MINUTES OF THE ANNUAL GENERAL MEETING OF THE BRITISH BRICK SOCIETY HELD AT THE BLACK COUNTRY MUSEUM AT 11.00 a.m. ON SATURDAY 21st FEBRUARY 1981

Present:

Mr. C.H. Blowers

Mrs. J.A. Costigan (Hon. Sec.)

Mr. M. Hammond Mr. G.R. Hague

Mr. S.A. Holm

Mrs. Los

Mrs. L. Perrings
Mrs. S. Postles
Mrs. A. Roper
Mr. Stamp
Mrs. C. Wilson

and five quests

Apologies:

Mr. and Mrs. Beswick Dr. R.W. Brunskill Mr. M. Bussell Mr. G. Hines Mr. H. Holt

Mr. and Mrs. J.R.C. Howell

Mrs. J. Kirk Mr. N.J. Moore Mr. A.P. Trevor Miss J. Wright

In the absence of the Chairman, Mr. Blowers kindly consented to take the Chair.

1. Minutes

The Minutes of the previous meeting were confirmed.

2. Matters Arising

There were no matters arising.

3. Secretary's Report

The Secretary apologise for not circulating a formal Agenda before the meeting and proposed that the form of agenda of the preceding meeting be adopted. explained that during the year a number of requests to joint the Society had been received and in the earlier part of the year she had passed these to the Treasurer. She had also always written back to the enquirer describing the services the Society offered and telling them to contact the Treasurer direct and giving them the name of their regional recorder. More recently Mrs. M. Laurence had taken on the task of dealing with membership. The Secretary had also received a number of requests for information on specific topics. In several instances she had been able to answer such queries herself but where they concerned areas or subjects which were unfamilar she had sent them on to the Regional Recorder listed in Information. Mrs. Costigan said she was anxious that there should be some clarification of the roles of Officers of the Society and confirmation that regional records were prepared to continue to deal with enquiries. After some discussion it was agreed that Mrs. Costigan should liaise with Mrs. Laurence and Mr. Hines to ensure that a revision of the membership list was carried out and Mr. Blowers agreed to help by contacting Mr. Hines concerning Hon. Members. Mr. Perrins offered to become a Regional Recorder covering the Hertfordshire area.

Treasurer's Report

No Treasurer's Report had been presented to the meeting. It was clear that Miss Fox was finding pressure of work and personal circumstances were making it difficult for her to fulfil her role as Treasurer. The Secretary undertook to investigate the position. (See note following).

5. Election of Officers

It was with great regret and gratitude for all his hard work in the past that the Committee had received the resignation of the Chairman, Mr. N.J. Moore. Nominations had been requested and Dr. H. Crawford had nominated Mr. T. Tatton-Brown, who had kindly agreed to stand. The nomination was seconded by Mrs. Suella Postles and as no other nominations were received Mr. Tatton-Brown was deemed to be elected unanimously. Mrs. Costigan was re-elected as Secretary as no other nominations had been received. The question of the election of Treasurer was deferred.

6. Any Other Business

Mr. Martin Hammond informed the Society of the death of Mr. D. Young of Broadmayne and great regret was expressed at the death of someone who had done so much to further research into brickmaking.

The possibility of Regional meetings was raised by S. Holm and the feeling of the meeting was that these might be a very successful way of fostering contact and exchange of information between members. It was felt that the responsibility for organising such meetings should rest with the Regional Recorder for each region.

Mrs. Catherine Wilson thought it most important that Brick Society members should be kept informed of relevant meetings organised by other bodies. Members were therefore urged to keep Mrs. Los informed so that information of this kind could be included in the Newsletter.

The attention of members was drawn to the work of Ms. Alison Roper in assembling the Brick Bibliography and they were invited to inspect this during lunch.

Date of next meeting

An offer had been received from Geoffrey Hines to arrange the next A.G.M. at Layer Marney, the home of Major Charrington. This news was received with enthusiasm. Some members thought that a date slightly later in the year might make travelling easier and the date was provisionally fixed as 27th March 1982. (This date has now been confirmed).

