARAH EARWAKER IN CANADA

Two weeks after their marriage in April 1875, Samuel and Sarah Earwaker set sail for North America. We do not know how, why or when they made the decision. We also do not have any details of the journey — the port they sailed from or the ship they sailed on — or of where they arrived in Canada on 10 May 1875, but it appears from a newpaper account of Sarah in a local newspaper dated 25 June 1896 that they spent three months, if not more, in Toronto.

THE FAMILY OF SAMUEL AND SARAH EARWAKER, 1851-2000

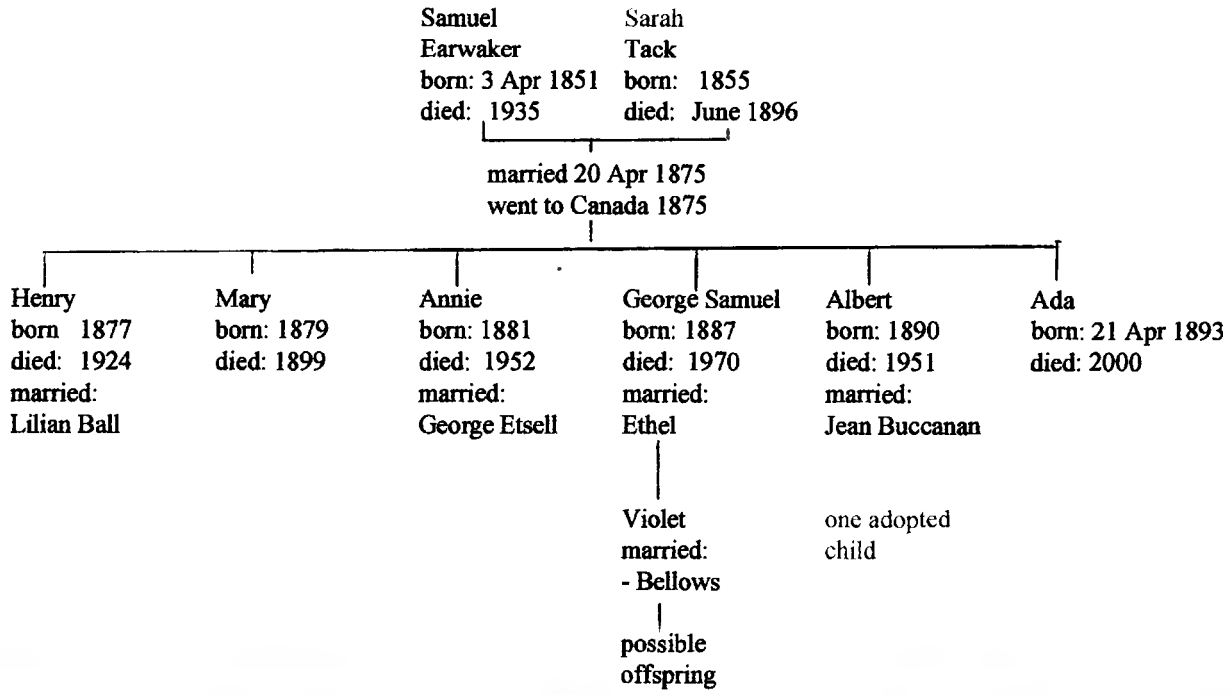

Fig. 1 Family Tree of Samuel and Sarah Earwaker, 1851-2000

In 1876, they moved from Toronto to the Township of Culross in Bruce County, Ontario, in an area known as Cheviot and a location called Moscow, where Samuel set up a brickyard on a small plot. Wisely, Samuel was using the brickmaking skills herhad acquired in England to start manufacturing what must have been a much needed building material.

We know nothing of the actual conditions under which Samuel and Sarah moved into on the Moscow plot. But it would seem that firstly it was a very small plot of 5 acres (2 hectares) in contrast to the normal farming allocation for farming of about 100 acres (40 hectares), and secondly because it was close to the river, it might not have been so heavily wooded. Clearing trees seems to have been a major part of early settlers' work, although, of course, the timber was used for building the first accommodation.

It seems as though the Moscow settlement was quite industrial, due to the proximity of the river, which was a source of power. We are told that a 200 acre (81 hectare) site, purchased for $300 in 1859, had both a grain mill and a saw mill built on it and that ten years later the whole propery was sold for $15,000. Some ten years after that the mill was destroyed by fire! This left Samuel's Moscow brickyard as the remaining industry and in 1885 he sold it to the Bruce Brick and Tile Company.

