

BRITISH  
BRICK  
SOCIETY

# INFORMATION

No 38

Feb '86

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# INFORMATION

BRITISH BRICK SOCIETY

## INFORMATION 38 FEBRUARY 1986

EDITORIAL

Before the introduction of modern methods into the brick-making industry, work at a brickyard, as is well known, was markedly seasonal. Raphael Samuel has drawn attention to the case of Rutter's yard at Crayford in Kent, where only thirty-three persons were employed during the winter slack period, whilst at the height of the season 382 people were employed according to evidence given to the Children's Employment Commission in 1866. This was an extreme case, to be sure, but on a lesser scale the phenomenon was widespread.

Thus it was that brickmakers frequently combined such a business with some other trade or occupation. Many brick-makers, indeed, were farmers who had clearly found, and had decided to exploit, a suitable deposit of clay on their land. Farming provided alternative employment when bricks were not actually being made. The workers too often suffered from a lack of work during the 'off' season. At West Drayton, many took to pig-

breeding as a secondary occupation, and indeed in that area the pig became known as 'The Brickie's Bank'. Similarly, in Charles Dickens' Bleak House the brickmaker's home, located near St Albans in Hertfordshire, 'was one of a cluster of wretched hovels in a brickfield, with pigsties close to the broken windows...'. In Birmingham brick-making was combined with malting and brewing, as it was in Hertfordshire and occasionally in Kent. In the latter county in 1851 the secondary occupations included farming, building, lime or cement burning, potting, house painting, plumbing, surveying, and brewing; the brickmakers also included a slate merchant, a timber merchant, two coal merchants, two cornfactors, an estate agent, a hoyman, an insurance agent, the proprietor of the Sittingbourne gasworks, four publicans, a registrar of births and deaths, a shipowner, and two sugar-mould makers. The large firm of Eastwood's Ltd began as Sand, Lime, and Builders' Merchants, and expanded their interests in the 1880s by taking over five brickmaking firms in Kent.

In the Medway area many of the labourers from the brickyards were gas-workers in the 'off' season, which fortunately for such workers coincided with the peak demand for gas. Similarly elsewhere in Kent: Michael Winstanley records the words of Harry Matthews, whose father worked at the Faversham brickworks at the end of the century: '... my father used to go up to Woolwich ... in the winter time. They used to go up to Woolwich gas-house, Greenwich gas-house and get a job in there for the winter.... Sheerness too, they always wanted men over there. You could get a job in them in the winter when the gas was wanted more. Most times night work it was.' Other jobs during the 'off' season included potato digging, hopping, wurzel pulling, corn threshing, or casual labour unloading corn or coal barges at the creeks. Younger men or boys could work on the cross-Channel boats or barges. So far as the gas-workers are concerned, Professor E.J.Hobsbawm has drawn attention to the fact that in both London and Birmingham the trades unions connected with the gas industry automatically organised brickmakers as well as gas-workers. Often, of course, they will have been the same people.

It would be interesting to pursue this line of inquiry, to see what secondary occupations were followed by brickmakers in different parts of the country. Were there regional variations? Was farming a more common secondary occupation in East Anglia, say? Just how widespread was pig-breeding? Is it true, as Professor Hobsbawm conjectures, that 'the mechanization and the decreasing seasonality of brickmaking, and the depression of the building trade after 1900 cannot have been without effect on the stokers' in the gas industry? When did brickmaking cease to have a predominantly seasonal aspect? And did this too vary from region to region?

Terence Paul Smith  
Editor

Not Mathematical Tiles. Michael Hammett has been kind enough to send me details, and colour slides, of some interesting bricks used on the Gissons Hotel at Kennford in Devon. Much of my time in recent years seems to have been spent looking at tiles (mathematical tiles) pretending to be bricks. These are bricks pretending to be tiles. They are made in such a way that when laid the wall appears to be tile-hung with fish-scale tiles. The special bricks have faces measuring 235 by 80 mm and corner-bricks are also made. I found these fascinating, and a welcome change from the sort of masquerade with which I am more familiar!

TPS



## URSULA TAYLOR'S CHARITY

David H. Kennett

In 1724 Ursula Taylor of Clapham, Bedfordshire died. Having survived her husband for thirty-five years and with the elder of her daughters by then the Lady Ashburnham, she felt able to devote her own resources to charity. In her will she bequeathed lands at Wootton Green, Marston Moretaine, also in Bedfordshire to a charity bearing her name. The purpose of the charity was to pay for the apprenticeship of one or two poor boys annually from Clapham.

The sum to be derived from the lands was £24 per annum, certainly a sufficient amount in the early eighteenth century to finance four apprenticeship premiums in three years. It is unlikely that a parish with an estimated population of 140 in 1671 and a recorded population of 157 in the first census of 1801 would have more than two boys in any one year who needed help in starting their careers. In the nineteenth century, premiums paid out by the Bedford Charity for various building trades were in the order of £15.

The farmland at Wootton Green proved by the last quarter of the nineteenth century to have another resource. Marston Moretaine, like the adjacent part of Wootton, usually known locally as Wootton Pillinge (but known outside Bedfordshire as Stewartby), is above the rich seam of Oxford Clay which provides such good raw material for bricks. Many members of the British Brick Society will be familiar with the brickworks at Stewartby.

By 1881, the farm at Wootton Green, Marston Moretaine included a brickyard. In 1912, the brickyard, farm, and stables, with 31 acres, 1 rood, 3 poles, was let out at an annual rental of £65. In addition, the royalties from the brickyard had produced a surplus of £408 2s. 0d. invested in India 3% stock, giving a yield of £12 4s. 8d. per annum. Ursula Taylor's charity thus had an annual income of £77 4s. 8d. Of this, £7 10s. 0d. was applied to Clapham Board School, and the remainder to the apprenticeship premiums of six poor boys.

The brickyard had clearly prospered in the thirty years before 1912. The profits enabled the charity to build up a holding of government stock. The presence of the brickyard meant that the farm could be let for more money. This increased the income of Ursula Taylor's charity, enabling the benefaction to increase six-fold, thus keeping pace with the growth of population in Clapham: there was a population of 704 in the 1921 census.

By 1972, the farm had returned to agricultural use and any buildings which may have been connected with the brickyard had an agricultural use. Their earlier use was difficult to trace.

### Notes and References

1. Victoria County History of Bedfordshire, vol.3, 1919, p.132; for the Taylor family see ibid., p.130 (at Clapham) and p.126 (at Bolnhurst, Beds.), with G.D.Gilmore, 'The Papers of Richard Taylor of Clapham (c.1579-1641)', Publications of the Bedfordshire Historical Record Society, 25, 1947 for 1943, 104-109. Living away from Bedfordshire, the author has been unable to consult the published transcript of the parish register of Clapham, Bedfordshire Parish Registers, 16, 1937.
2. 'Apprenticeship Register of the Bedford Charity for 1840-41', now

in Bedfordshire County Record Office.

3. Ordnance Survey 6 inches to the mile (1: 10,560) sheet XVI SW (issued 1884, surveyed 1881), reference cited A.Cox, Survey of Bedfordshire: Brickmaking, a History and Gazetteer, 1979, p.90, site G111. The national grid. ref. is TL 001433. Notes (made c.1975) of Bedfordshire brickmakers in directories covering up to 1914 reveal no record of any brickmaker at this farm.
4. Note completed 18 September 1985. The visit made in 1972 was not specifically to investigate the brickyard. It would repay further investigation. Ursula Taylor's name is preserved, it is pleasing to note, in the recent Ursula Taylor C.V.P.School at Clapham, Beds.