Note of Treasurer's Report

Since the A.G.M. in February, Miss Fox has resigned as Treasurer. Pressure of work and other commitments has made it impossible for her to continue and the Committee are grateful for her efforts during 1980/81. Mr. Martin Hammond of St. Anne's, 13 Jackson Road, Parkstone, Poole, Dorset has agreed to act as Treasurer and has therefore been co-opted in this role until his Treasurership can be confirmed at the next A.G.M. in March 1982. We are most grateful for his generosity in agreeing to help the Society in this way.

AUGUST 1981 J.A. COSTIGAN

£28.24

£1.24

OFFICERS OF THE SOCIETY 1981 - 1982

The Brick Section of the B.A.A.

Chairman Anthony Tatton-Brown 2 Mill Lane, St. Redigurds, CANTERBURY

Deputy Chmn. J.E. Tye, MBE, FCIS. The Brick Development Association, Woodside House,

Winkfield, WINDSOR, SL4 2DX

Hon. Sec. Michael Hammett 9 Bailey Close, Lucas Road, HIGH WYCOMBE

(He is already a member of the Victorian Society) 0494-20299

The British Brick Society

Chairman A. Tatton-Brown as above

Hon. Sec. Mrs. J.A. Costigan Avoncroft Museum of Buildings, Stoke Prior,

BROMSGROVE, B6O 4JR 0527-31363

Membership Mrs. M.W.F. Laurence 44 Lyncombe Hill, BATH, Avon, BA2 4PH

Sec. (who also receives all direct subscriptions £1.00 p.a.)

Hon. Tr. Mr. M.D.P. Hammond 13 Jackson Road, Parkstone, Poole, Dorset

(only matters concerning the annual a/cs and expenses etc.)

Editor Mrs. W.A. Los "Peran", Plaxton Bridge, Woodmansey, BEVERLEY,

E. Yorks, HU17 ORT

Archivist Mrs. A. Roper Archivist: Lucas Industries Ltd., Gp. Archive

(nee Cleal) & Mus. (A.5) Gt. King Street, BIRMINGHAM, B19 2XF

Publications Mrs. R. Preece 29 Princess Close, Mossley, ASHTON-UNDER-LYNE,

Officer Lancs. Ml3 9PL

(also @ M/C Museum Uy. of M/C)

Registrar W.R. Serjeant County Hall, St. Helen's Street, IPSWICH,

IP4 2JS

BRITISH BRICK SOCIETY - ACCOUNTS FOR THE PERIOD: 26th AUGUST - 31st DECEMBER 1980 at NWB Longton, Staffs, excluding balances held at Nottingham.

£28.24

Represented by overdraft in current a/c @ NWB Longton, Staffs.

ACCOUNTS FOR THE PERIOD 1st JANUARY - 15th JUNE 1981 excluding Deposit balance (only) and any accrued income held at Nottingham.

Expenditure		Income
Post/Tel	18.78	Subscriptions 48.00
Bank Charges	0.51	Transfer of balance* 72.03
		Credit from Nottingham** 1.00
	19.29	
Excess of income	101.94	
	£121.23	£121.23

- * Current balance with Barclays Bank Nottingham as shown in 1979 accounts £79.34 less encashment of outstanding cheque also shown therein being £7.31.
- ** This credit is possibly due to an uncancelled Standing Order.

Represented by: Cash in current account (as per statement) at NWB Longton: £100.70.

ADD overdraft £1.24. £101.94 being excess of income to date.

BALANCE SHEET

It is not possible to state either the assets or the liabilities until the following details are known for both the year 1980 and the period 1st January to date in 1981:

Any undisclosed cash in current account at Barclays Nottingham (Market Square) subsequent to 6th January 1981 when the transfer of the balance as it then was in that account to NWB Longton, was made; and the June and December interest on the deposit of £159.64 (as at 31st December 1979) with Barclays Nottingham, together with the June interest on the accrued deposit for 1980.

It is proposed that when the mandate for transfer of the Society's accounts to NWB, Poole, Dorset has been executed, the accrued deposit and any further payments into the current account with Barclays, Nottingham will be transferred direct to the new Deposit account at Poole.