After the sale of the brickworks, the family then moved into the settlement of Walkerton in the Township of Brant. Walkerton is approximately 100 miles (160 kilometres) from Toronto in a north-westerly direction and about 25 miles (40 km) from Lake Huron at Kincardine. At Walkerton, Samuel became a farmer, purchasing an area along the west bank of the Saugeen River which apparently became known as Earwaker's Flats. Samuel worked this land for thirty years.

During their nine years in Moscow, three children had been born: two daughters, Mary and Annie, and a son, Henry. In their early years in Walkerton, three more children were born to Samuel and Sarah: George Samuel, Albert and Ada. Sadly Sarah died here at the age of 41 in

Fig. 2 Samuel Earwaker and his children, *circa* 1897. From the left: back row, Mary and Annie; centre, Samuel; front row, Albert, Ada and George.

June 1896 and three years later their eldest daughter, Mary, died at the age of 20. Much later, their youngest daughter, Ada, attributed these deaths to anaemia brought about by the economic depression which hit the area in the 1890s. Henry had left the family home and is missing from the family photograph (fig. 2) taken at Walkerton, *circa* 1897, after their mother's death in 1896. Samuel Earwaker was serving on the town council in Walkerton when his wife died. In her obituary in the local newspaper of 25 June 1896, Sarah Earwaker was described as:

> a woman of marked individuality, capable and industrious, a good manager and a kind and obliging neighbor. She was a model wife whose home, husband and children were the objects of her constant attention. .... Six children, 3 sons and 3 daughters are left with her husband to mourn.

In 1915, Samuel, then aged 64, decided it was time to retire, so he sold the farm and moved into the town, where he lived in a house on Victoria Street until shortly before his death, at the age of 84, in 1935.

A. Corder-Birch, *Our Ancestors were Brickmakers and Potters, A History of the Corder and related families in the Clayworking Industries,*
Halstead, Essex: Adrian Corder-Birch, 2010,
168 pages, numerous (unnumbered) colour and black-and-white illustrations and plans,
Photographs and illustrations by Christine Walker
ISBN 978-0-9567219-0-7, price £14-95, plus postage and packing.
(available from A. Corder-Birch, Rustlings, Howe Drive, Halstead, Essex CO9 2QL)

Adrian Corder-Birch, who is a long standing member of the British Brick Society and has been its auditor for many years, comes from many generations of a family of brickmakers in north-west Essex, specifically the area around Sible Hedingham and Castle Hedingham. Now he has written a fascinating family history of how skills were passed from father to son in his maternal family, the Corders.

John Corder (1806-1880), Adrian's great-great-grandfather, had originally plied his trade as a brickmaker in Gestingthorpe, an Essex parish near to Bulmer where Peter Minter and his sons continue to make bricks by hand: Peter contributes a 'Foreword' to the present volume. The British Brick Society visited Gestingthorpe in April 2002. Looking at the brick tower of St Mary's church, on top of his rise, it struck this reviewer most forcibly that Karl Marx was wrong about rural England: your reviewer had just begun the final phase of his paid career, engaged in the teaching of Sociology. Gestingthorpe church served to reinforce the convinction that sturdy yeomen and craftsmen in East Anglia kowtowed to no lord of the manor.

John Corder moved to Castle Hedingham in about 1848, beyond the time when the brick tower built beside the castle in the second half of the fifteenth century had been demolished, although its contemporary, the brick bridge over the eleventh-century castle ditch, remains. The Corder family worked in the parish and in the adjacent one of Sible Hedingham as brickmakers, and sometimes as potters, for three and four generations, depending on from whom among John Corder's children — five of his sons and one daughter — they were descended. John's daughter, Eliza, married a brickmaker, Samuel Westrop, and their son, Alfred, followed the family trade. Some of the sons — David, James and Alfred — all began in the brickmaking trade — John as early as eleven and David by fourteen in the 1840s, three decades before compulsory schooling and more than twenty years before the 1871 Factory Act forbade employment of children under ten in brick, tile and pottery works — but moved on to other occupations: David as a publican, James as a wheelwright and later a foreman carpenter for a firm of agricultural engineers, and Alfred as a builder and, following a severe accident at work, as the driver of a stationary engine. Alfred had seven children; one daughter who married a brickmaker, William James Wiseman.

Adrian uses mid-nineteenth-century census returns combined with marriage, baptismal, and burial records to flesh out details of their careers. Working on a nineteenth-century family history, Adrian has the advantage of the census records and these enable him to trace the climeractics of more than twenty men and four women from the Corder family who at some stage in their lives were involved in the brickmaking trade. A host of bills, accounts, photographs of brickworks, and advertisements add further details to the lives of the Corder family of Essex brickmakers.