L & LBC. In Information 31, November 1983, 26 Lyndon F. Cave asks about some bricks found near Kenilworth and bearing the frog-mark 'L & LBC'. I suggest that the initials stand for Leamington and Lillington Brickyard Co. Ltd, Campion Road, Leamington Spa. The correspondence that I have is dated 1937, regarding the selling of 3½% Conversion Stock and is signed by Harold Mason, Chairman and F. ? Lee, Director.

Alan Hulme

An Eighteenth-Century Brick Chancel. In the most recent issue of Records of Huntingdonshire A.J. Richardson essays 'Offord Cluny: Not a Case of Eighteenth-Century Neglect': Rec.Hunts., vol.2, no.5, 1985, 20-23. Mr Richardson includes a good photograph of the brick chancel erected in 1726. The former (?medieval) chancel had become ruinous by the early 1720s after the north wall fell down in 1717. In 1726 a new chancel was erected in red brick with white stone quoins; there is a datestone 'L B 1726' (sc. Le Neve Boughton, rector 1722-30). Here at least was a rector who fulfilled his responsibilities to his church: the rectorial tithes were for the upkeep of the chancel. A description of 1748 records 'church [i.e. nave] and chancel in sufficient repair'.

Even non-resident rectors did their share towards upkeep, not least John Newcombe (1683-1765), Master of St John's College, Cambridge, and also Dean of Rochester, and from 1730 to his death Rector of Offord Cluny. In 1752, he gave a set of altar rails and in 1757 a communion cup. There are photographs of both of these in the article cited.

Both this issue of Records of Huntingdonshire and the previous issue, vol.2, no.4, 1984, have a feature on 'Vanished Buildings of Huntingdonshire', including demolished brick houses, churches, and chapels. They may be obtained from Mr J.Hedley, 7 Post Street, Godmanchester, Huntingdon, price £1.40 each, plus postage of 20p per issue.

DHK

Old Bricks - New Houses. David Kennett has sent me a cutting from the Observer for 27 October 1985 concerning the re-use of old bricks for new houses at Broomfields, Esher, Surrey, where old Cheshire stock red bricks have been used. The same firm, Octagon, had earlier used reclaimed London bricks at Wimbledon Common. The aim is to give a, so to speak, 'pre-weathered' appearance, avoiding the rawness of new brick. The houses are very expensive!

TPS

## MORE ABOUT STRUCTURAL BRICK<sup>1</sup>

D.H.Kennett and Michael Wingate

In a previous issue of Information D.H.Kennett drew attention to three churches in East Anglia where the building was flint-faced but the engineering of the building was of brickwork subsequently covered by plaster.<sup>2</sup> The present note draws attention to two further instances of such 'structural brick' in Norfolk.

Added to St Michael's Church, Sutton, Norfolk (TG 388240) at an unknown date in the late fifteenth or early sixteenth century is a two-storey south porch. Sir Nikolaus Pevsner records this as 'formerly two-storeyed, with a brick entrance arch'.<sup>3</sup> More recent writers note of the same feature: 'The late perpendicular porch is most attractive, using red brick freely, in particular for the splendid outer arch, which is squared off with a hood; the porch formerly had an upper room but is now open to the roof.'<sup>4</sup> The present writer recently examined the porch. There are north and south windows of brick. In addition the plaster has flaked from the inner walls of the porch to reveal a fabric of brick although the 'public face' of the structure is of squared flint.

(DHK)

At the Church of All Saints, Catfield, Norfolk (TG387215) there is a lot of brick in the tower, particularly on the inside of the tower, where there is a fireplace and various other details. The date is the first quarter of the fourteenth century.

(MW)

The method was adopted in the nineteenth century too, and the two instances recorded here are both ecclesiastical buildings. The first is the cemetery chapel at Gorleston Cemetery (TG 518037). This has a small nave with an apsidal chancel at the east end and a south porch. The building appears as flint-faced with brick trim. The engineering job of supporting the decorative face of squared flints is done by bricks. The chapel is contemporary with the opening of the cemetery in 1879, a date recorded in the brick gateway.

Of late nineteenth-century date also is the Methodist Chapel at Ludham, Norfolk (TG 389185). This building has a schoolroom attached to it in the same structural and architectural style. The building is faced with knapped and squared flints. The quoins and the door- and window-openings are of brick, alternately yellow and red and laid in a complex arrangement of headers and stretchers so that the colours extend to the same width in sequence. The building has an inner skin of brick.<sup>5</sup>

(DHK)

### Notes

1. This note has been compiled by the editor from information supplied and written up by the two authors; their contributions are indicated by initials.
2. D.H.Kennett, 'Structural Brick', BBS Information, 34, November 1985, 13-16.
3. N.Pevsner, The Buildings of England: North-East Norfolk and Norwich, Harmondsworth, 1962, p.325.
4. D.P.Mortlock and C.V.Roberts, The Popular Guide to Norfolk Churches

No.1 North-East Norfolk, Fakenham, 1981, pp.90-91. Further survey of this structure is in progress.

5. Personal observation at both these buildings; D.H.K.'s contributions completed 16 March 1985; MW's received November 1985.

## WINTER WARMTH

Alan Hulme

There have been a number of comments in past issues of Information about brick footwarmers and about bed heaters. I now possess a Nawells Footwarmer similar to the glazed example reported by Martin Hammond in Information 33, May 1984, 18. To judge from the wear marks on the

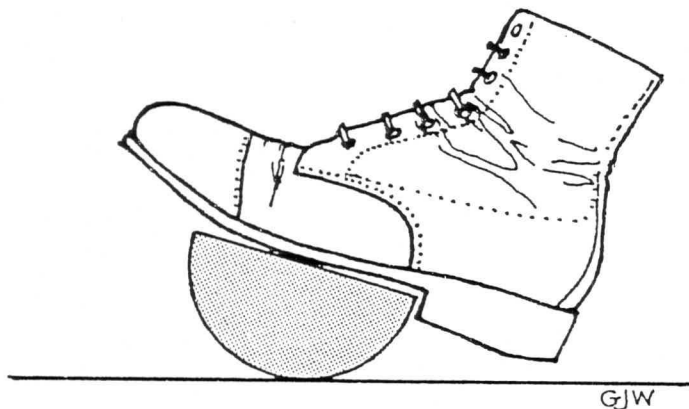
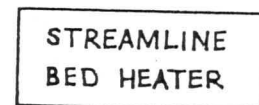
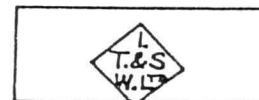


Fig. 1



TOP



BOTTOM

Fig. 2

footwarmer, it seems to have been used with the curved side downwards, offering a flat area for the feet and a smaller area in contact with the floor (fig. 1.). (This, of course, would also enable the warmer to be 'rocked' by the feet - perhaps desirable on a long railway journey). My own example has the words 'Nawells Patent Footwarmer' printed into it, not just 'Nawells Footwarmer'.

Regarding the comment in Information 32, February 1984, 18-19, concerning the use of ordinary bricks for warming a bed, I have a special bed heater in fireclay, as in fig.2. It measures  $7\frac{1}{2}$  by 4 by 3 inches (190 by 101 by 76 mm.). I do not know its origin.

(The editor is grateful to Mr G.J.Walder for fig.1 - TPS.)

## WINN'S PORTABLE BRICKMAKING MACHINE

Alan Hulme has sent in the following item from the English Mechanic and Mirror of Science for 10 December 1869, p.296; the accompanying illustration is from p.307 of the same issue. Alan Hulme writes: 'In Information 36, May 1985, 10 Martin Hammond's home-made kiln was built with the idea of being semi-portable. Perhaps Winn's portable machine may have worked, but I doubt it.' Clearly it was meant to travel about the yard on flanged rails. But what exactly was its point? Do any members know of any attempts to use such a machine?

