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**BRITISH BRICK SOCIETY**

# INFORMATION 64

**FEBRUARY 1995**



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*Members of the BAA may elect to join its Brick Section and, as such, will be eligible for affiliation to the British Brick Society. They should inform the Hon. Secretary of the BBS of their address so that they can be included in the membership list.*

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Cover illustration shows Perrott House, Pershore, built for Judge Perrott, in about 1770. In fine red brick.  
(from Pershore Town Walk)

The British Brick Society visited Pershore as part of its Autumn Meeting in 1994.

## Editorial: British Brick Society in the News

'Not just another brick in the wall' was the headline in the Daily Telegraph of Saturday 12 November 1994. The British Brick Society was featured in an article by the journalist Stephen Jarvis who seeks out esoteric organisations. When the editor lived in Norfolk, he was often the subject of a gentle ribbing by a former pupil who thought bricks were something one dropped.

Those who read the article will have been reminded of bond, brick colour, courses, and the importance of mortar. As its main illustration the article reproduced Paul Waplinton's portrait of a steelwork on the end wall of a terrace in Castle Street, Sheffield. I do not know the number of different colours used in the bricks of the steelworker, but a quick count suggests something in excess of three dozen.

Also illustrated was the mural of a teapot with a cup and saucer, clearly with hot tea in the cup, on the wall of a kiosk at Island Gardens, Millwall, London. The article mentions the two brick buses on the side of the bus station in Nottingham and the Noah's Ark at Harlingen, in the Netherlands.

Esseentially for non-brick reasons, I visited Stoke-on-Trent recently. Above the entrance to Stoke-on-Trent City Museum and Art Gallery, Bethesda Street, Hanley, is a very wide brick mural. It depicts the trades of the Five Towns. Coal, pottery making, steel, and the canal are all represented. The mural was a splendid bonus to my visit.

Stephen Jarvis' article was based on conversations with the society's chairman, Terence Paul Smith, whose "career" in bricks goes back a long way, to our shared schooldays. I break no confidence to reveal that he wrote his first article about a brick building, Someries Castle, near Luton, almost thirty years ago.

Terence Smith is still writing articles about bricks and brick buildings. There is a short contribution in this issue of British Brick Society Information. The previous issue had a much longer one which led him to kindly undertake the editorial work for that issue, for which I am most grateful.

Actually the editor has not moved. The initial thoughts when coming to Lancashire have been modified. Being within walking distance of the five good libraries of the twin cities of Salford and Manchester has much to commend it, even if I do spend the summer commuting north to the former county town, that eponymous with the shire, and to its university.

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The welcome publicity provided by the Daily Telegraph article has produced new members for the society. With a mailing to members of the Ecclesiological Society which also produced new members, the secretary informs me that some three dozen new members have joined the British Brick Society in the last two months of 1994.

We welcome them to the society and hope that they will enjoy its varied activities. Some may wish to contribute to its newsletter, Information, which appears three times a year.

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An unexpected bonus from the society's exposure in the Daily Telegraph was a telephone call to the hon. secretary from Chiddingstone Brickworks which suggested a visit by society members thereto. Accordingly a third Spring Meeting has been arranged for 1995, and preliminary details are given on page 22 of this issue of BBS Information. As announced in our previous number we will be holding one meeting in April to look at St Albans and another in May to visit brick buildings in Salford.

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The society held a very successful Autumn visit to Northcot Brickworks and Pershore on 24 September 1994. There is a more detailed account in this issue of BBS Information.

One item, however, is omitted by our reporters. It seems that every so often the society is fated to meet a top hat and tails wedding although it seemed to certain members of the society that this was chinless wonders exercising the level of inanity typical of those without responsibility. Perhaps we only saw the minor personages in the junket at Pershore Abbey, which was why we were unable to look at this fine stone building more closely, but this wedding was definitely several levels less grand than that the society encountered in June 1984 when it visited Mapledurham after the Annual General Meeting held at Ewelme.

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One useful by-product of the editor's visit to Stoke-on-Trent City Museum and Art Gallery was to buy a new copy of the reprint in Journal of Ceramic History, No. 5, of Edward Dobson's "A Rudimentary Treatise on the Manufacture of Bricks and Tiles" (1850) edited with an introduction, biography, notes, bibliography and index by Francis Celoria. The reprint, with four pages of the original to an A4 page, costs £3-50.

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Subscriptions are now due and can be paid either direct to the Membership Secretary at 9 Bailey Close, Lucas Road, High Wycombe, Buckinghamshire HP13 6QA. or via a bankers order to the society's account with the National Giro Bank. Members should have received paperwork on this with the November 1994 mailing.

Since the Annual General Meeting of 11 June 1994, those members of the society who are also members of the Brick Section of the British Archaeological Association are also payers of a subscription to the society and should have received notification of this.

If you have paid early or have paid via a banker's order, the enclosed subscription reminder should not apply to you. But please keep record of your payment.

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Details of the activities planned by the society for 1995 are given elsewhere in this issue of BBS Information. We hope to see as many members as possible at as many of the visits as they feel able to make.

DAVID H. KENNETT

The Feast of St Thomas of Canterbury, 1994

# BRICK TERMINOLOGY

## Ken Faithfull and Elizabeth James

### INTRODUCTION

In response to M.J. Crute's appeal for elucidation of the meaning of words connected with brickmaking and bricklaying, the editor has received two individual contributions which are printed here.

In Ken Faithfull's list, with its explanations of twenty different terms, reference has been inserted at the appropriate point to Arthur Perceval's list, in BBS Information, 57, November 1992, 26, of brickmaking terminology derived from 'Dutch', meaning the language spoken in the Netherlands at the end of the sixteenth century.

Elizabeth James offers an explanation of one term, 'skintling'.

### BRICKMAKING TERMINOLOGY

I really enjoyed the June 1993 issue of BBS Information (no. 62) and found it fascinating that two of your correspondents, Roger Kennell (pp.9-10) and M.J. Crute (p.30) dwelt on brickmaking and bricklayer terminology. Roger Kennell's point that these terms are disappearing fast is well made and I echo his sentiment that a glossary should be compiled.

Herewith is a list of terms which may or may not be known to members.

- |                           |  |
|---------------------------|--|
| Chain Dog                 | A mechanical advantage grab attachment for lifting stone blocks.   |
| Squint Quoin              | Angles that are other than square are called squint quoins, a special shaped brick is therefore necessary. Squint bricks can be made to form an obtuse or an acute angle - piers in a bay window between sashes were known as squint piers.  |
| Burrs                     | Bricks that fuse together due to overburning. Sometimes used in rustic type garden walls. Today these bricks are called clinkers.<br><br>(burr, possibly by metaphor from Du boer = farmer; AP)  |
| Chuffs or Shuffs          | Underburnt brick or bricks from a clamp kiln cracked or misshapen due to rain falling on them while hot.   |
| Skintling<br>or Scintling | Basically means to set diagonally, e.g. the layer of fired bricks upon which the clamp is built are usually skintled; in some areas, the bricks that form this base are called skintling bricks.<br><br>Alternatively when bricks in the hack line were half dry they were skintled or set diagonally with a 50 mm space between each brick. Alternate courses were reversed.<br><br>(skintle, from Du schuinte = slope)<br><br>(see below for further remarks on skintling by Elizabeth James). |
| Brick Frogs               | Were sometimes called kicks or sinkings.   |

Scutch + blade or scutch hammer or scutcher	A corruption of scotch? A wooden handle into which a flat blade was fitted with a wedge - used for the fine shaping of cut bricks.
Bressummer	An old term for a lintel, especially in fireplace construction.  (In timber-framed buildings, the horizontal beam which supports the vertical timbers above a jetty is called the bressummer; DHK)
Parging or pargetting	A rendering coat applied to the inside of chimney flues are the work proceeds.
Withes or wythes or mid fathers	The partitions between flues.
Grizzle bricks	Underburnt bicks which are sound and of good shape that can be used in internal work.
Place bricks	Underburns which are unsound and/or misshapen that can only be used for rough or temporary work.
Necking course	An oversailing course which projects all round the base of a chimney stack, immediately above the flashing to throw off water.
Sussex bond	Flemish garden wall bond.
Beam filling or spar foot filling or wind filling	The brickwork built in between the roof rafters at eaves level.
Callow	Overburden or topsoil that is removed to expose clay for mining.
Loo Board	A screen or hurdle to protect the sides of brick hack lines - they are removed in good weather.
Shippers	Sound but imperfectly shaped bricks used as ship's ballast.
Hunziker	An engineering brick made of crushed flint and lime.
Compo	Mortar made of lime, cement, and sand, abbreviated from composition mortar. In my young days on site, mortar was often called muck; in America it is called mud; and in South Africa dagha (pronounced darga, with a hard "g" as in golf), this is a Zulu word which means mud.