One is struck by the number of brickworks with which the family became involved. That at Brick Kiln Hill, Castle Hedingham, was where John Corder was manager from about 1848 to 1860 and where his four eldest sons worked in 1851; its proprietor was Sarah Downs, widow of William Downs, a master brickmaker at Gestingthorpe. John moved on to make pots and drain

pipes at the brick and pottery works at Southey Green, Sible Hedingham, which his son William had purchased soon after his marriage in 1859. William Corder continued as a brickmaker throughout his life — he died in 1903 — acquiring other brickworks at Park Hall Road, Gosfield, and Potters Hall, Great Yeldham. In addition he had extensive farming interests. Much of this had to be sold, including the Gosfield brickworks, when as a late consequence of the financial crash of 1894, William Corder's debtors, including a major London purchaser of bricks, were unable to pay him and so he could not meet the demands of his creditors. The brickworks at Southey Green and Great Yeldham continued to operate and in January 1896 William Corder successfully applied for discharge from bankruptcy.

When William died in 1903, his son Harry Corder (1873-1942) took over the business and he was joined by his brother and Adrian's grandfather, Fred Corder (1885-1961), who worked as a tilemaker. The business was highly successful for the first four decades of the twentieth century, producing bricks, tiles, chimney pots, but production ceased in early September 1939 and on Harry Corder's death in 1942, in the midst of the darkest period of World War II, the brickworks and its materials were sold: the major purchaser of all this equipment was Lawrence Minter of the Bulmer Brick and Tile Company, who was accompanied on the many journeys moving the equipment purchased by his nine-year-old son, Peter, then deemed too young to drink beer on the refreshment stops between Sible Hedingham and Bulmer.

As one would expect in a family history, many of the illustrations are of family members, either when working or in much neater attire. Amongst the latter are three men in uniform, all of whom returned from serving in the Great War. One, Herbert Charles Corder (1888-1970), had barely minimal connections with the industry before his war service, but between 1919 and 1939 was the brick burner at Maiden Ley Brickworks, Castle Hedingham. Despite firing already being in progress on 3 September 1939, the last kiln load had to be abandoned for almost six years; however, when firing was restarted in 1945, most of the bricks were satisfactory.

The Great War was reduced the number of men in the industry and consequently in 1920 there were far fewer rural brickyards operating in 1920 than in 1914. Several of the Essex yards did keep going but the prohibition on kiln firing, due to blackout regulations strictly imposed on the first day of the Second World War dealt a real blow to the industry. Skilled brickyard workers found other employment in 1939, which they retained until retirement: Herbert Charles Corder as an engine driver at Bocking Mill, Fred Corder with a joinery manufacturer.

Apart from his own family, the Corders, Adrian also records employment in brickmaking of related families in Castle Hedingham, Sible Hedingham, and Gestingthorpe, extending his researches on the Finch family of Gestingthorpe to the Finch Brickworks at Hull in far distant Yorkshire. Here the inter-relationships between one family of brickmakers and another is marked: Adrian is related to the Finch family, in both Gestingthorpe and Hull through his material grandmother, whose own mother was born Sarah Ann Finch.

As noted above, many of the illustrations are photographs of family members but others in the large selection have a more general interest. One of the most useful aspects of the illustrations is the maps, drawn from the Ordnance Survey's 25 inches to 1 mile maps, showing where all the brickworks were together with the land they occupied, often with the buildings marked. A useful addition, for those not totally familiar with this corner of north-west Essex, would have been a general map showing the location of the villages in relation to roads and railway lines. Equally of value are the historic pictures in black-and-white of the brickworks in operation and those in colour of the same places today when much, if not, as in some cases, all, of the evidence has been obliterated: trees now grow where once there was brickworks at Castle Hedingham.

Transport figures highly amongst the photographs; that on the front cover, in colour, has a variety of wheelbarrows as well as two railway wagons. Railway sidings are marked on the

maps. Horses, stables and harness sheds are mentioned in connection with brickworks, and a former brickmaker, later employed as a coal man, Benjamin Smith who married Ellen Corder, is shown in the latter capacity, but, sadly, no photograph of a horse-drawn lorry or dray delivering bricks. The transition from horse and wagon to petrol or diesel lorry is well-illustrated by several of the vehicles owned by building firms with which members of the family were associated, either as the owners of a firm of jobbing builders or as employees thereof. Several of the houses built by these firms and of bricks made by members of the Corder family are also illustrated.