'Many worthless devices in the shape of brickmaking machines have been tried, and while there have been many failures and few successes, brick makers are still anxious to try new devices in the hope of getting the right thing. Such a machine it is claimed is the one illustrated in our engraving [overleaf]. The machine is a steam-boiler, engine, and brick machine combined, the whole made portable by being constructed upon wheels, and can easily be moved upon a track. It is constructed entirely of iron. The clay mill, to which is attached the pressing or moulding arrangement, is placed upon the boiler, and at each side of it are two engines [sic, presumably for: 'at each side of it is an engine' - sc. there were two engines in all; that at least appears to be the case from the illustration. TPS] or steam cylinders. of eight in. bore by fourteen in. stroke, running forty revolutions per minute. The capacity of the boiler is twenty horse power. The clay mill, in which the clay is ground and tempered, is built of heavy boiler-plate iron, of the same quality as the boiler, and is of cylindrical form, constructed with two shells or walls, with an annular chamber between the two shells of two and three-fourths inches space. This space contains a coiled pipe, through which steam circulates and heats the water which occupies the annular chamber, and used in supplying the boiler as well as in tempering clay. By this arrangement the boiler is supplied with hot feed water, and the clay is regularly and evenly tempered, the water for the purpose being taken from the annular chamber above the clay, inside the mill, by means of a perforated horizontal pipe extending over it, and the supply regulated by a cock which is adjusted by the pit shovellers. There is also an arrangement for tempering the clay by steam direct from the boiler, by which it is claimed most clays may be thoroughly tempered without previously soaking in a pit. Two perforated pipes, passing through the clay mill direct from the boiler, admit high pressure steam. This steam is condensed by the colder clay which absorbs the water produced by condensation and the latent heat of the steam given off while condensing, so that the clay becomes thoroughly wetted as well as uniformly heated. The bricks are delivered from the molds [sic] hot. Of course they dry more rapidly than could be the case with cold-moulded bricks; fifty per cent being the saving in this respect claimed over any other process, attained without the expense of fuel and fixtures required in other artificial methods of drying.

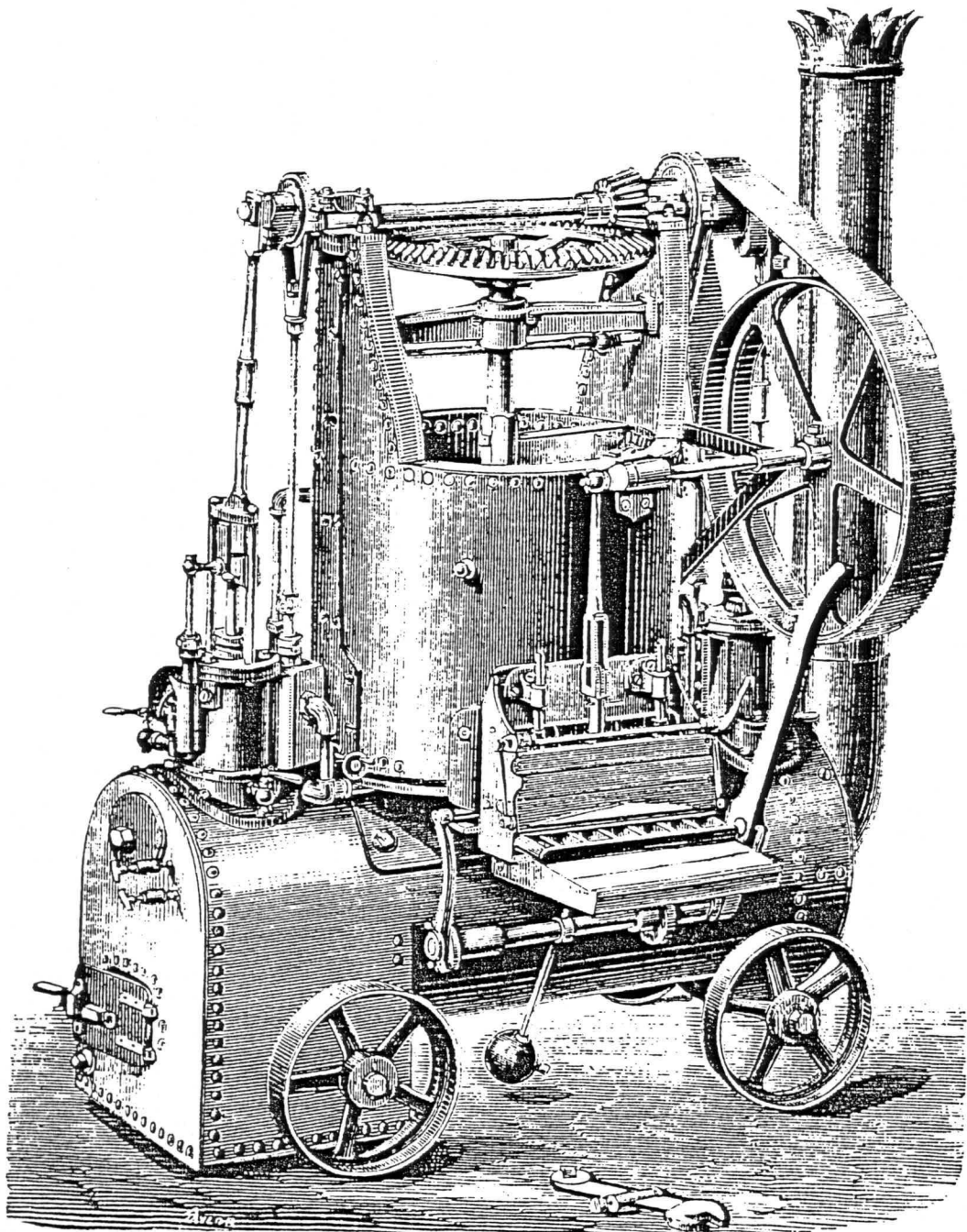
'Besides being advantageous in working tenacious clays, the use of steam is particularly beneficial in winter. It is claimed that by its use the manufacture may progress as profitably in winter as in summer provided a market for the bricks can be secured. The steam extracts all the frost from the clay, and the bricks are laid on the floor at a higher temperature than can be attained by the expensive method of arches and flues with super-imposed floors; the bricks in cooling becoming so dry that they are no longer liable to injury from frost.

'In good weather, when the yard is in good drying condition, there is no particular advantage in tempering with steam, and the cock may be



closed; but in cloudy, misty weather, when the yard is damp, or from any other cause the drying of the bricks is too slow, the steam is turned on and the water partially shut off, and the clay is heated as much or as little as desired. Or, if the clay is tough and tenacious and does not properly temper, the steam is used. For making brick during the winter season, the use of the steam is indispensable and the bricks may be delivered from the moulds or machine at any temperature desired up to 212 degrees.

'Patented, through the Scientific American Patent Agency, by C.A.Winn, of Lock Haven, Pa.'



WINN'S PORTABLE STEAM BRICKMAKING MACHINE.