(Ken Faithful)

#### BRICKMAKING TERMS: "SKINTLING"

On reading Mr Crute's appeal for help with certain brickmaking terms, I was interested to see the word "skintling" included. As other members could tell him, "skintling" is the term for arranging bricks fresh from the mould to dry, before they are fired. To allow the air to circulate freely around them, the bricks were spaced out in a row, with stretcher side uppermost and "beds" facing. The next row would be lodged along the stretchers of the first, but at an angle, each one lying diagonally across the space between two of those below. The word "to skintle", for this process, according to the OED, may well once have been "squintle", and linked with similar words implying something at a slant, e.g. "squint" and "squinch".

By the time the second row was placed, the bricks beneath were already starting to harden and the upper bricks would tend to sag slightly into the spaces between them, leaving a mark which now appears as a diagonal ridge across the stretcher face, which could thus be called a "skintling mark".

Thus far, the answer to Mr Crute's query. However, I should like to point out two further points about these marks. The first is that, although the term "skintling" appears to have continued in use, there seems to have come a point at which the practice changed, so that the spaced lines of bricks were no longer set to dry in this diagonal relationship with each other, but parallel, so that the ridges formed in the softer upper row were horizontal across the stretcher face. (Which is why, in view of the "diagonal" linguistic connections of the word "skintling", I prefer instead to call them "hack" marks, from the hack or hackstead forming the base on which the bottom row was laid to dry.) Why this change was made is never spoken of, but as mass production led increasingly to large kilns and quantities of bricks, presumably it was more convenient to lay them out in this more stable arrangement on a pallet, which could then be transported wholesale into the kiln as it stood. Comments would be most welcome.

The second point is that, in West Norfolk at least, the change seems to have been a complete one. Examination of skintling/hack marks on bricks in dated buildings in King's Lynn has even made it possible to suggest tentatively that the changeover took place around here in, roughly, the 1780s, and to use the nature of the mark as a rough guide to a pre- or post-1800 date for an otherwise featureless wall. Certainly cases where you can see bricks with both diagonal and horizontal marks in use in the same building phase have always proved on closer examination to be built of re-used or mixed old and new bricks.

An exception recently quoted to me is at Catfield in eastern Norfolk, where a 19th-century building shows red bricks with horizontal ridges together with, it seems, contemporary white bricks with diagonal ridges. We have wondered whether the exception has something to do with the procedure for making white bricks in particular?

Again, comments from other areas would be gratefully received and most useful.

(Elizabeth James)

Since the above notes were set, the editor has received from M.J. Crute an extended list of words with their meanings.

It is hoped that BBS Information 65 (June 1995) will include this.

(D.H.K.)

#### MUD BRICKS COLOURED WHITE

In the Science supplement to The Guardian on Thursday 13 October 1994, a report appeared of the discovery of a major Roman fortress of the second century A.D. at Suez, the port at the head of the western arm of the Red Sea. This fortress guarded one of the routes between Egypt and Palestine. The

The fortress had twelve great towers round a walled space measuring 660 ft by 412 ft (201.1 m by 125.5 m). The walls are of mud brick coloured white.

Mohammed Abdel Maksoud, leader of the excavation team, has commented that the experienced excavators have never seen anything like this before, and tentatively suggests the possibility that chalk was mixed with the mud.

One feature of the site is a series of 400 grain silos.

DHK

## THE FERRO-CERAMIC COMPANY

Charles Thurlow

I have been able to assist Michael Owens with his query about at Dewerstone on the edge of Dartmoor (see BBS Information, 61 (February 1994), 17-19). Members may be interested in some of the detail, especially about the kiln.

I am grateful to Justin Brooke of Marazion for the ensuing information about the company. The Ferro-Ceramic Company Limited was formed to acquire and work a mining property known as Dewerstone Wood; it was registered in Truro on 11 November 1880, with a capital of four thousand £5 shares, of which two thousand shares were issued and fully paid by May 1881. Some work was done on the property, which was put up for auction in one lot in May 1883 as Dewerstone Iron Mine. It was situated at Shaugh Bridge, about 10 miles from Tavistock and from Plymouth and  $1\frac{1}{2}$  miles from Bickleigh Station on the G.W.R. and L. & S.W.R. The property was stated to be held in trust for the Ferro-Ceramic Company, in liquidation, and to be held for 21 years from March 1880. The lease contained a licence to make bricks from clay in the sett, clear ground, and divert water. There was an annual head rent of £200 and a royalty of 8d per ton on iron or iron ore over 6000 tons. The leasee had powers to break at 7 or 14 years. There was also power to divert water from the River Cad for a water-wheel for 21 years less a day from December 1879 at an annual rent of £30, and also with power to break at 7 and 14 years. Power was also held to lower and widen the bridge over the River Plym or River Cad, and to use it for conveying tin, copper, and lead, metals or ores, and other materials except granit and clay. The bridge was held under a lease of 21 years less one day at an annual rent of £20 and 1d per ton on all stuff brough over it.

The plant included a Brogden and Casper's improved tunnel kiln, two working sheds adjoining the brick kiln, nearly completed, tramways, eighteen iron tram wagons, two turntables, a 16 ft by 3 ft water wheel, tools, tramway metals, about 60 tons of iron ore, the manager's office, and a smith's shop.

This information helps to explain the remains on the site that were detailed by Michael Owens. Adjacent to the kiln are partly worked ores of decomposed granite, heavily iron stained, which could have provided a clay/sand mixture for making bricks or a low grade iron ore.

The reference to Brogden and Casper led me to their Patent No 654 of 1880 for an improved tunnel kiln. A copy of this patent is appended (pp. 8-10 for the text; pp. 11 and 12 for the illustrations).

The main feature patented for this kiln was a series of four vertical doors/gates that could be raised or lowered to minimise heat loss when trucks of bricks entered or were withdrawn from the kiln. There are four sets of vertical grooves in the kiln at Dewerstone which could have guided vertical doors. The patent contains interesting drawings of an improved kiln without dimensions but the positioning of the doors is not the same as found at Dewerstone. Much of the lower half of the Ferro-Ceramic tunnel kiln still stands and is built of local, undecomposed, granite. The cross-section of the tunnel here appears to have been square rather than 'gothic' as shown in the patent. The patent mentions the possibility of fire places or top firing holes. There are no traces of firing arrangements or obvious chimney remains to be seen at Dewerstone today.

*Brogden & Casper's Improvements in Kilns.*

A.D. 1880, 14th FEBRUARY. N° 654.

Kilns.

LETTERS PATENT to George William Hargreaves Brogden and Edward Casper, both of King William Street, in the City of London, for an Invention of "IMPROVEMENTS IN KILNS."

PROVISIONAL SPECIFICATION left by the said George William Hargreaves Brogden and Edward Casper at the Office of the Commissioners of Patents on the 14th February 1880.

GEORGE WILLIAM HARGREAVES BROGDEN and EDWARD CASPER, both of King William Street, in the City of London. "IMPROVEMENTS IN KILNS."

Among the many efforts heretofore made to simplify the construction of kilns so as to diminish the quantity of fuel required, and the amount of labour necessary, the most nearly approaching the object in view is on kilns of a tunnel shape.

The objection however to the practical utility of this class of kiln are the following:—

During the time necessary for the introduction and withdrawal of the trucks containing the bricks or other plastic forms to be burnt a rush of cold air is permitted to enter.

From the earliest times it has been recognised that the admission of external air into the kiln wherein plastic material is undergoing the process of transformation into ceramic or other products is prejudicial to the commercial value of the articles to be manufactured.

The kilns of tunnel form or construction heretofore made permit a draught of cold air to traverse them during a time more or less prolonged, and thus diminish the heat obtained at great expense, besides causing the deterioration of their contents.

We have invented a simple means of remedying this defect. We construct a prolongation of the ordinary tunnel kiln, and of a length of sufficient (say), for two or three trucks, and we fix at the ends of such prolongation a pair of doors, which doors are made so as to reach to the ground, so that when they are allowed to descend they absolutely exclude external air from the kiln.

In order to obtain all the results possible from the heat in the kiln, we utilize the space between the exterior and interior doors of the inlet end of the kiln as a drying chamber, and in order to render this chamber of the highest use we make apertures, preferably in the lower part of the interior door, which apertures are so

contrived as to be capable of being covered or uncovered according as the work to be done renders it necessary. These holes when uncovered admit the heat from the kiln itself into this exterior or drying chamber, and by partially closing or diminishing the number of these holes, we regulate the heat so admitted in such a way as to make our drying chamber more or less hot, as the condition of the substances renders necessary. Other dampers than those above described may be applied to the flues in order to regulate and direct the draught as may be required.