Adrian's book is a useful addition to the growing literature on regional aspects of the brick industry. As a history of one family connected with brickmaking for well over a century and a half, it demonstrates the value of the variety of approaches which can now be applied to the past of the brickmaking industry.

DAVID H. KENNETT

BRICK IN PRINT

Between November 2010 and February 2011, the Editor of the British Brick Society received notice of a number of publications of interest to members of the society. This is a now regular feature of *BBS Information*, with surveys usually two or three times a year. This listing includes two items held over from *BBS Information,* **115,** January 2011, due to considerations of space. Members who are involved in publication and members who come across books and articles of interest are invited to submit notice of them to the editor of *BBS Information.* Web sites are also included. Unsigned contributions in this section are by the editor.

DAVID H. KENNETT

1. Peter Brimacombe, 'The Stage is Set',
Heritage, January 2011, pages 66-70.

By the time this notice appears, the revamped Shakespeare Memorial Theatre in Stratford-upon-Avon, Shakespeare's birthplace, will have opened with a production of *King Lear.* This well-illustrated article considers the reconstruction. (But the judgements herein, it should be noted, are my own.) The author ought really to know that his assertion '[t]he original theatre dates from 1932' (p.68) is untrue, for on the same page he includes a photograph of its Victorian predecessor burning in 1926. It was a consequence of this fire that the long familiar Shakespeare Memorial Theatre was built between 1928 and 1932 to a design by Elisabeth Whitworth Scott (1898-1972), 'the first woman architect to design a major building in England' (p.68). The result was an irresolute and rather fidgety structure which locals dubbed 'the Jam Factory' (p.68). The cavernous interior was also unsatisfactory, one (unnamed) actor complaining that performing there 'was like standing on the White Cliffs of Dover and shouting at Calais!' (p.68).

Originally conceived as a building clad in Cotswold stone, it was eventually faced with mostly red bricks together with some grey-blue and grey-mauve bricks, giving a warmer appearance and one more consonant with the town, as well as recalling some iconic Tudor buildings. It was also cheaper!

By the end of the twentieth century, the Royal Shakespeare Company (RSC) was demanding something more satisfactory. The original proposal was to raze Scott's building and replace it with 'an iconic modern building'; but this was unacceptable to some conservation

lobbyists and the RSC 'was eventually forced to ... [accept] a less revolutionary design' (p.69). The result — by Simon Erridge and Rab Bennetts of Bennetts Architects — retains much of, and adds to Scott's original building. 'In total, 5,000 original bricks have been reclaimed and nearly 170,000 hand-thrown bricks have been added' (p.69).

Sadly, but perhaps inevitably, what we now have is an over-complex building, part neo-Georgian, part inter-war Modern (both legacies of Scott's design), and part post-Modern. A dominant feature — *too* dominant in some views (see p.68 top) — is a tall viewing tower, a suave structure mostly of red brick, but perhaps just a *little* too reminiscent of an airport control tower — an impression encouraged by the wing-like projections of the roof (see p.70 top left).

Inside, however, the internal rearrangements are much more successful, including a thrust-stage bringing the actors closer to the audience and refurbished backstage facilities. The new auditorium has the approval of Dame Judi Dench: 'a brilliant way of retaining the [1930s] building, while constructing a new theatre which will work wonderfully for actors and audiences alike' (p.70) — not a bad *imprimatur* that!

T.P. SMITH

2. Bill Bryson, *At Home: a Short History of Private Life,*
London, etc.: Doubleday, 2010
536 pages, 19 unnumbered black-and-white illustrations
ISBN: 978-0-385-608275-5, price £20-00, hardback

To one who spent several years professionally and even more as an amateur engaged in their study, it was gratifying to come across the author's observation that 'building materials are more important, even, dare I say, interesting than you might think' (p.211). Any new book by Bill Bryson is to be welcomed, this one included. It began when he and his wife moved into a former rectory near Wymondham, Norfolk. The bulk of the book (chapters 3 to 13, pp.48-483) uses each of the rectory's rooms or spaces (and the garden) as the basis for an investigation of houses, households, and much else. Most of what is considered covers the last couple of centuries, though there are excursions into earlier periods too, including an examination of the Neolithic village at Skara Brae on Orkney; and apropos the bathroom, 'you can't talk about baths without talking about the Romans' (p.5). The result is an engaging, informative study of domestic life and its infrastructure, mostly, though not exclusively, in Britain and the USA.