# THREE BRICK CHURCHES BY SIR GILES GILBERT SCOTT

Terence Paul Smith

Sir Giles Gilbert Scott (1880-1960) lived right through the period of the 'Modern Movement' in architecture. Nor was he untouched by its spirit. Gavin Stamp reminds us of Scott tearing up to Liverpool in his Buick<sup>1</sup> - symbol of speed, power, and progress. The aspect of power was expressed in architectural terms in his Battersea Power Station (1929-35) - now, sadly, to be demolished it appears - and its progeny at Bankside (1955) and at Rye House, Hertfordshire (1954). Perhaps, too, the admired sleekness of the motor car shows itself in the fine sweeping arches of his Waterloo Bridge of 1939-45. His greatest monument, however, must be the exciting Liverpool (Anglican) Cathedral, won in competition in 1904 though only recently completed. Seen in relation to the feeble gimcrackery of its Roman Catholic neighbour, the power of Scott's building is particularly evident, and perhaps is one of the strongest arguments for a traditional approach to buildings of this kind - economics permitting, of course! Certainly it is the most assured of the twentieth-century English cathedrals. Liverpool Cathedral owes something to the influence of G.F. Bodley (1827-1907), one of the competition assessors and the man who was appointed joint architect with the youthful competition winner. (Interestingly, Bodley had been articled to Scott's grandfather, Sir George Gilbert Scott, 1811-78.) Giles Gilbert had been a pupil of Temple Moore (1856-1920), and the latter's Gothic Revival style probably also played its part in influencing the young Scott. For Gothic is indeed the style of Liverpool Cathedral, though it is far from a slavish historicism.

In some of his later churches - necessarily on a much humbler scale - Scott pared down the Gothic elements much further, and produced what we might call a 'stripped Gothic', on analogy with the accepted term 'stripped classical'. Like, say, Hawksmoor at All Souls', Oxford or the Westminster Abbey towers, Scott was able to produce buildings of unmistakably Gothic character whilst using a minimum of historically derived details. Much, indeed, depends on the use of plain wall surfaces, a technique of which Scott was to prove himself master in the massive-walled power stations.

Both these aspects - the articulation of plain surfaces and the deployment of minimal Gothic motives - find excellent expression in the three churches considered here: Northfleet, Kent; Luton, Bedfordshire; and Golders Green, London.

The Roman Catholic Church of Our Lady of the Assumption at Northfleet, Kent is the earliest of the three, being built in 1914. Here Scott was faced with a not very attractive, yet quite dramatically elevated, site: he took full use of this, even in the drab little town and amongst worked-out chalk quarries, by providing a massive west tower which becomes a focal point for some distance around. The principal entrance is through this tower, by means of a bold round-headed archway of six simple chamfered orders. Above this is a row of four deep arched recesses with the interesting conceit of having tracery at the bottom. Then comes a tall two-light window with foliated tracery. The top of the tower has a low crenellated parapet, slightly recessed and modulating to an octagonal form. In other words, the top of the tower breaks into smaller forms - an effective type of punctuation at this level. The way in which this prevents the whole tower from



Fig. 1

becoming merely 'massy' is best appreciated from the east, in combination with the fairly plain east end of the building. The traditional east window is omitted, and replaced by a small niche with stone tracery in its head. There are pilaster buttresses at the angles. The tower is flanked by wings which rise to only half height (fig. 1), and the nave has a podium-like base of plain chamfered forms. The chancel projection is diminutive and inside is separated from the nave by a rectangular chancel 'arch'.

In a number of its features the Northfleet church is reminiscent of Scott's Cathedral at Liverpool,<sup>2</sup> notably in the square chancel 'arch', the clerestory windows, and the form of the tower, in particular the crown-like octagonal top to the square mass beneath.

The building is in a warm brownish brick laid in English Garden Wall Bond - that is, with one course of headers alternating with three courses of stretchers. Brickwork details are simply executed using squinchons. These are used most effectively in the podium-like base around the building: a single off-set at the bottom is topped by a profiled stretch of brickwork, and this in its turn is topped by two further off-sets (fig.2).

Scott returned to the theme of a large west tower with his brick church of St Andrew, Blenheim Crescent, Luton, Beds., built in 1931-2. The north and south elevations of the building owe much to the massive buttresses, dividing its length into a series of similar bays. The buttresses have two sharply raked off-sets above a plinth, the upper off-set making a long sweep from eaves-level towards the ground (fig.3). The small detail of tumbling-in the bricks of these off-sets emphasises the triangularity of effect (figs. 3 and 4). From a distance, indeed, the buttresses appear to be almost triangular in form. Thus the building is very much a three-dimensional assembly of planes, made more effective by the complete lack of fenestration in the aisle walls: the interior is lighted entirely by the clerestory of connected lancets with slightly pointed heads. The tower, as at Northfleet, is a dramatic termination to the lengthy nave, though it is squatter and

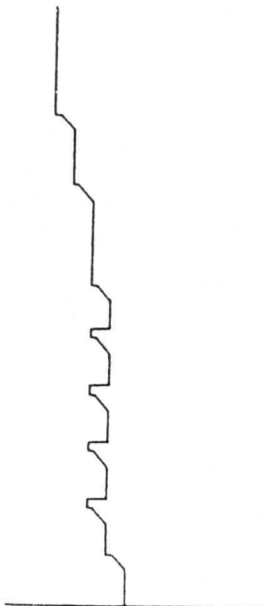


Fig. 2

more massive than at Northfleet. The Luton tower, too, because of the pilaster buttresses, the minimal fenestration, and the rectilinear form of the belfry openings, is a composition of brickwork planes. It is brought to an effective finish - again as at Northfleet - by a slight recession of the parapet which once more takes an octagonal form (though with the diagonals very short) and has shallow crenellations. Decoration throughout the building is minimal, almost non-existent. Only in the west face of the tower are the constraints lifted a little, and even there such decoration as occurs is restrained and well controlled, focussing attention, quite correctly, on the principal entrance to the church. Here, on the door surround, is the only extensive use of stone in the building, although elsewhere the windows are tellingly marked by being in stone. The tall arch which encloses both the doorway and the triple lancet window above it is stunningly bold. It is simply moulded using brick squinchons.

The brickwork throughout the building is fine, using, apparently, locally available 'Luton Greys' - variegated and most pleasant in hue - all laid with consummate skill in English Garden Wall Bond - though with four courses of stretchers to every one of headers. On the tower there are also a few soldier-courses - that is, courses of bricks laid upright - giving a slight pattern to the wall when seen close to.

As at Northfleet, the brick mouldings are achieved simply, by using squinchons with a minimum of other 'specials'. The off-sets around the base of the building, for example, which continue round the buttress feet, consist of a double course of such squinchons; special corner-bricks are employed at the angles (fig. 4). The same squinchons are used, again in pairs, for the simple chamfered mouldings of the clerestory windows and for the five plain-chamfered orders of the west arch in the tower. They are again used for the octagonal top of the tower. The tumbling-in on the buttresses uses the ordinary bricks cut to shape as necessary, presumably by the bricklayers on site.

Inside, the church again impresses by its simplicity. A series of only slightly pointed arches crosses the rectangular space of the church, corresponding of course to the positions of the buttresses outside. The arches are unmoulded and are brought down to floor level as shallow pilasters against the walls. The chancel arch is slightly narrower than the others. Simple unmoulded arches also cross the aisles transversely. The arcades are plain round-headed arches seemingly punched through the walls, and the ranks of clerestory windows above them are similarly plain.