In the centre or other suitable part of the drying chamber we construct a flue which communicates with the chimney, and by the draught thus created we draw off and convey into the chimney the steam or stive proceeding from the bricks or other substances.

It is of the utmost importance that the operation of closing and opening the doors be performed expeditiously and completely. For this purpose we adopt the following contrivance or contrivances:—We balance each pair of doors with a weight, and we connect each pair of doors by an apparatus connected with power, so that by the mere shifting of a clutch or its equivalent we raise or lower each pair of doors at will, or otherwise, as may be required.

At the present time the pair of doors which we call the interior doors allow a draught of cold air to enter from the top into the kiln to the detriment of the material to be treated. In order to prevent this current of air, the doors pass through an iron framing of a channel section, which frame is filled with sand. On the top of this door above the channel we attach a frame of angle iron made so as to fit into the channel before described, so that when the door descends the angle iron presses down and into the sand and closes the aperture, and so a tight joint is made.

In order to regulate the position of the wagon in the interior of the kiln, and to prevent their being driven behind the interior door, which would necessitate the labour of readjustment, we provide on the rails suitable blocks or stops which are operated by means of rods and levers worked from the outside, preferably the inlet end, so that we enable the attendant to block or stop the wagons at the desired point, and to release them when necessary.



*Brogden & Casper's Improvements in Kilns.*

SPECIFICATION in pursuance of the conditions of the Letters Patent filed by the said George William Hargreaves Brogden and Edward Casper in the Great Seal Patent Office on the 14th August 1880.

GEORGE WILLIAM HARGREAVES BROGDEN and EDWARD CASPER, both of King William Street, in the City of London. "IMPROVEMENTS IN KILNS."

Among the many efforts heretofore made to simplify the construction of kilns so as to diminish the quantity of fuel required, and the amount of labour necessary, the most nearly approaching the object in view is the construction of kilns of a tunnel shape.

The objections however to the practical utility of this class of kiln are the following:—

During the time necessary for the introduction and withdrawal of the trucks containing the bricks or other forms or substances, a rush of air is permitted to enter at one end of the kiln, and to pass through the whole mass in course of treatment or transformation, passing out at the opposite end, thus creating a cold blast.

From the earliest times it has been recognised that the admission of external or cold air into the kiln wherein material is undergoing the process of transformation into ceramic or other products is prejudicial to the commercial value of the articles to be manufactured.

The kilns of tunnel form or construction heretofore made permit a draught of cold air to traverse them during a time, more or less prolonged, and thus to diminish the heat obtained at great expense, besides causing general deterioration of contents.

We have invented a simple means of remedying this defect. We construct at the exit end of the ordinary tunnel kiln a prolongation of a length of sufficient (say) for two or three trucks, and we fix at the end of such prolongation a door or pair of doors, which are made so as to reach to the ground, so that when they are allowed to descend they absolutely exclude external air from the kiln.

In order to obtain all the results possible from the heat in the kiln, we utilize the space between the exterior and interior doors of the inlet end of the kiln as a drying chamber; and in order to render this chamber of the highest use we make apertures, preferably in the lower part of the interior door, which apertures are so contrived as to be capable of being covered or uncovered according as the work to be done renders necessary. These holes when uncovered admit the heat from the kiln itself into this exterior or drying chamber, and by partially closing or diminishing the number of these holes, we regulate the heat so admitted in such a way as to make our drying chamber more or less hot, as the condition of the substances renders necessary. Other dampers than those above described may be applied to the flues in order to regulate and direct the draught as may be required.

In the centre or other suitable part of the drying chamber we construct a flue which communicates with the chimney, and by the draught thus created we draw off and convey into the chimney the steam or stive proceeding from the bricks or other substances.

It is of the utmost importance that the operations of closing and opening these doors be performed expeditiously and completely; for this purpose we adopt the following contrivance or contrivances:—We balance each door or pair of doors with a counter weight, and we connect each door or pair of doors to an apparatus connected with power, so that by the mere shifting of a clutch or its equivalent we raise or lower the door or pair of doors as may be required.

At the present time the door or pair of doors which we call the interior doors allow a draught of cold air to enter from the top into the kiln to the detriment of

*Brogden & Casper's Improvements in Kilns.*

the material to be treated. In order to prevent this current of air, the doors used in our Invention pass through an iron framing of a channel section, which frame is filled with sand.

On the top of each door above the channel we attach a frame of angle iron made so as to fit into the channel before described, so that when the door descends the angle iron presses down and into the sand and closes the aperture, and so a tight joint is made.

In order to regulate the position of the wagons in the interior of the kiln, and to prevent their being driven beyond the interior door or pair of doors, which would necessitate the labour of readjustment, we provide on the rails suitable blocks or stops which are operated by means of rods and levers worked from the outside, preferably the inlet end, so that we enable the attendant to block or stop the wagons at the desired point, and to release them when necessary.

In order that our Invention may be more fully understood we will now describe the same with reference to the accompanying Sheet of Drawings. Fig. 1 is a longitudinal section; Figure 1<sup>a</sup>, a part plan, and Figure 2 is a cross section through the line  $x, y, z$ , of Figure 5, of a kiln constructed according to our Invention; Figure 3 is a side elevation of a similar kiln illustrating one mode according to our Invention for opening and closing the doors, showing also a stacking shed or chamber T in section to which the bricks are fed from the adjoining brick machine; Figure 4 is a side elevation of another arrangement or modification also constructed according to our Invention, showing another arrangement for opening and closing the doors; Figure 5 is a sectional plan, and Figure 6 is a cross section through line E, F, of Figure 1, the same; Figure 7, Sheet 2, is a vertical cross section of kiln through line  $p, q$ , of Figure 1, showing an arrangement for raising and lowering the dampers or doors, but drawn on a larger scale than the previous Figures; Figure 8 is a view of the arrangement for arresting the wagons; Figure 9 is cross section of same; Figure 10 shows the arrangement for stopping currents of air between the doors and the sides of the kiln; Figure 11 is front elevation, and Figure 12 is sectional plan of a door or damper arrangement; Fig. 13 is a vertical section through the door shown at Fig. 11, and Fig. 14 is a side elevation showing said door with its slabs in drawn up or open position. Similar letters of reference refer to like parts in all the Figures.

A is the heated chamber through which the trucks of bricks or other forms pass previous to going to the furnace; B is the furnace;  $a$  and  $b$  are the doors for closing the heated chamber. The door  $b$  may be formed with apertures of suitable size, as shown in Fig. 7, for the admission of heated air from the furnace B, as may be required for the preliminary drying of the bricks or other plastic forms or substances; the apertures in the doors are provided with adjustable slides or other dampers, or they may, as shown in Fig. 7, be of such an area as has been found most suitable, or they may be made in parts, such as shown in Figs. 11, 13, and 14, which parts are separated on raising the chain attached to the upper part, as shown in Fig. 14. The distance between the parts or slabs  $b^1, b^2, b^3$ , may be regulated by inserting pegs in the holes 1, 2, 3, and 4 in the bars  $b^4, b^5$ , fixed to the bottom slab  $b^2$ , and the bars  $b^3$  connected to the slab  $b^2$  on the other side; C, C<sup>1</sup>, are flues one on each side of the chamber A and leading to the chimney N, they are provided with dampers  $n^1, n^2$ , as shown for regulating the draught; C<sup>2</sup> is a flue or culvert to the drying chambers at uppermost part thereof in communication with the chamber A by apertures  $c, c$ , so arranged as to effectually distribute the hot air, and to pass away by a flue or culvert to the chimney N; E, E, (Figures 1 and 1<sup>a</sup>) are fuel holes in the chamber B above the fire places D.

In building the kiln we enlarge or diminish the size of the fire places and the number and size of the top firing holes, or we dispense with one or the other, that is, with the fireplaces or the firing holes, according to the nature of the goods to be burnt.

The rails of the kiln decline towards the end G of the kiln, and as before stated we provide a stop R, Fig. 1, which is also shown detached and enlarged in side

*Brogden & Casper's Improvements in Kilns.*

elevation at Figure 8, and cross section detached at Figure 9, on the rails, so that the trucks should not go further than desired into the furnace, and *f* is the rail in which a gap is formed; *R* is the stop or filling piece for this gap, it is pivotted at *f*<sup>2</sup> to the web of the rail *f*, and at the other end is provided with a jaw *f*<sup>3</sup>, which clips over the projecting web of the rail *f* and prevents any twist of the piece *R*; *g* is a pin and slot to limit the distance the stop or filling piece *R* can be raised; *h* is a cam working with a shaft *h*<sup>1</sup> for acting on rail; this cam shaft has a lever *h*<sup>2</sup> which is actuated by rods or levers or other means operated preferably from the entering end of the furnace. The trucks may be of any well known suitable construction.