With effect from the mandate being executed, the Subscriptions Secretary will remit any subscriptions received to NWB, Poole.

The transfer of the Society's accounts from Barclays Bank, Nottingham to NWB, Longton (Staffs) was only effected (for the current account) on 6th January 1981; that of the Deposit account not having been made until after the resignation of Miss Fox, has been done direct from Nottingham to the Poole (Dorset) branch of NWB where the Society's account is now kept in order to convenience the Treasurer elect.

The above statements of account reflect this unusual situation.

ANNUAL GENERAL MEETINGS: SATURDAY 27th MARCH 1982 BBS AND BRICK SECTION B.A.A.

Both AGMs will be held, by kind invitation of founder-member Major Gerald Charrington, at LAYER MARNEY TOWER. (NGR 928173). All refs. are to "Colchester Sheet 149" of OS 1" 1953-4 Edn. "Op." = optional.

- 1045 op. Coffee available at "The Angel" (1554 AD) HECKFORDBRIDGE (NGR 946218), eight minutes drive from The Tower where, upon arrival, please park in forecourt, then assemble in the brick-built church of St. Mary the Virgin (c. 1520 AD).
- 1110 Our host collects us at the Church for a tour of the house.
- 1145 1245 AGMs held in the house. Agenda in Information 26.
- 1300 op. If requiring luncheon kindly bespeak it <u>personally</u> and by not later than Monday 22nd March 1982, to Mrs. Rose Yarnell, The Angel Inn, Heckfordbridge, Birch, Colchester, CO3 5SP. Tel: 0206-330225.

Excursion:

- 1400 Cars leave pub. by two miles of lanes to St. Michael & All Angels, COPFORD c. 1125 50 (NGR 936227). Pevsner dates its re-used Roman brick to: "not later than 1300".
- Six miles via old A.12 crossing dual-carriageway at Marks Tey by A.120 to COGGESHALL for the Abbey c.1160 and St. Nicholas' Chapel, 1223, by kind permission of Mr. & Mrs. R.M. Brew.

Members intending to travel by train to Colchester please contact Geoffrey Hines (51 Marlborough Road, Ipswich, IP4 5BA, Tel: 0473-77116). He is recruiting volunteers to ferry them throughout the day. Both the UP and DOWN lines offer convenient arrival and departure times.* Requests cannot be met after 18th April (Easter Saturday).

Car owners will, we hope, offer lifts to neighbouring members.

From the North quit A.12 at Colchester. Take B.1022 signposted Maldon. Heckfordbridge is 4 miles SW from town centre on this road.

From the South quit A.12 at Kelvedon. Take B.1023 towards Tiptree and, in 2 miles fork left for Birch joining A 1023 (northeastwards) in half a mile. The Layer Marney turn comes in 2 miles at Smyth's Green and The Angel is $2\frac{1}{2}$ miles further along this road.

* Times of trains, name of host and number of car notified individually.

BOOKS

1. Guide books may be obtained in advance as under:

Layer Marney Tower. 17pp illus. 30p send min. weight postage & 8½ x 6 in cover St. Mary the Virgin 4pp 20p but NO MONEY - pay on arrival.

from Major G. Charrington, Layer Marney, Colchester, CO5 9US.

St. Michael & All Angels. 8pp illus. 10p plus min. weight postage and $7\frac{1}{2} \times 5\frac{1}{2}$ in. cover from The Rev. L. Middleton, The Rectory, Copford Green, Colchester, CO6 1DB.

2. BRICKS AND BRICK MAKING

Martin Hammond, beknown to many BBS members for his studies of brickworks and brick kilns, has produced what is likely to become the authoritative history of brickmaking for many years.

Shire Album No. 72, 'Bricks and Brickmaking' (1981) costs 95p. ex-shop, and for 30p extra direct from Shire Publications Ltd., Cromwell House, Church Street, Princes Risborough, Bucks, HP17 9AJ.