All in all, the building is impressive, and rightly described by

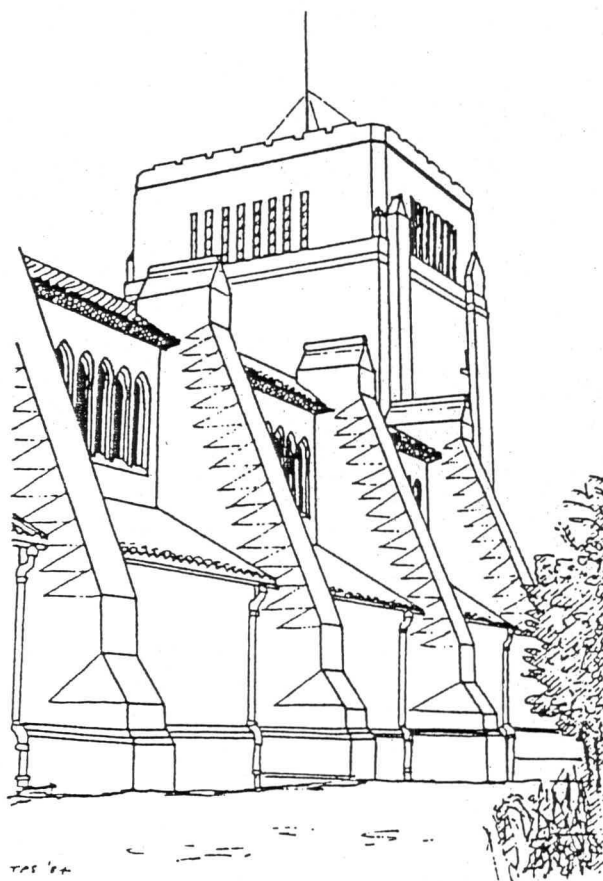


Fig. 3



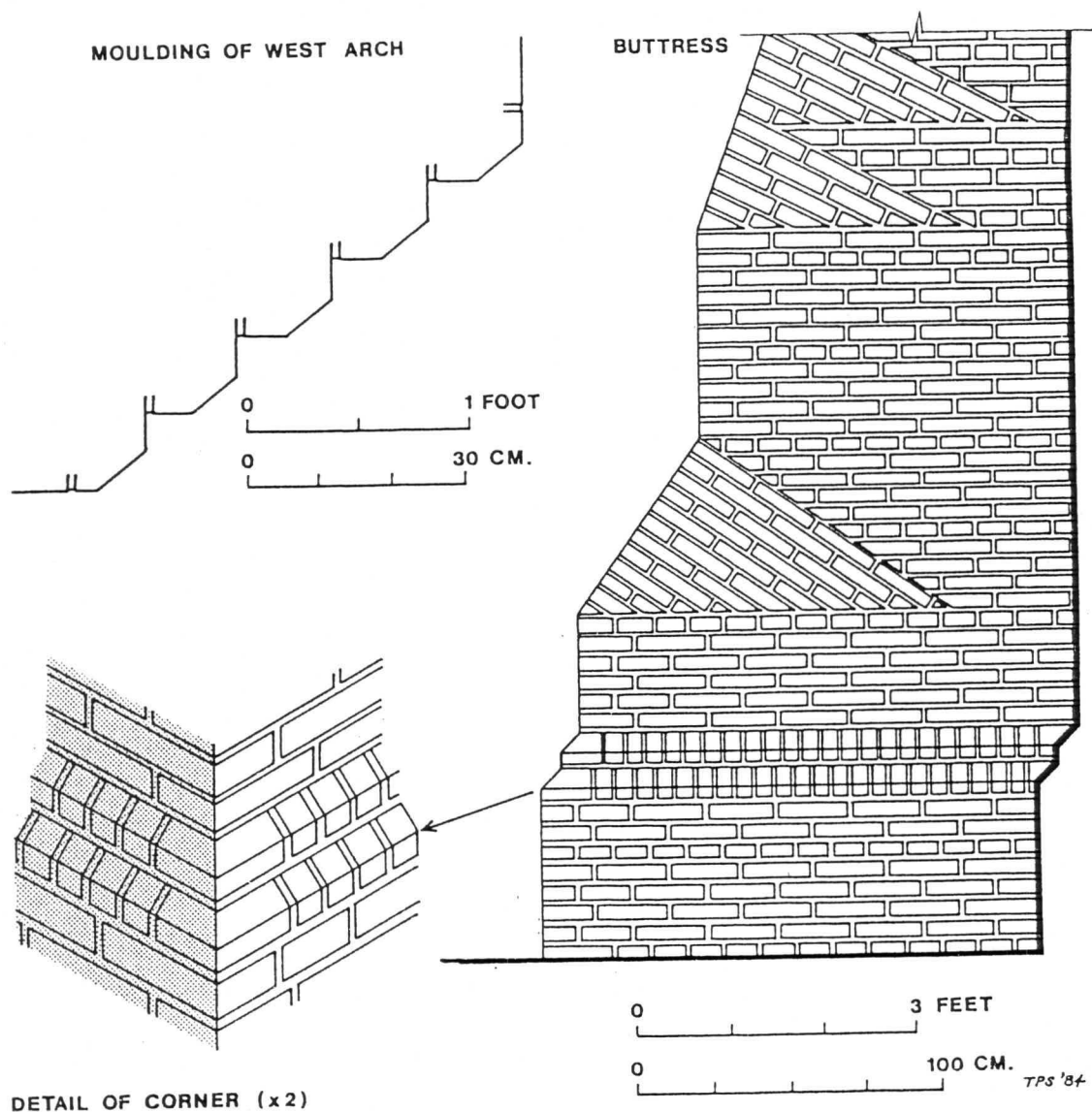


Fig. 4

Charles McKean as 'a Valhalla for bricklayers'!<sup>3</sup>

The Church of St Alban the Martyr and St Michael, North End Road, Golders Green, London was built in 1932, again in brick, although this time with stone dressings to the windows, off-sets, and elsewhere. The brick detailing of the two other churches is, therefore, not present, although there is tumbling-in on some of the buttress gablets. Unlike the other churches too this one has a cruciform plan with a central crossing tower topped by a low pyramidal spire. The gabled roofs atop the shortish arms - nave and chancel as well as transepts are quite short - help to give a solid, almost four-square appearance, and indeed, seen from the north-east in North End Road, the church as a whole is somewhat like a stepped pyramid in form. This appearance is aided by the 'shaved-off' angles - widening as they ascend - of the tower. These portions finish below parapet level; the tower top is octagonal, with low crenellations, just as at the other churches (fig. 5).

The windows have a simple flowing tracery and the principal ones are flanked by shallow pilaster buttresses. The east end, however, has a plain brick wall with no east window. The brickwork is of a brown colour and once again is laid in English Garden Wall Bond, with four courses of stretchers to every one of headers.

The interior is reminiscent of the contemporary work at Luton, with plain arches without orders finished in white-painted plaster.



A more open appearance is achieved than at Luton, however, since there are no aisles. The cants across the angles of the tower have shallow arched recesses, and there is a further shallow arch enclosing the north window of the north transept; there is no similar feature to the south. A slightly smaller arch separates the main body of the church from the chancel, which is reached up four low steps. At the west end a further arch subtly marks off a sort of western vestibule, approached through the main entrance in the north porch. The windows are square-headed, as on the exterior, with wooden lintels effectively exposed against the white plasterwork.