10 By pulling the rod or lever in one direction the filling piece *R* is raised, and by pushing the same rod in the contrary direction the filling piece or stop is brought down flush with the top of the rail, and the trucks can run along same.

The doors *a*, *b*, *d*, and *e* are raised by a winch through a shaft, or by chains or rods, or in any other convenient way.

15 At Figure 3 an arrangement is shown whereby they are raised by a shaft having drums *a*<sup>1</sup>, *b*<sup>1</sup>, *d*<sup>1</sup>, and *e*<sup>1</sup> thereon; the said drums are provided with clutch gear, so that only one or two doors may be raised at one time, as the case may be, and closed, and then the other drums locked to the shaft and the other doors raised, and so on, as may be required for the insertion or withdrawal of the trucks of bricks.

20 At Figure 4 another arrangement is shown for raising these doors or dampers, but in this case each door, or it may be two or three doors, are raised simultaneously if required by chains or equivalent attached at one end to the door or doors, and at the other end by connections to a chain or chains passing to drums of a winch, which drums are provided with clutch gear. At Figure 7, Sheet 2, the arrangement for raising and lowering the doors is by chains passing round a drum and operated by crank handle.

25 Figure 10 shows the arrangement before described for preventing the admission of external air to the interior of the kiln, showing the doors with angle irons of a double *L* section, the flanges embedding themselves in sand contained in channels or troughs *l* on each side of the door, such as *a*; *s*, *s*, are holes for supplying sand to the channels *r*, shown in Figures 3, 4, and 7.

In case of an accident of any kind there is no convenient means of access to the goods under treatment in tunnel kilns as heretofore constructed.

35 *m*, Figures 1, 2, 6, and 7 shews a passage or space formed under the wagons and between the rails for a workman to enter and get under the wagons or trucks when necessary to do so, and by this provision it is not necessary to remove the wagons from the tunnel, as heretofore.

40 The kiln being in operation, and the portions *B* and *A* being filled with trucks, the chamber *G* being empty, the doors *e* and *a* are lowered to the ground, then the doors *d* and *b* are raised, the stop at *R* is adjusted, and the whole of the trucks are advanced the length of one truck by means of the chain *t*. The stop *R* is raised so as to prevent the over running of the next truck. The doors *d* and *b* are lowered to the edge of the trucks. The door *a* is raised, and a truck of green bricks is then introduced into the preliminary drying chamber *A* and coupled to the other trucks; the door *d* is then lowered on to the edge of the truck. The truck or trucks of burnt bricks now in the chamber *G* can be cooled down by gradually raising the door *e* and withdrawn. The flue *C*<sup>2</sup> in the centre or other suitable part of the drying chamber communicates as stated with the chimney *N*, and by the draught thus created we draw off and convey into the chimney the steam or stive proceeding from the bricks or other goods; the roof of the preparatory chamber *A* is made higher than the kiln proper, so that the steam does not seek to enter the kiln itself, but is carried off to the stack by the flue *C*<sup>2</sup>.

50 When the bricks enter the kiln proper they are capable of supporting the regularly increased temperature, which fits them for presentation to the vitrifying heat, which thus acts upon them evenly throughout their entire substance. For semi plastic bricks too soft to bear more than their own weight, we build laterally

*Brogden & Casper's Improvements in Kilns.*

with the tunnel kiln an annexe *M*, as shown in dotted lines at Figure 5. This annexe is of an interior section similar to that of the drying chamber *A*, to which latter the trucks are conveyed one by one from the annexe *M* by means of a traverser.

The hot air after having passed through all the bricks in the chamber *B* is by 5 the damper *O*<sup>1</sup> admitted to the annexe *M*, and by placing the bricks therein we obviate all necessity for a drying floor.

In this annexe, which is of a suitable temperature, the green bricks remain until they are ready to enter the preparatory chamber *A*.

In the tunnel kiln with our annexe and our improvements the vitrefaction of the 10 clay is perfect, because it is effected by exact and properly timed degrees.

Each stage is under the eye of the brickmaker, and can be modified to suit the circumstances of each case.

Having now described the nature of our said Invention and in what manner the same is to be performed, we declare that tunnel kilns with waggons in same for 15 carrying the forms to be burnt are known, and we therefore lay no claim whatever to such kilns and waggons when taken alone or separately, except as hereafter claimed in combination with other devices, but we claim as our "Improvements in Kilns,"—

20 First. In tunnel kilns, or in combination therewith, the application of a preparatory drying chamber, such as *A*, with or without the annexe *M* at one end of the kiln for carrying off the heated vapours or steam, and a cooling chamber, such as *G*, at the opposite end for preventing the too sudden cooling and consequent cracking of the goods, substantially as described and shown.

25 Second. The fitting to the inner ends of such drying and cooling chambers sliding doors or dampers, which may be provided with apertures adjustable or not, the said doors or dampers being fitted and operated substantially in manner and for purposes hereinbefore set forth.

30 Third. In combination with tunnel kilns having end chambers, such as *A* and *G*, the employment of the fring or feeding holes *E* arranged as set forth, and the passage beneath for going under the waggons, all substantially as hereinbefore described and shown.

40 Fourth. In combination with tunnel kilns, the apparatus or appliance for arresting the waggons and for regulating their position therein, substantially as described and shown.

In witness whereof, we, the said George William Hargreaves Brogden and Edward Casper, have hereunto set our hands and seals, this Seventh day of August, in the year of our Lord One thousand eight hundred and eighty.

GEO. W. H. BROGDEN. (L.S.) 40  
EDWARD CASPER. (L.S.)



FIG. 1.

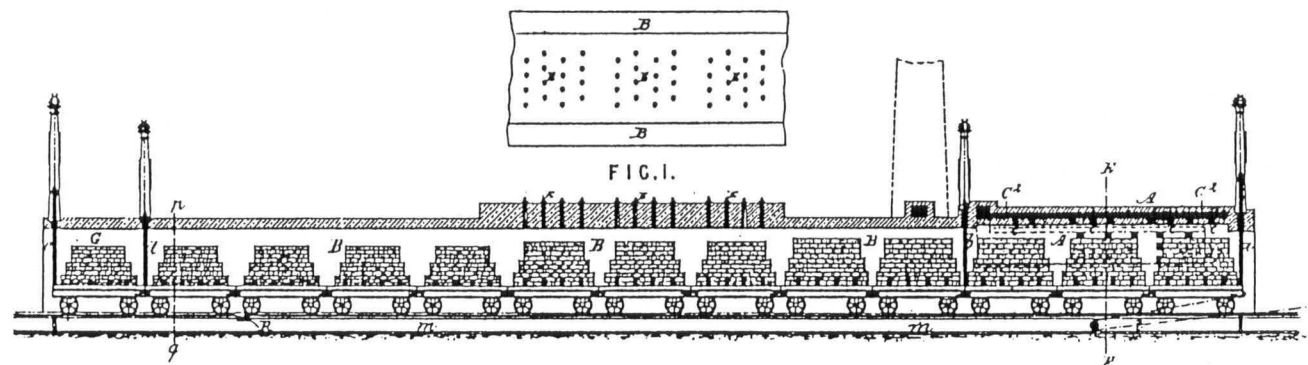


FIG. 2.

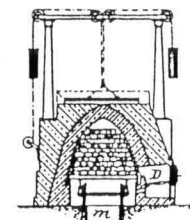


FIG. 3.

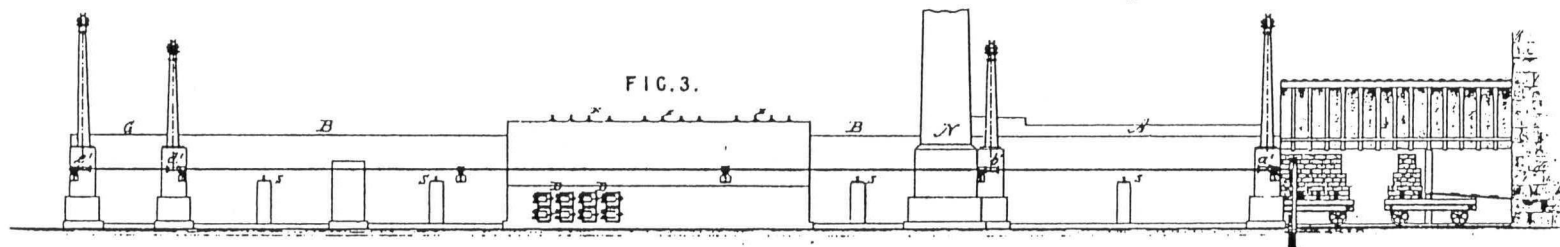


FIG. 4.