It is a comprehensive and compact account of the whole craft. The 32 pages contain 40 photographs, splendidly selected to evoke the essence of the action. Some of the 22 line drawings have been drawn by the author who is a professional architect. The text derives from careful research. It leads us, stage by stage, through the making of bricks and delineates the history of each stage to include the latest innovations. There are passages on Calcium Silicate brickmaking; transport; 'The Brick Itself', and'The Geology of Brickearths' - in tabulated form. This last has a - mainly typographical - error. The Cenzoic Era is not named but its Tertiary and Quaternary Periods are printed as if, also, they were 'Eras'. Again, within them, the respective Eocene, Pleistocene and Holocene Divisions are misprinted as if they were 'Periods' in their own right. Howsoever, geologists dispute these terms among themselves!

Kilns and firing, Hammond's speciality, occupy a quarter of the book. He has chosen the technical term for process or tool most commonly in use. There has been, alas, no space for the rich local variations of these words, an omission which points to the need for someone to undertake the Johnsonian job of compiling an authoritative glossary of brick. Vb. sap.!

Personally speaking, I found that the book 'glowed like a Fletton' when I took it with me on a visit to a site. It opened my eyes to much.

AUGUST 1981 G.C. HINES

3. OXFORDSHIRE BRICKMAKERS

Eight investigators collected the material of whom three wrote the book. This method has enabled each one to research archive material and study the brickyards and brick buildings of the county without becoming defeated by the wealth of detail. The book owes its vividness to this reliance upon first sources, fitting selection and arrangement and, finally, a readable style. When the authors assess information they are critical without being pedantic. In that perilous part in any such book when we are given a 'generalized' account of mediaeval brickwork, most of the snags are avoided. Nevertheless it may be incautious to date the nave arches of St. Mary's Polstead (Suffolk) to "about 1160". Their bricks may be so but the arches, while retaining a romanesque form, make more sense - in terms of brickwork, setting, mortar-widths and so on - as part of a major reconstruction which happened in the 14th century and probably a little before the Black Death (1348-9: first occurrence). It is good to see the revised date for Little Wenham Hall, namely, 1275.

The ten pages which follow present the county's more notable brick buildings. The archives first witness an early 14th Century use of tiles. There follows Shirburn Castle (cren. lic. 1377) and Stonor House (lic.cren. 1416-17) and so onwards to 1825. BBS and BAA members who attended John Stean's lecture, last March, should value the epitome of it here.

When reviewing (Infm. 22, pp. 7-8) the comparable 'Oxfordshire History and Gazetteer', I had occasion to deplore the absence of any geological description to preceed the section on brickmaking. Here we are given a geological map and some 600 words of text. This is how every book on localised brickmaking should open. How else?! This preceeds $7\frac{1}{2}$ pages about processes from digging to firing. It is a pity that more emphasis had not been given to the colloquial terms used to name the operators, what they did and the tools they used; there is such a rich variety, for example - Hack, Hacke and Hale. We need a Dr. Samuel Johnson to compile a comprehensive glossary of brickmaking terms.

The main portion of the book falls between these sections about buildings and processes. This consists of ten pages on Brickmakers and Brickworks. It has not been intended to

include a Gazetteer. It is here that readers will appreciate the painstaking use of archive material drawn from the Bodlean Library; the County Library and Archive; the Record Offices of Oxfordshire and Berkshire and records of such great estates as Queens College and Stonor. Dusty work! But the dust does not show.

32 photographs, 3 maps and 23 line drawings fit the text to take us easily to the reality of whatever is being portrayed. There is a comprehensive index and brief bibliography. At £1.20 plus 15p pack/post (from: Oxfordshire County Museum, Woodstock, OX7 lSN) this 34pp work is a bargain which, like its Bedfordshire precursor, indicates the whole story of brick through the window of one county. Members from Hull and Suffolk will, for example, be fascinated when they read of the Oxfordshire de la Pole connection - that family deserves an independant monograph.

JULY 1981 G.C. HINES

4. SOMERSET BRICK

Included in the third issue of the Somerset Industrial Archaeological Society's journal are four items of interest to BBS members. There are articles on Taunton brickyards, a Somerset brickmaker's contract of 1680 and a further list of Bath bricks. In addition there is an account of an 18th century glasshouse which was later converted to fire brickyard goods.