It is not, of course, a book about *bricks*, but the rectory itself is 'of red bricks' (p.31) and the material is considered several times. When the rectory was brand new, London's Great Exhibition of 1851 was being planned, one quite unrealistic proposal requiring 'thirty million bricks' with 'no guarantee that such a number could be acquired' (pp.10-11). Fortunately, Joseph Paxton (1803-1865) stepped in with his iron and glass Crystal Palace. But that takes us away from bricks.

They are reintroduced with the author's observation on the suitability of the material for fireplaces and chimneys: 'bricks .... can deal with heat better over the long term than almost any rock [or *stone* as we Britons might more naturally say]' (p.64). The history of (largely English) bricks is considered at pp.215-18, 220, and 224-6, with an excursus on Coade 'stone' (a *ceramic* material, of course) at pp.223-4. It is a competent summary from a non-specialist, although one might take issue with a few of his assertions. 'Roman bricks were not actually very good' (p.215) is impossible to accept by anyone who has worked on these usually excellent materials or has considered their reuse in Anglo-Saxon and later buildings. That 'brick came into its own in the time of the Tudors' (p.215) is *close* to the truth (though one might push the date back by half a century or so), as long as one remembers that the material was limited to certain parts of the country, principally in eastern England. It was *red*, not *all*, brick which 'suddenly [well, *fairly*

suddenly] became unfashionable' in the mid- to late eighteenth century. The alleged effects of the Brick Tax of 1784 and its repeal in 1850 are, some of us feel, not borne out by the evidence — though the view does have the *imprimatur* of some authorities. All that said, one may welcome the author's generally sound summary of the history of English bricks and brickwork.

There are other passing references, including that to Thomas Jefferson's successful firing of 650,000 bricks in Virginia in the late eighteenth century, albeit 'only about half from any load were usable because the heating was so uneven in his home-built kilns' (p.323). The house, Monticello (fig. 1), was not finished in his lifetime, and at one point Jefferson wrote to a friend 'we are now living in a brick kiln' (quoted p.320)! A little later Sydney Smith 'was said to have fired 150,000 bricks [for his rectory at Foston le Clay, Yorks.] before finally conceding that he probably wasn't going to get the hang of it' (p.216). Amongst other details are the bricks 'stacked like stepping stones' in the six-inch-deep excrement in a yard in nineteenth-century St Giles, London (p.382; also mentioned by Jeremy Paxman in *The Victorians: Britain through Paintings of the Age*, pbk edn., London: BBC Books, 2010, p.61); the '318 million bricks' needed for Sir Joseph Bazalgette's London sewer system (p.392); and the fact that Rev. Edmund Cartwright, famed for his invention of the power loom in 1785, was also involved in manufacturing methods of 'roof tiles and bricks' (p.421-2). Also considered, in the author's native USA, is the 'tallest brick building ever built', on the unlikely mushy ground of Chicago — 'the sixteen storey Monadnock Building, ... designed by John Root' (1850-1891) of Burnham & Root, completed by Holbird & Roche in 1893 (p.225).

No-one (I hope!) is interested *only* in bricks, and there is much else, from actuarial tables to zinc and hundred of things between, in this well researched book by one of our few contemporary polymaths, capable of presenting learning with wit and an enjoyable lightness of touch. There is an impressive 'Select Bibliography' (with full bibliography available at *www.billbryson.co,uk/athome*) and a full index. If one has a grouse it is that the illustrations are few and their reproduction disappointingly dull.

T.P. SMITH

3. Roger Cragg, *Civil Engineering Heritage West Midlands*,
Andover: Phillimore & Co. Ltd, 2010
xii + 164 pages, 214 black-and-white illustrations,
ISBN 978-1-86077-572-7, price £18-99 (pbk)

This is the third volume to appear in its series: earlier publications have covered East Anglia, by the series editor Peter Cross-Rudkin, and Wales by Keith Thomas. There are five introductory chapters covering bridges, inland waterways, railways, roads, and public utilities and power. There is much in these which is valuable. For each of the six modern administrative counties of the region — Herefordshire, Shropshire, Staffordshire, Warwickshire, West Midlands, and Worcestershire — there is a gazetteer of sites, conveniently indexed to a county map which shows roads, railway lines and canals. Almost all sites are illustrated although some photographs sink too far into the gutter between pages.