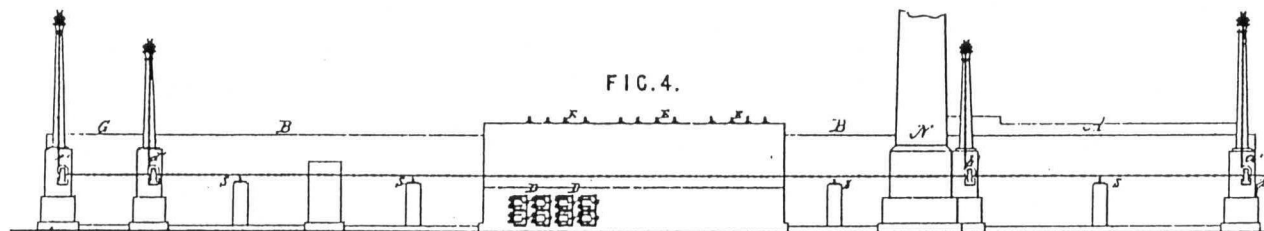


FIG. 6.

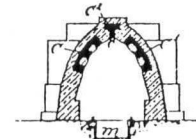
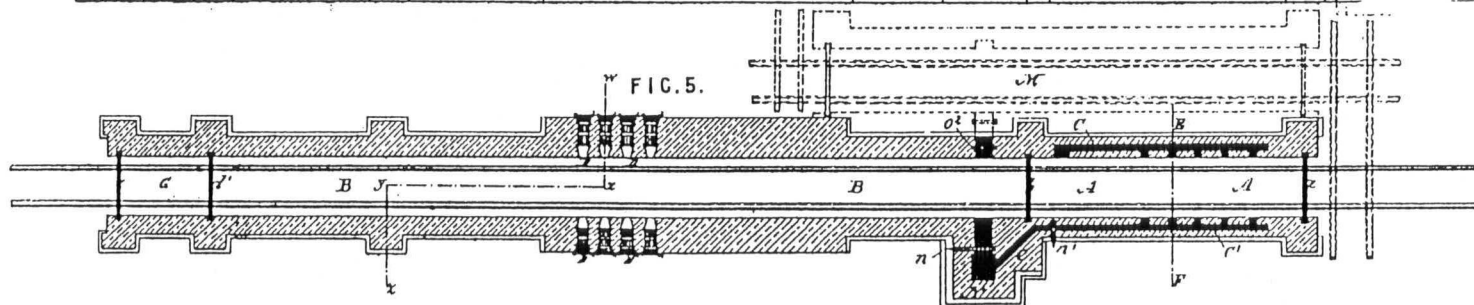
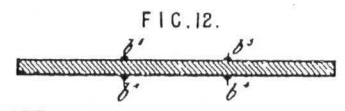
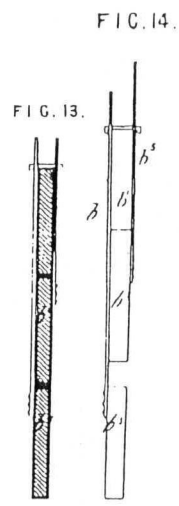
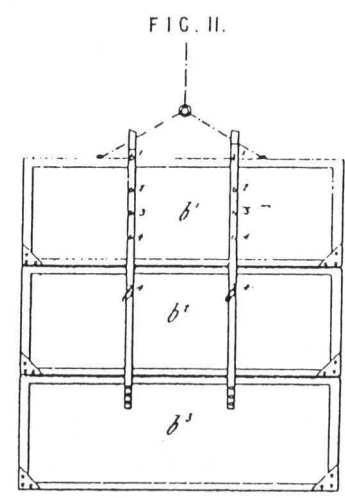
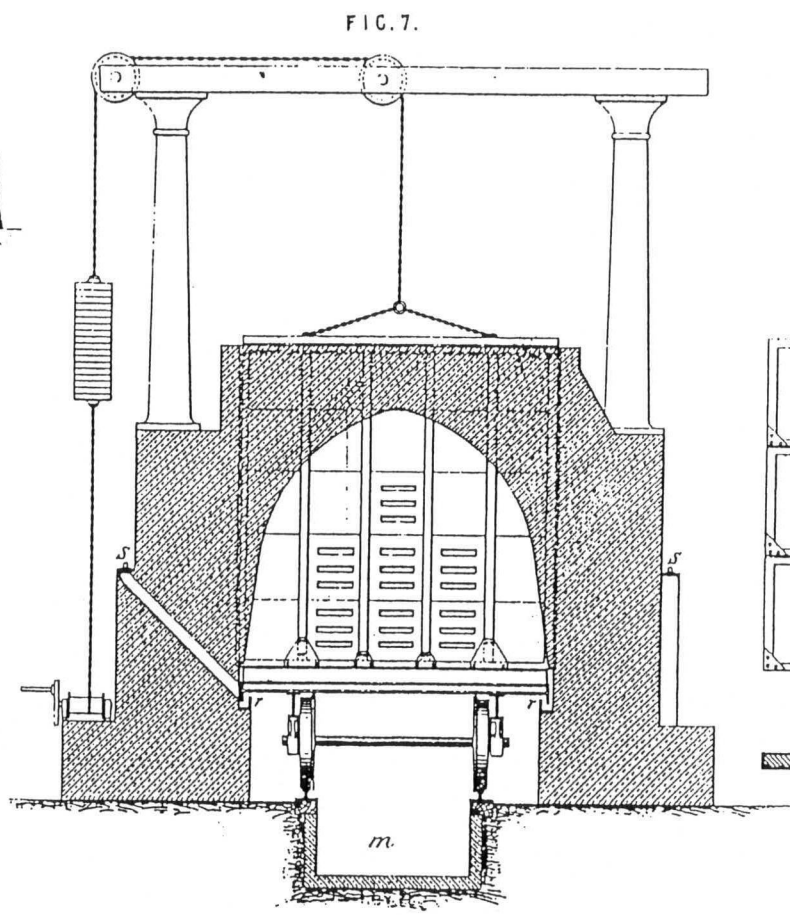
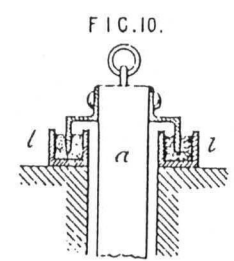
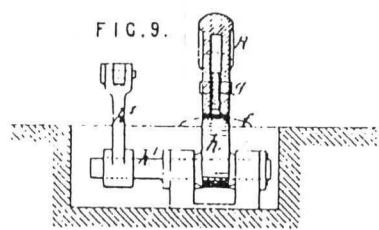
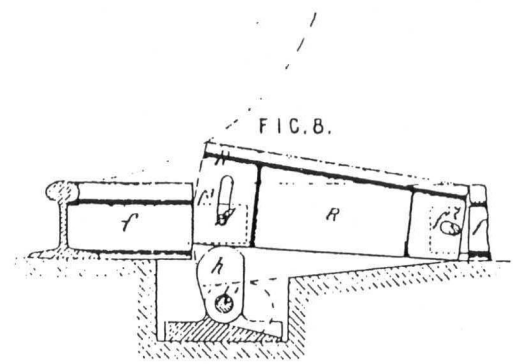


FIG. 5.





The relative absence of brick debris on the site confirms that the kiln had a very short working life, if any. There was a very successful brickworks nearby at the Lee Moor China Clay Works from about 1840 to 1940. They were using residue material from china clay production and would have been strong competition for the Dewerstone works.

The remains at Dewerstone may be those of one of the oldest tunnel kilns that can be seen in this country.

I would be interested in members' comments.

## PAINTED BRICK-LINED TOMBS IN BRUGGE, BELGIUM

T. P. Smith

In a short article of 1985 (1), David H. Kennett and I drew attention to brick-lined tombs; this referred briefly to painted brick-lined tombs in Brugge (Bruges), Belgium. A recent article by Hubert De Witte in the Dutch archaeological magazine Scarabee deals with this subject (2), and it may be of interest to members of the British Brick Society, to have an abstract of the article. A full translation, though without the illustrations, has been placed in the BBS library, (3).