Printed offset-litho; 44pp.; 29 illus.; price £2.50, post free; cheques "SIAS" from B.J. Murless, 46 Holway Avenue, Taunton, Somerset, TAl 3AR.

DULLAS BAY BRICKWORKS (Anglesey - Gwynedd)

The map of "Industries" on page 88 of Melville Richards' "An Atlas of Anglesey" marks five brickworks, including Porthwen which was described on page 5 of Information 16 (Nov. 1978). And now I have found a sixth, simply because a new Tourist Map of the island has repaired Richards' omission.

The site is on the SW shore of Dullas Bay in the parish of Llanwenllnyfo. One arrives by way of the A5025 Amlwch - Benliech road turning NE at the crossroads in Llaneuddog, about 4 miles from Amlwch. Half a mile of narrow lane terminates in a neglected stone causeway which also forms a quay, one relic of the old brickworks. The other is a large rectangular pool on the left of the lane as you approach the causeway. This was once the claypit. Everything points to a pocket of alluvial clay created by the Afon Goch where it enters the bay.

The last cottage before this pool is 'Ty Brick'. The owner, a Miss Abson, was out when I called but it looks as if any remains of the site would be on her property - shown on the new (metric) OS map of Anglesey NGR 474881. The works are said to have closed 'over fifty years ago' and bricks found in their neighbourhood are 'badly made with inclusions of over 2" pebbles' - this from another resident.

The far (SE) side of the bay rises to over 100 feet in a steep, wooded hillside produced by Anglesey's sole slither of Old Red Sandstone. Few folk appear to have found it. Like Porthwen it is an enchanting place where Common Tern and Blackheaded Gull fish the water while Oystercatchers and Ringed Plover prod the sand.

I hope to revisit it in 1982. Meanwhile, if other members can forestall me and search the site I hope that their findings may appear here.

JULY 1981 G.C. HINES

THE BRICK TAX AND LARGE BRICKS

The article by Mr. Maurice Exwood in Information 24 lost some meaning during typing. A corrected photocopy of the original article is supplied with this issue. I am sorry for any problems this has caused.

CROWBOROUGH WORKS

Re the article in Information 23. The mixing of fuel in the form of coke breeze, anthracite dust or town ash is almost universal practice in south east England whether the bricks are fired in clamps or in any type of kiln.

The Aberson soft moulding machine is of Dutch manufacture, by Joh's Aberson, of Olst, established 1847.

The kilns are interesting. There is an oval Hoffmann kiln of 1890, later extended from 12 to 16 chambers, apparently by the builders of the Sercombe kiln - the brickwork is similar. The Sercombe kiln is one of only two I know of: the other is at Norton, Worcestershire, near Junction 7 on the M5 motorway. It is similar to the Hoffmann, but has branch flues in the chamber arch for the removal of steam in the first stage of firing, and two outlets per chamber at low level for waste gases, all connected to the main chimney flue.

I have surveyed the Belgian kiln. A photograph of this soon after completion appears as fig. 287 on page 448 of the 1956 edition of A.B. Searle's "Modern Brickmaking". Although captioned Staffordshire kiln it is definately a Belgian, designed in the London office of the Viennese engineer Alphons Custodis. The change to gas took place in 1975. The bricks were packed close together in the kiln for firing and the dark colour results from the reducing conditions. Where exposed to excess air the bricks come out an insipid flesh pink. "CROWBOROUGH ASHDOWN" bricks of similar colour are now made at the new Ashdown works near Bexhill-on-Sea. This highly automated works using an Aberson machine and a Butterley K7 continuous kiln opened in 1979.

APRIL 1981 M.D.P. HAMMOND

STANLEY BROTHERS, NUNEATON

According to Jewitts Ceramic Art of Great Britain 1878 reprinted 1971 the works were established about 1830 by P.W. Williams upon the site of a very old pot works, but of which no record exists. At first there were two distinct works - one worked by the eldest son John Williams, who sold it to his three brothers Peter, Charles and James, by whom it was carried on under the style of "Caroline Williams". It afterwards passed by purchase into the hands of J. Rawlins, and was taken over by Messrs. Broadbent and Stanley Brothers, by whom it was considerably extended. The other works was carried on by Walter Handley at whose death it passed to his son-in-law, David Wheway, at whose death it was incorporated with the first works and carried on jointly by Broadbent and Stanley Brothers. In 1871 Mr. Broadbent retired from the concern.