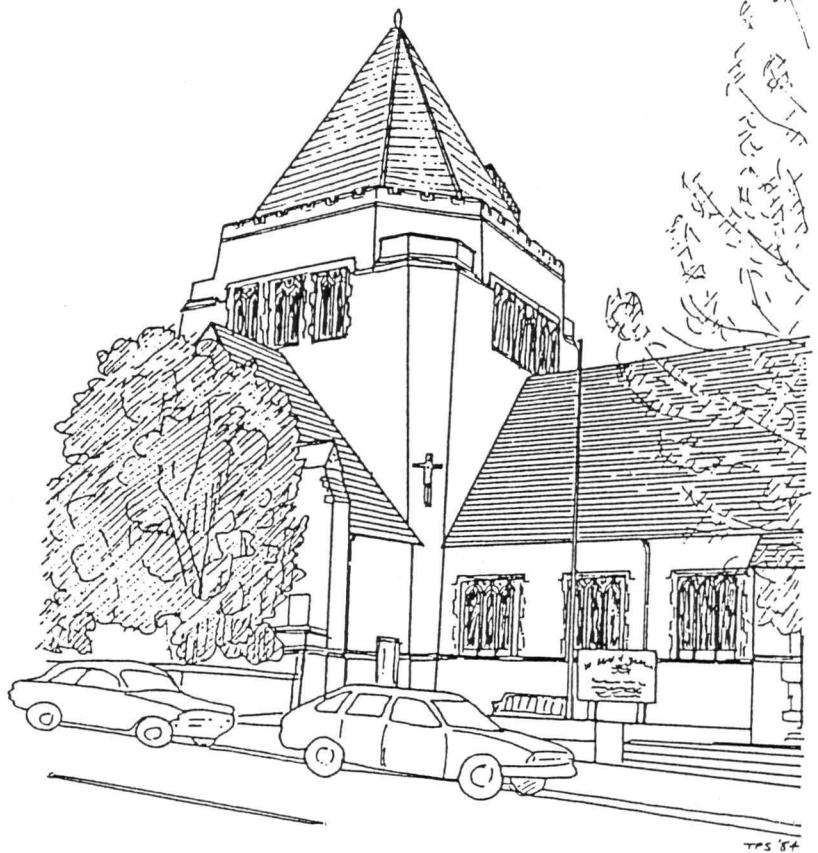


Fig. 5

The tower has a coffered wooden ceiling. The arms of the church, on the other hand, are covered by rafter roofs with two pairs of large side-purlins, those of the nave being quite massive.

At all three buildings the bricks are narrow - of Dutch dimensions - measuring  $8\frac{3}{4}$ -9 by  $4-4\frac{1}{4}$  by  $1\frac{3}{4}$ - $1\frac{7}{8}$  inches (222-228 by 102-108 by 45-48 millimetres).

It is entertaining, and perhaps instructive, to reflect that two of these churches were building at exactly the same time that an influential book, published to coincide with an equally influential exhibition, could unashamedly claim that 'from an aesthetic point of view, brick is undoubtedly less satisfactory than other materials, including stucco.'<sup>4</sup> I shall not bother to offer further comment!

#### Notes and References

1. G.Stamp, 'Giles Gilbert Scott: the Problem of "Modernism"', Architectural Design Profiles, 24, Britain in the Thirties, n.d. but 1980, 72.
2. Cf. A Whittick, European Architecture in the Twentieth Century, Aylesbury, 1974, p.132.
3. C.McKean, Architectural Guide to Cambridge and East Anglia since 1920, London, 1982, p.144.
4. H.-R.Hitchcock and P.Johnson, The International Style, originally published 1932, re-issued with some additional material, New York, 1966, p.52. Cf., from some years earlier, Paul Scheerbart's judgement that 'Glass brings us the new Age / Brick-culture does us nothing but harm;' quoted in R.Banham, Theory and Design in the First Machine Age, new ed. London, 1982, p.266.

Long Melford Church, Suffolk. In Information 34, November 1984, 13-14 I drew attention to three East Anglian churches with fifteenth- or sixteenth-century brickwork which fulfilled a structural function whilst remaining, in original intention, concealed to view. The final paragraph listed other churches which might be worthy of inspection in this respect, including Holy Trinity Church, Long Melford, Suffolk.

Although there has been no structural work to the fabric enabling a detailed inspection of the construction of the walls, an examination of the visible evidence has brought to light some relevant data. Close inspection of the flushwork, especially towards the east end of the south aisle and the south chapel, and throughout the north side of the church, reveals that much brick is used within the fabric. Some of this is repair work of a later date; but some - notably the band of bricks, one course high, along part of the south chapel wall - appears to be primary.

More significant, the north side of the building has plaster which is flaking off, and this shows that at least the east end and the Clopton aisle are both built of 'structural brick', not intended to be seen.

The church is of various late fifteenth-century dates: inscriptions around the outside of the building record the completion of the clerestory in 1481, of the south chapel in 1484, and of the Lady Chapel in 1496.

Incidentally, the floor of the Lady Chapel is in yellow brick lumps of the sort to which I drew attention in Information 36, February 1985, 5. They probably date from restoration work known to have been carried out with monies provided by the Incorporated Church Building Society in 1833; possibly they are even earlier. The church guidebook by C.Sansbury, Holy Trinity Church, Long Melford, 1979, contains good photographs of the Lady Chapel floor, one of them in colour.

David H. Kennett

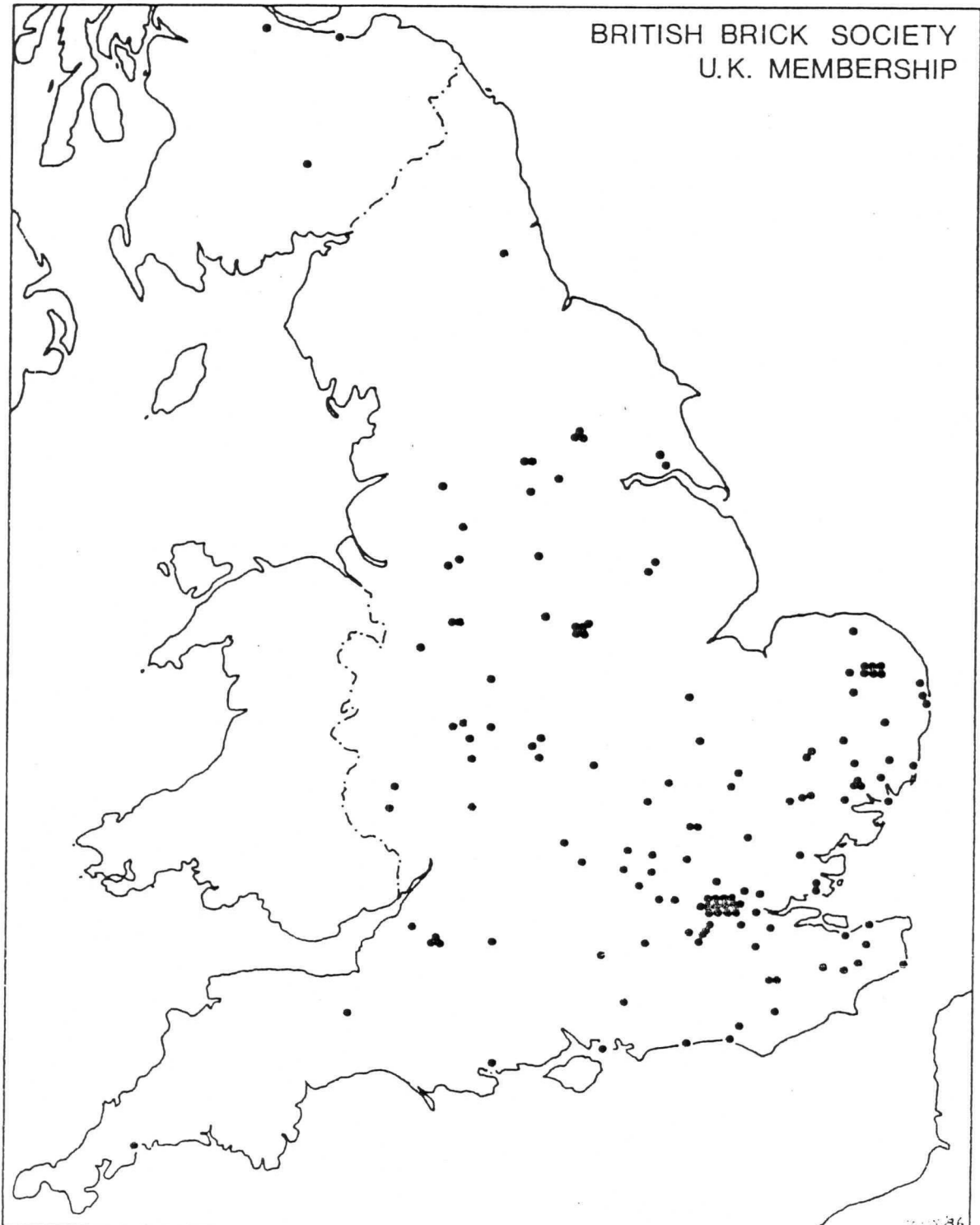
Hiort's Patent Brick Chimneys. In Information 34, November 1984, 10-11 Maurice Exwood drew attention to the manufacture and use of Hiort's Patent Bricks, used for the construction of chimneys. After this had appeared, I came across a reference to these in a back number of Hertfordshire Past and Present. Richard Storey mentions the discovery, by Messrs Sutcliffe and Otley, of a brick of this type at Hope Maltings, Ware, Herts. It measured 9 by 2 $\frac{1}{4}$  by 2- in (228.6 by 69.8 by 54.0 mm.) and was marked 'Hiort Patent'. As Mr Storey mentions, the Patent drawing - reproduced at p.11 of Maurice Exwood's article - shows only wedge-shaped bricks in any detail; he continues: 'the function of the specimen preserved can only be assumed to be that of a filler for gaps not suitable for bricks of normal dimensions. The Hope Maltings were demolished some years ago. The full reference to this brick is: R.Storey, 'Some Additions to the Industrial Archaeology of Hertfordshire', Hertfordshire Past and Present, 11, 1971, 26.