Excavations in the sanctuary of the Church of Our Lady in Brugge in 1979-80 revealed, inter alia, three brick-lined and painted tombs: that of Petrus Calf, tenth dean of the church, who died in 1295; that of Nicolaas van der Steene, twelfth dean, who died in 1339; and a third, unidentified, of c. 1320. Because of their superb state of preservation, special efforts were made to conserve them and make them accessible to the general public; finds are displayed in the Brugge Archaeological Museum.

"The origin of figurative grave-painting," we are told, "goes hand in hand with the adoption of brick as a building material from grave vaults," and lasted from the second half of the thirteenth century down to the fifteenth century. A new iconography associated with the mendicant orders probably stimulated the particular themes of the painted graves. Almost certainly, the practice began in Brugge itself, where sixteen churches and chapels have such graves. The main distribution is within the diocese of Doornik (Tournai), although they are also found further afield. Those at Utrecht and Dordrecht in the Netherlands are probably due to the close ties between the dioceses of Doornik and Utrecht in the Middle Ages. There are occasional examples in northern France, at Valenciennes and Lille, and in Germany, at Lubeck, Bonn, and Koln (Cologne).

The brick-built graves are trapezium-shaped, with the broader (head) end nearly always at the west. Most have no bottoms "and the coffin rested on a few loose stones or on two small cross-walls of brickwork. In a few examples with a brick floor the coffin rested on iron bars built into the brick wall."

The iconography includes the Crucifixion with Mary and John at the head or the foot of the grave. A Madonna with Child commonly occurs at the foot, usually sitting on a bench. The long sides show censuring angels and saints, including the patron saints of the deceased and of the church in which the graves occur. Portraits of the deceased occur sometimes: "Thus, Petrus Calf is shown as a kneeling priest in his own grave. Possibly the earliest portrait of an inhabitant of Brugge! "

The brick walls formed the support and a layer of lime-plaster the ground for the paintings. The figures were scratched into the wet plaster and colours - various shades of red, ochre, blue, and brown - were added. Finally, the black outlines were drawn in, obliterating some (and often a good deal) of the scratched design.

After c.1400 this fresco technique was replaced by a different method in which the principal designs were painted on paper in the workshop and the paper then stuck on to the wet plaster; subsidiary motifs - borders and the chains of angels' thuribles - were still applied direct to the plaster.

Much has been learned about the preservation of such painted graves. Because of the expense involved, a policy of digging up only those threatened by excavation works has been adopted. Only the better preserved examples will be conserved. "The other painted graves, probably hundreds of them, are better left untouched underground, as an archaeological reserve."

The article finishes with a reading list (in Dutch) (4) and a list of places to visit in Brugge.

#### Notes

1. D.H. Kennett and T.P. Smith, 'Medieval Brick-Lined Tombs', BBS Inf., 37 (Nov. 1985), 18-19.
2. H. De Witte, 'Begraven Kunst in Brugge', Scarabee, 2, 1, Nov-Dec. 1993, 54-57.
3. The BBS Library is held by the BBS Publications Officer, Mrs W.A. Los, 'Peran', Plaxton Bridge, Woodmansey, Beverley, East Yorkshire, HU17 0RT.
4. To the reading list might be added E.L. Hoffman-Klerkx, Sprekende Graven, Utrecht: Kwadraat, 1987, which contains full information on the Utrecht examples as well as more general discussion.

#### BRICK IN CHURCHES

From time to time BBS Information has an issue devoted to a single aspect of bricks, brickmaking, or brick buildings.

The editor has received five contributions on various aspects of 'Brick in Churches' and is aware of at least two others. One of these is rather long and will be the principal article in BBS Information 66 (October 1995); the others, which are written by just two people, are to be divided between two of the issues of BBS Information being devoted especially to 'Brick in Churches' in 1996 to 1998. The first of these two will be BBS Information 68 (June 1996).

The editor would welcome contributions for this as he would be most grateful for all contributions for consideration for inclusion in future issues of BBS Information.

## Meetings and Exhibitions

### INFLUENCES AND EVENTS

It has long been customary for BBS Information to carry a report on the meetings held by the society from time to time. BBS Information 63, November 1994, recorded impressions of meetings in Essex, at Marks Tey brickworks and Colchester, in Lancashire, at Bolton, and in Somerset, at Bridgwater. This issue includes an account of the society's Autumn Meeting at Northcott Brickworks, Moreton-in-Marsh, and Pershore.

Members have long been encouraged to submit short reports of meetings of other societies which they have attended where the meeting has had a brick interest: BBS Information 63 has an account of the British Archaeological Association's meeting in Utrecht.

With this issue we include an account of an exhibition which may be of interest to members. It is the new venture of lending out a major work of art by a central institution to form the centrepiece of an exhibition in a provincial gallery.

If other members visit architectural exhibitions or those of paintings with a landscape or architectural theme, reports for future issues of BBS Information would be welcome.

DHK

### THE BRICKWORKS OF NORTHCOT BRICK

British Brick Society  
Saturday 24 September 1994

A keen anticipation of an expertly guided afternoon to the architectural pleasures of Pershore was greatly enhanced by the appropriate and fascinating morning visit to the works of Northcot Brick. We are indebted to Brian Warby, the general manager, for spending a Saturday morning conducting us through the works and imparting his enthusiasm and extensive knowledge of brickmaking acquired over 43 years.

Situated at Blockley in the northern tip of Gloucestershire between the villages of Moreton-in-Marsh and Chipping Campden the works was established in 1925 by a local landowner, Captain E.G. Spencer-Churchill, to provide work for local people. It is still a privately owned works currently producing some 11 million bricks per year or  $\frac{1}{4}\%$  of the total United Kingdom brick production.

At the time of the visit the works was back on full production after the long recession with about 18 months production in stock. The works stands on an extensive deposit of Lower Lias clay of the Jurassic period which geological surveys show extend to a depth of between 500 and 900 feet but has so far been excavated only to 60 feet.

Below a band of yellow clay, not used for brickmaking, is a band of blue clay varying in thickness from 6 to 18 feet. Below this is a fossil band some 2 feet thick bearing ammonites and lelemnites and below that a harder blue/grey caly.

The clay is preferably used while still freshly dug as it tends to become too fine if allowed to weather. At the time of the visit some twenty- types of multi-coloured facing bricks were available as rusticated, sandfaced, extruded wirecuts and sandfaced handmades. The colours range from plum brown through shades of red to silver grey and buff. The quantity of carbonate in the clay somewhat reduces the redness of the fired brick.

Bricks are supplied not only to the British Standard size of 215 mm by 102.5 mm by 65 mm but also with heights of 50 mm, 73 mm, and 80 mm. The two latter match the course heights of the larger bricks commonly used in the past in the Midlands and the north<sup>2</sup> of England. The extruded wirecuts have a compressive strength of 41.3 N/mm<sup>2</sup> (6000 lb/sq in) with a water absorption<sup>2</sup> of 12 to 14% while the handmades have a compressive strength of 20.6 N/mm<sup>2</sup> (3000 lb/sq in) and a water absorption of 15 to 18%. As a result of improved production techniques all bricks are now classified as frost resistant.

The current range of bricks is used in many types of buildings including housing, schools, supermarkets, offices, hospitals, swimming pools, and churches. Naturally many of these buildings are located in Gloucestershire and the adjoining counties but others are as far away as Lancashire, Lincolnshire, Essex, and London. Most famously, perhaps, the Battersea Power Station was built between 1929 and 1934 from extruded and repressed Northcot bricks. An unusual recent commission was for bricks to refurbish Fort George on the north bank of the Moray Firth.

During our walk round the brickmaking plant we were shown a 'wet pan' which processes some 18 to 20 tons of clay per hour. An older machine made in 1925 processes the soft clays for handmaking.

The mystery of how and why vertical perforations are made though extruded clay bricks was revealed. As the column of clay is extruded horizontally under pressure through a die which determines the length and width of the bricks, the advancing face of the column is cut horizontally by a stationary steel knife edge to the back of which are threaded rods with bulbous tails which form the perforations. Once the continuous advancing column of clay passes the knife edge the cut surfaces are sealed by the pressure in the taper section of the pug berrel but the perforations remain. Perforations are introduced in extruded clay bricks to assist even drying and firing. The column of clay is extruded to form 'green' bricks 235 mm in length to achieve a 'work size' length after drying and firing of 215 mm. Much experience, knowledge of the clay, skill, care and attention is required to ensure that the actual sizes of the fired bricks are within the limits of variation specified in the British Standard.

The column of clay is wirecut to form the height of the bricks which are loaded, 38000 at a time, into dryers where the moisture content is reduced to approximately 2% over a period of six days at a temperature of 75°C.