The author's interests are clearly evident in the introductory chapters so it is a pity that his gazetteer whilst including the Tramway Bridge over the river Avon in central Stratford-upon-Avon does not also extend to the underbridge by the Tramway public house or the overbridge a mile to the south on the Shipston Road (the A3400). The tramway, opened in 1826, ran from Stratford-upon-Avon to Moreton-in-Marsh. Similarly, whilst the early gasworks in Warwick — brick-built but covered with stucco on the street façade only — is noted, the adaptation of the stone-built watermill at Warwick Castle to provide electricity is not mentioned. For the power it provided, the mill is equally as early as the gasworks.

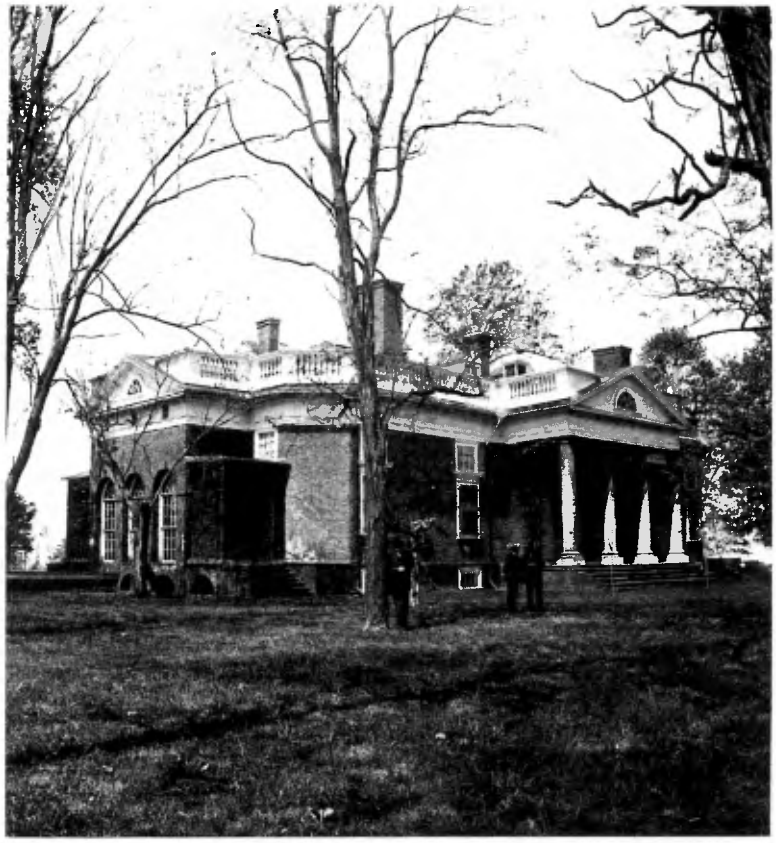

Fig. 1 Monticello II, Charlottesville, Virginia, USA (1796-1809: Thomas Jefferson) from the south-east. The East Portico leading to the Entrance Hall is on the right; the South Porch or Greenhouse can be seen on the left.

Like a predecessor series issued by the Institution of Civil Engineers, for which Cragg wrote the second edition of the volume on *Wales and West Central England,* the series relies on the listings of historic engineering sites made for and held by the Institution of Civil Engineers. It is perhaps this which might suggest why some sites are omitted. The volume and the series of which it is a member are both to be welcomed as a useful addition to the literature, particularly for the gazetteers from which to search for interesting places connected with brick.

4. Alan Dale, 'Hell-Fire and Heliographs'.
Best of British Past & Present, February 2011, page 43

This short article, largely comprising the author's reminiscences of the 1960s, considers an intriguing structure, known as the Thor Obelisk, at Camberley, Surrey. Its age and purpose are not entirely certain, but it seems to have been erected *circa* 1770. It 'may ... have been used as an observation post for the Great Military Camp, held on Bagshot Heath in 1792', although its principal purpose appears to have been heliograph signalling using reflectors and sunlight. Standing on a low hill, it has a square base with vertical walls; receding brick courses led to the tall superstructure, also square in plan but with battered walls, so that the structure tapered to the top. The total height was 100 feet (30 m); but in the early 1880s the building was severely damaged by an accidental fire and the upper 70 feet (21 m) had to be demolished. The article includes a black-and-white photograph of *c.*1880 showing the complete tower and a colour photograph of what survives. The latter shows the base, the receding courses, and the start of the

tapering superstructure now ending in crenellations. It is of red bricks in Flemish Bond. One of the tall arches in the base is clearly visible: it has square jambs and a round arch turned in brick. This truncated building now stands forlorn and neglected: sadly, it is also the victim of vandalism.