The goods included terra-cotta vases, chimney pots, coloured paving tiles for geometric designs, garden edging, ornamental ridging, ornamental and plain building bricks and sanitary pipes. The marls from which the various goods were made on the ground worked by the firm, comprise about 20 different measures of diverse colours and qualities. The works occupy nearly 10 acres of ground. (G. Godden revised version has added that Stanley Brothers continue to the present day, i.e. 1972).

JANUARY 1981 J.M. HOWELL

BRICKWORKS VISIT WANLIN - ARDENNES - MEUSE - BELGIUM

This works is now owned by the Nouvelle Société d'Hennuyéres et Wanlin, a subsidiary of Ibstock Building Products, formed in 1977. It produces very hard solid wire cut facings from Devonian shale.

A contractor digs the clay by tractor-mounted shovel and builds a stockpile, adding clay from different seams in thin layers. Clay is dug vertically from the stockpile to ensure a fair mix of these layers, and fed onto a conveyor belt which supplies the pan mill. The clay fires naturally a deep red, but for brown bricks small quantities of manganese dioxide are added at this stage. From the pan mill, where a small amount of water is added the ground clay passes through a de-airing pug mill and extruder. The top and sides of the clay column are "rusticated" with wires as it emerges, and the bricks are chopped off individually by a single wire and set ten at a time on a pair of laths and pushed sideways onto a hoist which takes them to the dryers. These are of the chamber type, on the upper floors of a large building with the two Hoffmann kilns on the ground floor. The bricks are set and drawn from opposite ends of the dryers by finger-cars which can lift 6 laths (i.e. 60 bricks) at a time. The fingercars are electrically driven from overhead wires and are mounted on transfer cars in order to negotiate the right-angled turn into the dryers. A heat-exchanger and fan, supplied with steam from an oil-fired Lancashire boiler provide most of the heat for drying though a certain amount comes from the kilns below.

When dry, the bricks, still on the laths, are taken and placed on another hoist which takes them to the ground level. They are wheeled on a large trolley into the kilns, where setting and drawing is done by hand. The kilns are identical - each has 26 chambers - the arch is 11' 6" wide and 8' high. There are rows of four feed-holes at 3' 4" centres. Firing is with coal by automatic stokers. Slack coal from the Limbourg region, 1" dust is first crushed and sifted to remove the larger lumps, - \frac{3}{6}" is an ideal size - then spread over the top of the cooling chambers to dry out before being shovelled up into the hoppers of the stokers. These are portable and fit over individual feed-holes, and worked by stout wires hooked to long rods moved back and forth by a small electric motor. Shrinkage is tested by a graduated rod thrust through small spy-holes on the arch. As the stack of bricks shrinks, so the reading changes, and is compared with a reading taken at the start of the firing - the total is 4 to 6 inches.

After the firing the bricks are drawn from the kiln by hand, sorted and stacked on pallets for despatch.

The present works dates from 1922. In 1920 it was taken over by the Tuileries du Progres, of Hennuyéres, then one of the largest brick and tile manufacturers in Belgium. It is hoped to publish a full report on that firm later. Suffice to say that it is the home of the Belgian continuous kiln, and four of the original kilns still exist, though somewhat altered inside; two are still used for firing bricks.

APRIL 1981 M.D.P. HAMMOND

CHARFIELD BLOCK TILE AND BRICK WORKS PART ONE

The following article was forwarded to me by one of the authors Owen Ward. As I felt members would be most interested in the article itself and as a fine example for their own work I asked if we could use it in Information. Permission was given by Owen Ward and Will Harris the authors of the article and by the BIAS who published it in their Journal 13 1980 and our thanks go to all concerned.