The bricks are fired at 960 to 980°C in a fourteen-chamber transverse arch continuous kiln. Eleven chambers are fired every week each holding some 18500 bricks. Since the introduction of gas firing in 1984 the improved firing has given a much greater percentage of frost resistant bricks to designation 'F' of BS 3921.

Although the kilns are primarily gas-fired, some 15% of the total fuel is provided by bituminous coal. The waste heat from the kilns is conducted back for use in the dryers.

We left the works with a greater understanding of the processes and a renewed admiration for those with the skill to turn clay, one of this country's finest natural, if unprepossessing assets, into a cherished building material without which we would all be poorer in spirit.

TERRY KNIGHT



PERSHORE, WORCESTERSHIRE

British Brick Society  
Saturday 24 September 1994

One has seen the pictures in the guide books: Lees-Milne's Worcestershire is a good example but somehow the trip was never made.

Pershore is a delight, and even if the weather had become occluded by the time we embarked on our walk round the town, ably led by John Prentice and his colleagues from the Pershore Civic Society, we were treated to a richness of brick buildings.

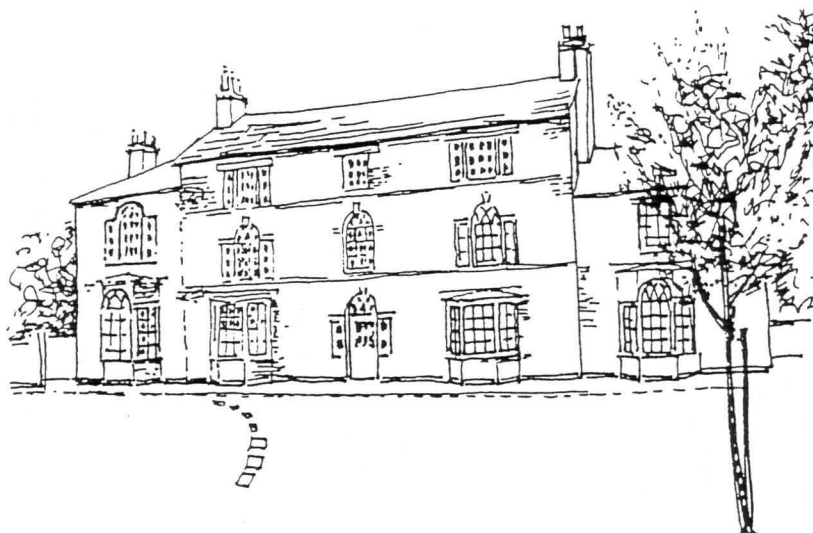


Fig. 1 Red-brick houses closing Broad Street, Pershore  
(from Pershore Town Walk)

Pershore was rich in the eighteenth century. Judge Perrott saw to that when he embarked the River Avon and controlled the shipping. His house, Perrott House, of c.1770, is the finest in the little town. Sir Nikolaus Pevsner characterised Pershore as

a pleasant little town, mostly of brick houses, two storeys high.  
Three storeys is a distinction.

Perrott House is one of the few to have such a distinction, but the canted bay windows extend only to the first floor. On the ground floor the style is Venetian, that is with a central portion rising into a round-headed arch. The doorcase has the treatment in the Venetian style as does the central window of the first floor. They liked the Venetian style in Pershore. It recurs in the 'Angel Inn and Posting House' on High Street and in the group which closes the west side of Broad Street. The latter date to c.1810.

Reminiscent of Suffolk is a long 'L-shaped' wall; East Anglia would term this a crinkle-crankle wall, but serpentine does just as well as a description. We saw too a modern example, defining the edge of a single house.

A modern close was the St Agatha's development by Drake and Darbourne. Here small-scale spaces have been created around housing and a health centre with the public library not far distant, another new brick building in the old town.

The Victorian is minor, a delightful Turnpike Cottage at the beginning of our walk and a wool warehouse, now converted to domestic use, seen almost at the end.

Perhaps nothing more need be remarked. The society's thanks are due to John Prentice and those whom he brought in to help and those who allowed us into their gardens and in the case of Perrott House their homes.

H.H. WILLOUGHBY

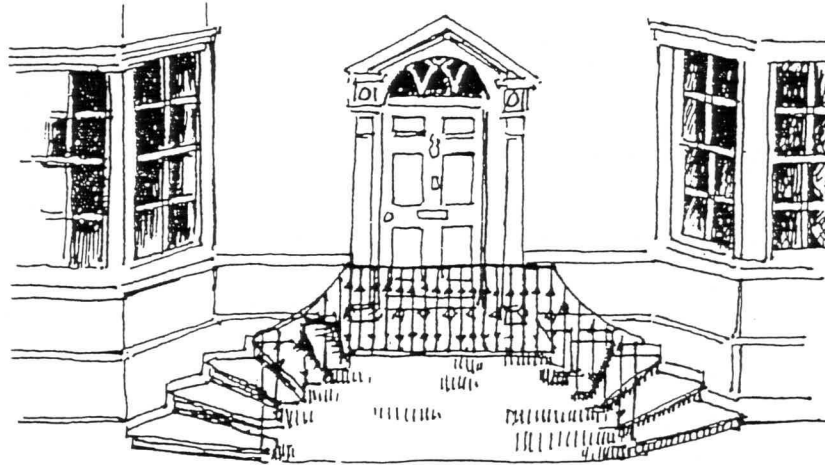


Fig. 2 Stanhope House, Pershore, built in about 1790 by George Perrot  
(from Pershore Town Walk)

#### TATE ON TOUR

JOHN CONSTABLE

'THE OPENING OF WATERLOO BRIDGE'

Stoke-on-Trent City Museum and Art Gallery

15 October - 27 November 1994

'Tate on Tour' is a new idea. London's great national collections have so much and the rest of England so much less. Based on sending an individual painting to a regional museum, the painting is displayed with that gallery's own collection of landscape and architectural paintings.

'The Opening of Waterloo Bridge' by John Constable is not obviously a painting with much of brick interest: there is more than one shot tower (one is post 1817 when the bridge was actually opened).

With this painting, Stoke-on-Trent City Museum and Art Gallery put on show about a hundred landscape and architectural paintings from their own collection, most of which are not usually exhibited. These, supporting, paintings are by artists whose working lives were contemporary with that of John Constable: he was born at East Bergholt, Suffolk, in 1776, and died in London in 1837.



The supporting paintings had much of brick interest. More than one came from a Potteries background. These included a watercolour of 'Burslem looking towards the first Market Hall from Liverpool Pack-Horse Lane' by John Shewin (c.1777-1842). It shows brick houses of both two and three storeys. Also from Staffordshire is a pencil drawing by Cornelius Varley entitled 'Remains of Purton Hall, Stafford, 1820'. The younger Pugin completed Burton Hall, in red brick, with blue and yellow brick enrichment, in 1855. Also by Cornelius Varley is a pencil drawing of 'Betley Church, 1820'. The church was one of George Gilbert Scott's earliest restorations (in 1842).

Over the county boundary in Cheshire is Little Moreton Hall. Three drawings by John Sell Cotman (1762-1842) derive from one or more of his numerous sketching tours. That of 'The Gatehouse of Moreton Old Hall' shows the complex diaper on the chimney stacks. This has been engraved and published in Britton's Architectural Antiquities Volume II.

Cotman was born in Norwich and made a precarious living from being a drawing master and antiquarian draughtsman, part of the time in Great Yarmouth.

Not quite in East Anglia is another pencil drawing, by Thomas Hearne (1744-1817) of the 'Episcopal Barn, Ely'. It is a mass of thatch with the only wall to be clearly discerned that of gabled central entry. Presumably this was of brick. Does the barn still survive?

After Stoke-on-Trent, John Constable 'The Opening of Waterloo Bridge' moves on to other museums to be exhibited with a different group of supporting paintings.

Herbert Museum and Art Gallery, Coventry  
3 December 1994 - 22 January 1995

Sunderland Museum and Art Gallery  
28 January - 19 March 1995

Abbot Hall Art Gallery, Kendal  
24 March - 14 May 1995

I shall certainly hope to catch up with the Constable again in Kendal, where, I know, there is J.S. Cotman, 'Norwich Market Place' of 1807.

DAVID H. KENNETT

#### EXHIBITIONS: FUTURE REPORTS

As noted in the introduction, reports of exhibitions with a broadly architectural theme representing brick buildings would be welcome for future issues of BBS Information.

BBS Information 65 (June 1995) will contain reports of the 'Parkinson Centennial' exhibition in Bolton and also of 'Prague 1891-1941, Architecture and Design' held in the City Art Centre, Edinburgh.