T.P. SMITH

5. Gillian Darley, 'A Stage of Her Own',
Guardian Saturday Review, 29 January 2011, page 18.

When the shortlist for the second stage of the competition to design the second Shakespeare Memorial Theatre in Stratford-upon-Avon was announced in 1928, the six candidates — three English, three from the United States — included the only woman amongst the seventy who entered: Elisabeth Whitworth Scott (1898-1972). To her surprise, her design was the one chosen, although the external materials were changed with brick replacing Cotswold stone. Also the final design is somewhat modified from the competition entry as might be expected with a major structure especially as the design process included an extended tour of recent construction in Germany: there is a strong influence of German expressionism on the original entrance façade facing Bancroft Gardens.

Darley's piece, like her subsequent radio presentation (Radio 4; Sunday 30 January 2011), concentrates on Scott's career in the 1930s and her influence in that decade on younger women: exceptionally modest, she became a role model as a woman who was professionally successful. But like many architects prominent before the Second World War, her career faded somewhat after 1945. Scott kept working until she was 70, spending the final decade of her working life as an assistant architect to Bournemouth Corporation, for whom she designed the theatre at the end of the pier: her distinction in the 1920s unknown to those who worked with her.

After winning the competition for the Stratford theatre, Scott went on to design the Marie Curie Hospital (for women with cancer) in Hampstead in 1929-30 (destroyed in World War II) and the Fawcett Building at Newnham College, Cambridge, completed in 1938. In that year, also, her firm — Scott, Chesterton & Shepherd — returned to build the now destroyed terrace restaurant on the river frontage of the theatre at Stratford. In the early years of the war, but by now a sole practitioner, she had designed and was supervising the construction of a new senior school at Northallaton, the county town of Yorkshire's North Riding. As Darley mentions but rather skates over there was also much housing work emanating from the firm's drawing boards in the 1930s.

Darley's newspaper article and her radio talk offer the prospect of a fine biography of a woman, who emphasised the co-operative nature of architectural work, but nevertheless stands out as a pioneer not just as an architect but for women in the professions.

It is fashionable to snipe at Elisabeth Scott's Stratford building: Darley records the insults from Edward Elgar, Walter Gropius, and many unnamed local worthies as well as with the feint praise from Nikolaus Pevsner. Many who see it most days, as this writer has done for the last fourteen years, have a more positive view of what is one of the half dozen most inspiring buildings in England — and not just brick buildings — of its decade.

6. Katherina Lewis, 'Why Brick is the Right Material',
PIR Construction, **60,** Autumn 2010, pages 16-18.

This construction materials magazine included an article from a member of the staff of the Brick Development Association on the advantages of using brick for external finishes, not least on grounds of durability, cost, and sustainability. Facing brick at £59 per square metre is less than

all other external finishes. Brick is cheaper than timber weatherboarding by one-third; ashlar stonework costs three times as much. "Modern materials" like curtain walling and patent glazing raise the price eightfold and ninefold respectively. Brick absorbs heat during the day but releases it during the night, giving the material a low thermal mass.

Above all, brick used sensitively and well looks good. Lewis' illustration of 52 Ferry Village, Braehead, Scotland (p.18), a six-storey block of flats, demonstrates this well, as does that of the exposed brickwork in a stairwell at the Royal Academy of Arts (p.16).

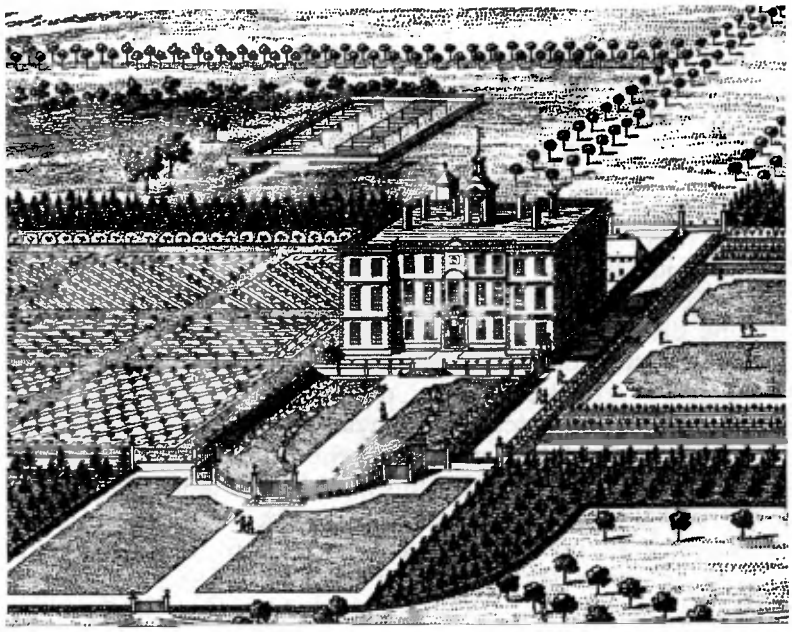

Fig. 2 Newby Hall, Yorkshire West Riding (1689-93). Engraving by Kip and Knyff of 1707, of the red brick house built for the Newcastle coal magnate Sir Edward Blackett which was subsequently enlarged by later owners.