TPS

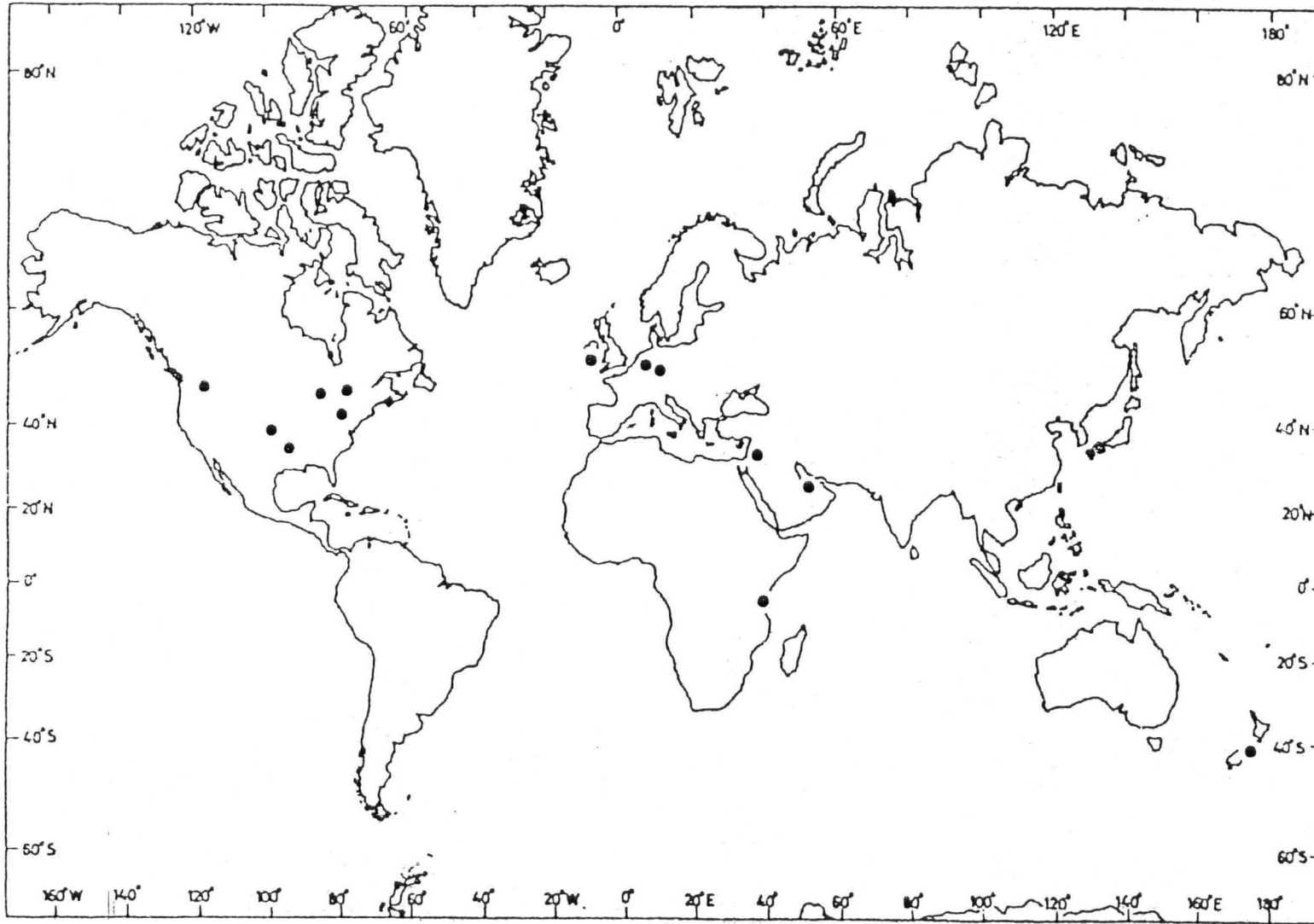
Where We All Are. The last issue of Information was accompanied by a list of members compiled by Michael Hammett. As an interesting exercise - though one of no great significance - it is worth mapping this list to see where our membership is greatest. This is done on the following two pages; two maps were necessary because some of our members live outside the United Kingdom. Within the U.K. itself it is clear that nearly all members come from England. There are three members in Scotland, but none at all in Wales or Northern

Ireland. In England the South-West and the northern shires are not well represented. The South-East, the West Midlands, and East Anglia are most prominent. But there are some odd blanks - much of Lincolnshire, for example. (Incidentally, I have used the published addresses, even where these are clearly work addresses; I know, for example, that one of the London addresses should be Sevenoaks in Kent as a private address; but I have not made any adjustments.)

TPS



BRITISH BRICK SOCIETY: NON-U.K. MEMBERSHIP



## BRICK-MOULDING AND ANIMAL FOOTPRINTS

Martin Hammond

In a previous issue of Information T.P. Smith describes some Dutch bricks with animal footprints and links this to the practice of laying the newly-moulded bricks flat for initial drying; he also mentions Roman and other bricks in this connexion. In this note I consider these matters further, beginning with a description of Roman brickmaking based on some notes prepared some years ago for the late Lawrence Harley.

The accepted method of Roman brickmaking was to spread a layer of clay on an area of ground covered with sand or straw and to divide it into brick sizes or else mould the bricks directly on the ground using a frame-mould. Accounts usually imply that the bricks were left as moulded until dry enough to be fired. When I had cause to make some 9 by 9 inch (23 by 23 cm.) 'pamment' I decided to test this idea. The pamments were individually moulded on the ground using a frame-mould; the ground had been given a good sprinkling of dry sand. Within two hours the top surface had begun to crack in the hot sun, even though in theory the tiles were free to contract. This problem was solved by drying them in the shade. After two days they had stiffened sufficiently for me to stand them on edge propped together in pairs, in the way that roofing tiles are dried at some small works in Mediterranean countries today. They finished drying in 2-3 weeks.