DHK

## BOOK NOTICE

John Page (Editor), State of the Art Review Masonry Arch Bridges,  
London: HMSO for Transport Research Laboratory  
ISBN 0-11-551190-3  
x + 118 pp., many line drawings, 16 photographs  
price £40-00

This is a technical manual, written by eleven contributors drawn from railway and roads backgrounds, of whom three are connected with an institution now called 'University of Wales College of Cardiff', a designation of this reviewer's part of Pryffisgol Cymru still takes some accommodating.

The book begins with a glossary of terms associated with arch bridges and follows this with chapters on 'History' and 'Masonry Arch Construction'. The next three chapters cover 'Analysis and assessment techniques', 'Load tests', and 'Measurement of bridge data for use in assessment'. The two final chapters are on 'Common problems, maintenance, repairs and strengthening', and the 'Design and construction of new arch bridges', respectively.

Thirteen bridges have been given Load tests to collapse. Of these four had a brick arch and one an arch of concrete and brick; the others were of sandstone or concrete. Two of the brick bridges are tests done before World War II, so less data is available about these. The information in the table which covers four pages is clearly set out and there are informative photographs of the bridges near to breaking point. Further tables delineate tests on scale models, some of which were brick.

Not all tests need be destructive and table 5.3 offers 'Consensus views on methods for masonry' indicating also accuracy, portability, skill requires, and interpretation required.

The brick bridges in the review of 'Design and construction of new arch bridges' are Prestwood Bridge, near Stourbridge, Worcs., over the Staffordshire and Worcestershire Canal, and Kimbolton Bridge, Hunts., over the River Kym, for Cambridgeshire County Council, the present local highways authority.

The book closes with a fifteen page bibliography with more than two hundred entries. Many of these refer to the behaviour of brick arch bridges, as a paper by Clive Melbourne in British Masonry Society Proceedings is entitled.

DAVID H. KENNETT

N.J.G. Pounds (editor), The Colchester Area,  
Proceedings of the 138th Summer Meeting of the Royal Archaeological Institute,  
1992.

Supplement to the Archaeological Journal Volume 149 for 1992  
London: Royal Archaeological Institute, c/o The Society of Antiquaries of  
London, Burlington House, Piccadilly, London W1V 0HS  
Price: not stated.

A Summer Meeting of the Royal Archaeological Institute consists of a week of visits and lectures. It is held in a different city or town during July each year.

Previously issued as part of Archaeological Journal, in the last five years publication of the proceedings of the meeting has been separate although coming to subscribers with that year's volume. The proceedings comprise the evening lecture(s) and accounts of the sites visited. The Colchester Area gives an account of a number of brick buildings. Under castles, Castle Hedingham,

by David Andrews, is noted; while abbeys and priories include Beeleigh Abbey, Maldon, by Judith Cligman, St Botolph's Priory, Colchester, by N.J.G. Pounds, who also provides a brief notice of St John's Abbey, Colchester, but does not mention that the fine gatehouse was actually built of brick. Parish churches with/of brick include St Nicholas at Castle Hedingham, by A.P. Harris, and St Mary Stoke-by-Nayland, by Judith Cligman. New to this reviewer is Holy Trinity church at Bradwell-juxta-Coggeshall; the account by Warwick Rodwell and David Park points to brick piers, brick quoins and window dressings all of the first half of the twelfth century. Rodwell and Park give two dates: a general one of 1125-1150 and a specific one, 1167 for the dedication of the high altar. It was argued in Information 50 that Polstead church pre-dates 1163 (1). Bradwell-juxta-Coggeshall has wall paintings and there is an account, by Ann Ballantyne, of another church with wall paintings, White Notley, where the chancel arch and an arch on the south wall of the chancel are of re-used Roman brick. P.M. Ryan gives notice of Layer Marney Tower and Long Melford Hall is recorded by Richard Hyde Parker and David Adshead. David Stenning notes both Maldon and Hadleigh, both small towns with important brick buildings. Excepting the two last-named accounts are followed by references.

#### Note

1. D.H. Kennett, 'Polstead Church, Suffolk', BBS Inf., 50, October 1990, 9-16.  
DAVID H. KENNETT

Brian Essam and Pat Freeman, Bricks and Rollers,  
Clacton-on-Sea: The East Anglian Traction Engine Club, 1994  
Price £6-00, plus 50p. postage and packing (for up to 3 copies)  
available from Brian Essam, 241 St Osyth Road, Clacton-on-Sea, Essex CO15 3HJ  
or Pat Freeman 'Oron', 11 Avenue Road, Chelmsford, Essex CM2 9TY

A circular on this family history, which includes among its past activities brick making and brick transportation, was sent to me just as this issue of Information was being put to bed.

It is hoped to include a longer notice in a future issue of Information.

DAVID H. KENNETT

## BRITISH BRICK SOCIETY IN 1995

To date the officers of the society have arranged two Spring Meetings and the Annual General Meeting for 1995.

Dates for members' diaries are:

Saturday 8 April 1995 St Albans, Hertfordshire  
a walk round the city, including Roman brickwork in Verulamium, re-used Roman bricks in St Michael's church (Anglo-Saxon) and in St Albans Abbey (Norman), the Marlborough almshouses of 1736 and the Chapter House of 1982.  
Guide: T.P. Smith

Saturday 13 May 1995 Salford, Lancashire  
Nineteenth-century brick churches by Bodley, Paley and Austin, R.B. Pearson; late Georgian brick terraces; late nineteenth-century civic buildings.  
Guide: D.H. Kennett

Saturday 10 June 1995 Annual General Meeting in Lincolnshire  
Meeting at Horncastle College in morning; afternoon visit to Tattershall Castle, a fifteenth-century tower house of brick, with brick buildings in village.  
Guide: various experts

Optional Sunday Programme  
To include a visit to the Scotch Kiln at Baumber, which is en route to Lincoln from Horncastle. Members may wish to include Lincoln on their journey home. Brick features include brick buildings within the precinct of Lincoln Castle and the brick exhibit within the Museum of Lincolnshire Life.

Saturday 15 July 1995 Chiddingstone, Kent  
Afternoon visit to Chiddingstone brickworks.  
Guide: Caroline Dunmall

Lullingstone Castle, brick with brick gatehouse, and Lullingstone Roman Villa are in the area. There are good examples of mathematical tiles in this part of Kent.

Saturday 23 September 1995 Darwen, Lancashire  
Morning visit to Shaws of Darwen, terracotta works. Afternoon visit could include St Gabriel's Church, Blackburn, by F.X. Velarde, 1933; Samlesbury Hall, with brick wing of 1540s.

Details of the two first-named are enclosed with this mailing.

Details of the A.G.M. and the Chiddingstone visit will be sent to members with the mailing in early summer.

Details of the Darwen visit will be sent with BBS Information 65 (June 1995).

Suggestions for future visits are always welcome. Possible venues in 1996 include a brickworks in Yorkshire, Eton College, and, perhaps, Leeds.

Suggestions for visits in future years should be made to

Michael Hamnett

Hon. Secretary, British Brick Society

9 Bailey Close, Lucas Road, High Wycombe, Buckinghamshire HP13 6QA

Suggestions for visits in areas not given prominence by the society in the last ten years would be particularly welcome. There is a map showing where the society has held visits and its annual general meeting between 1984 and 1994 on page 14 of BBS Information 61 (February 1994).

DHK

#### BBS INFORMATION IN 1995

The stock of contributions in the editor's files for including in future issues of BBS Information swelled somewhat in the last two months of 1994. Accordingly he was able to make some choice of contributions to include in the three issues of the newsletter in 1995 and the first issue of 1996. A notice elsewhere in this issue of BBS Information informs members that BBS Information 68 (June 1996) will be the first of two issues devoted to 'Brick in Churches'.

Members may like to know the probable contents of the next three issues of BBS Information.

It is hoped that BBS Information 65 (June 1995) will contain contributions on Brick Terminology, The Makers of 'Broseley Tiles', Dragons in Surrey, and Brick in Museums: The Lancashire Mining Museum, Salford.

The principal article in BBS Information 66 (October 1995) is expected to be about Brick in Churches: Bedfordshire and Buckinghamshire. This issue will also contain reports on the society's meetings in 1995, which are listed on the last page of this issue of BBS Information.

In the first issue of 1996, BBS Information 67 (February 1996) the editor hopes to include articles on Brickwork in Canada and on Brick and Tile Taxes.

After that the various envelopes will be a little threadbare, except that is for items written by the undersigned.

DAVID H. KENNETT

End Figure The Doorcase from No 1, Bridge Street, Pershore, a seven-bay house of late-eighteenth-century date in plain dark brick, with a fine front door. (from Pershore Town Walk)