7. Vicky Sartain, 'Hall of Residence'
Heritage, January 2011, pages 26-33.

Replacing a medieval house on a different site, Newby Hall, near Ripon, North Yorkshire (formerly Yorkshire West Riding), was built for Sir Edward Blackett from 1689. It is an elegant Baroque building of red brick in Flemish Bond with stone dressings, designed according to this article 'under the guidance of Sir Christopher Wren' (p.27). There has been much subsequent alteration, particularly inside, including work by Robert Adam; and there is a wide variety of fittings and furnishings. The article concentrates on these, although there are good photographs of the external brickwork at pp.6-7, 28-9, and 30. The gardens (with miniature steam railway) and parts of the house are open to the public during the summer months: details are available by telephoning 0845-450-4068, or on the website *www.newbyhall.com*

Another published account of this house is P. Leach and N. Pevsner, *The Buildings of England: Yorkshire West Riding: Leeds, Bradford and the North,* New Haven CT and London: Yale University Press, 2009, pp. 600-604, with plan on p. 601.

T.P. SMITH

British Brick Society at Leeds International Medieval Congress 2011

Session 1130 at the Leeds International Medieval Congress in 2011 is sponsored by the British Brick Society. The session on Wednesday 13 July 2001, from 11.15 a.m. to 12.45 p.m. is in the Adel Room of Weetwood Hall, one of the two halls of residence in use for the congress. The theme of the session is 'Brick and Building: Rich Patrons, Poor Producers'. Three papers are planned:

Mike J. Kingman, 'Early Brick Buildings in Staffordshire and Beyond';
David H. Kennett, 'Holbein's Sitters and their Houses';
Nat Alcock, 'Housing the Poor in Medieval Coventry'

The International Congress runs from 9.00 am on Monday 11 July 2011 to 3.30 p.m. on Thursday 14 July 2011.

On the afternoon of Wednesday 13 July 2011, the congress includes an Historical and Archaeological Societies Fair at which the British Brick Society is hoping to be represented.

Details of the congress can be obtained from

International Medieval Congress
Institute for Medieval Studies
Parkinson Building Room 1.03
University of Leeds
Leeds LS2 9JT
telephone: 0113-343-3614;
e-mail: *imc@leeds.ac.uk*;
website *http://www.leeds.ac.uk/ims/imc*

Faversham Open House

Faversham Open House is now in its 42nd year and in 2011 will take place on three successive Saturdays: 2, 9, and 16 July 2011. Admission to all properties is by the handbook, price £7-50, which is available from the Fleur de Lis Heritage Centre, 10-13 Preston Street, Faversham, Kent ME13 8NS. Telephone 01795-534542.

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 2011

Saturday 18 June 2011
Annual General Meeting
Annual General Meeting at 11.00 a.m. in Newark Millgate Museum, 48 Millgate, Newark, Nottinghamshire, with afternoon visit to brick buildings in Newark.

Saturday 23 July 2011
London Meeting
Canonbury to Welsey Chapel: walk *downhill*/bus journey with stops in north Islington, Essex Road rail station, Moorfields Eye Hospital, the Leysian Mission building; Wesley Chapel.

A Weekday in August 2011
Late Summer Meeting
We hope also to arrange a visit to either the Blist's Hill Brickworks in Ironbridge, Shropshire, or the brick-built lime kilns in the quarry at Llanymynech Rocks on the Anglo-Welsh border between Shropshire and Monntgomeryshire.

A Saturday in late September or early October 2011
London Autumn Meeting
Hampstead Garden Suburb

Projected future visits include:
1. Early brick houses in West Norfolk
   To include some of East Barsham Manor, Oxburgh Hall, Great Gressingham Priory and Methwold Vicarage (these are all on or near the A1065 road from Fakenham to Mildenhall)
2. The Tilbury Forts

Details of theLondon Autumn Meeting are included in this mailing.
Details of meetings in the later part of 2011 will be included in the July 2011 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 Terence Paul Smith, Michael Oliver or David Kennett.

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