There is a brick in the Rockbourne Roman Villa museum, near Fording-bridge, Hants., said to have been made at Sandleheath, which has the imprint of finger-tips near one edge, caused by someone trying to lift it whilst it was too soft. Before lifting, my tiles were tending to curl at the corners, like stale sandwiches. Lifting them certainly speeded the drying, and also prevented warping and cracking problems. It enabled the drying-ground to be cleared for moulding more tiles, too.

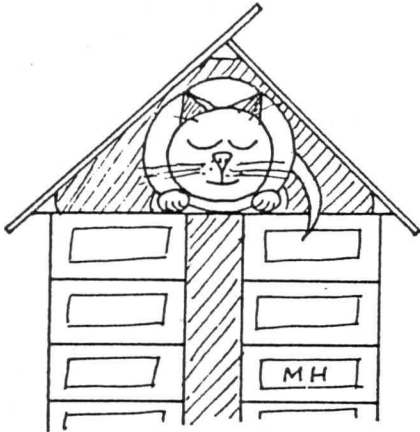
It has been noticed that Roman bricks are hardly ever found over-burnt or underburnt, and yet there must always have been a proportion of such bricks from each firing. Crushed brick was an ingredient of their mortar and it is possible that reject bricks were ground up and used for this purpose.

Concerning later bricks, I have taken another look at the Bible illustration of c.1425. I have used the herringbone and chequer methods of setting for drying bricks. The former is good for quarry tiles, which I sometimes make. Once the first two tiles are set on edge in a T-formation the pattern can be repeated ad infinitum. The chequer-work hack appears to be for a second phase of drying, when the bricks were stiffer. An early photograph reproduced in my Bricks and Brickmaking shows that in the slop+moulding process the bricks were first dried on the flat for a day or two before being set on edge in an ordinary hack. The clay used was rather softer than that used for pallet-moulding and if set on edge immediately the bricks would slump out of shape. In pallet-moulding the bricks are stiff enough to keep their shape as they leave the mould and can be picked up between two pallet-boards and set on edge as close together as possible, one course at a time. When leather hard they were 'skintled', that is set diagonally more like the herringbone method but 10-12 courses high and further apart.

Dutch clays are often wet and silty if dug from riverside locations. The little Dutch bricks in my collection appear to have been dried on the flat initially. The bed-face is quite uneven and the sides are dis-



torted by slumping or careless de-moulding. In developing countries the bricks are sometimes moulded on the ground and remain there until stiff enough to handle. Machine-made 'soft-mud' stock bricks, made in this country now, often using Dutch machinery, are dried flat on perforated metal pallets.



I have seen bricks in my own area of Dorset with cat's paw-marks on the stretcher faces; they are pallet-moulded handmade bricks. And I have known cats to take shelter under the hack-caps, on top of the stack of bricks, as in the accompanying sketch.

#### Notes and References

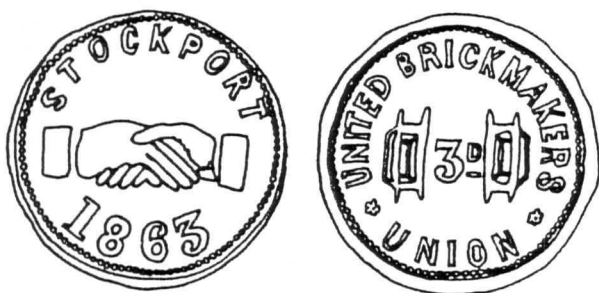
1. T.P.Smith, 'Two Dutch Bricks with Animal Footprints', BBS Information, 37, November 1985, 11.
2. M.Hammond, Bricks and Brickmaking, Shire Album 75, Princes Risborough 1981, p.15 bottom.
3. One such brick is shown on the cover of Hammond, op.cit.
4. See photographs in J.Woodforde, Bricks to Build a House, London 1976, pp.202, 203. (See also the photograph of brickmaking in a Muslim country, showing - in the background - flat-dried bricks and - in the foreground - part-dried bricks re-arranged in what appears to be a sort of herringbone arrangement, in R.Lewcock, 'Architects, Craftsmen and Builders: Materials and Techniques', in G.Michell, ed., Architecture of the Islamic World, London 1978, p.115 centre right. TPS)

Haunchwood Bricks. I am grateful to Messrs. C.H.Blowers, Lyndon F. Cave, Martin Hammond, and A.K.Knox for much helpful information on the Haunchwood Brick that I illustrated in Information 37, November 1985, 20. My conjecture that it may have been used for paving was wrong. The brick - or bricquette - was used for decorative, "Tudor" style fireplaces. Catalogues were produced to show the possibilities, and Mr Blowers was kind enough to send me a copy of the July 1963 edition of the catalogue. Mr A.K.Knox, who was Managing Director of Haunchwood from 1956 to 1965 tells me that they were also frequently used for shop fronts. The firm had three factories, each making different products, including chimney pots, agricultural pipes, blue engineering bricks, and ridge tiles, as well as the bricquettes. The latter were made by hand, with a stock-board which had a steel plate fixed to it with screws; to this was rivetted a cast brass kick with the name on it. The works closed in 1969, when it was bought by Lewis Tileries of Cannock. Mr Hammond visited the works in 1965 and found women employed in making the bricquettes. Mr Cave tells me, amongst much other useful information, that the County Museum in Warwick has quite a lot of information about the firm. I am most grateful for this information. Amongst other things, it shows that the Queries section of Information can serve a useful purpose.

T.P.Smith

## QUERIES

From: Alan Hulme: The accompanying drawing of a token or medallion of the United Brickmakers' Union of Stockport, Cheshire is taken from photographs sent in by Mr Hulme. In turn, these were sent to him, and both Mr Hulme and the original sender would be glad to receive any further information about such tokens, or about the Union itself. Replies to: Alan Hulme, 20 Swan Close, Poynton, Stockport, Cheshire SK12 1HX.



From: T.P.Smith: In the course of a continuing investigation into the use of brick-tiles (mathematical tiles) in Kent, I came across the illustrated example on a house at 25 High Street, Sandwich. The brick-tiles cover the lowest of three storeys on the front face - the only face exposed. The upper storeys are clad with ordinary tile-hanging. The brick-tiles are laid in Flemish Bond with joints of some  $\frac{1}{4}$  in. (7 mm.). A stretcher face measures 9 by  $2\frac{3}{4}$  in. (229 by 70 mm.). Closers are also used. The angles at the short returns are rendered; on the canted bay-window they are mitred. The tiles are in a red fabric, unpainted, and of a very hard texture, unusual for this material. There are also some striations on the faces, running horizontally, so that it looks very much as though they were manufactured by extrusion. They look late nineteenth- or early twentieth-century in date. This late date, and the apparent method of manufacture, are unusual. I know of no other examples in the county. Maurice Exwood has come across tiles of this shape in Helmingham, Suffolk, though he thinks that they are twentieth-century replacements. He believes that the 'Keytoclad' tiles were of this type and that they were extruded. This would put the Sandwich examples in the late 1950s or in the '60s, and I had rather fancied that they were earlier - say, the 1930s, even the '20s. This impression, however, is based on no more than a vague 'feel' and could well be completely wrong. Has anyone further information about them? Replies to: T.P.Smith, The School Flat, Grammar School House, West Hill, Dartford, Kent DA1 2HN.