The Companies and the Setting

In its heyday the Charfield works was proud of its modern 'mass production' system of

qualities are advantageous.

a cavity block which, because of its relative lightness and large size, was a cheaper alternative to conventional brick. It was appreciated by large public organisations anxious to build quickly and cheaply and was often used in situations demanding considerable load-bearing strength. Had there been a supply of more reliable raw material the works might now be meeting a renewed demand for blocks to complete the

walls of concrete and steel framed structures where their insulating and soundproofing

The Phormium Cavity Block Company began work on the construction of the site at Charfield (ST 722926) in 1928 and the first kiln was fired in September 1929. We are not aware of clay being dug from the site of the pit prior to this but bricks and tiles for the vernacular buildings of the area must presumably have been burnt in clamps or temporary kilns, using locally dug clay. The existence of works making conventional bricks at Wotton-under-Edge, two or three miles to the north-east, is recorded, and hand-made brick is still referred to locally as "Wotton brick". The brickfield (ST 927758) lies on the south bank of the stream 200 m below Hack Hill. Cursory observation of local vernacular buildings suggests that building with hand-made brick ceased in the third quarter of the 19th Century. Moreover, buildings where manufactured brick was used appear to date from this time. Brunel in the construction of the Bristol and Gloucester Railway (1844) used local materials in the many of the bridges on the line, including pennant sandstone at Mangotsfield and carboniferous limestone at Wickwar. Charfield bridge is in hand-made brick as are most of the station buildings. Conversely, the bridges on either side at Wickwar and Huntingford are in carboniferous limestone.

In 1932 the Phormium plant at Charfield was purchased by the Great Western Brick and Tile Company (of whom nothing else is at present known) who in turn sold to G.H. Downing and Company in 1933-34. We understand the George Downing had been engaged in the manufacture of clay tiles before the First World War, but after 1918 became progressively more involved in the manufacture of tiles and it is said that he was the instigator of the mass production of tiles to counter the heavy imports of tiles from Belgium and France in the early twenties. Initially he had several individual companies either solely owned or in partnership with other people until, in 1933, all were put together on the open market to form G.H. Downing and Co. (1933) Ltd. In the next few years he bought two or three other companies to make Downings by far the largest clay-tile manufacturer in the country, if not the world, at that time. Charfield works was acquired by Downing because it was at that time probably the most efficient and cost effective clay tile work in the country. Mr. Downing died in 1937 at the age of 70 and the management of the company passed at the beginning of 1938 to Mr. A. Hartley who had been manager at Charfield when Downings originally bought it and had left the plant shortly after its acquisition by Downing.

The works were sited on the eastern side of the Bristol-to-Gloucester Railway some 500 m north of Charfield Station. A siding was laid, from the down-road refuge siding, to deliver coal for the boiler and the kilns and also to despatch products. The clay pit lies on the other side of the track some 600 m to the west, set in the bank of Underhill Wood. Of a red marl, similar to Keuper Marl, the pit is some 3-4 acres in extent, with a pool in one corner. Although at a higher level than the works, the pit was connected to it by an overhead ropeway rather than a tramway, presumably because of the railway. One of the bases for the trestles or standards remains as does the terminal bay at the pit.

Bryant Homes Ltd. who purchased the site from G.H. Downing and Co. after 1973 subsequently obtained planning permission, following an appeal to the Department of the Environment, to erect 79 houses. The site was cleared during March/May 1979 and the shed over the kiln was sold. It has recently been re-erected at Hill House Farm, Charfield. One other shed was also sold and all that now remains is the approach road to the siding.

The Products

The first company on the site was the Phormium Cavity Block Co. which was established on open fields in 1928. A 'puff' of 1932 (in the 'Industrial World') describes their products as lightweight hollow blocks for walls and floors. The works had a capacity of at least 6,000 blocks per day, together with a few 'Cotswold-grey hand-made sand-faced tiles and machine-made Red Broseley Pattern Roofing Tiles, a certain proportion being finished by hand to meet architects' special requirements'. Photographs published in 1932 show a block about 10 inches square and 4 inches thick with two hollows and walls about an inch or more thick but the standard sizes of cavity block 'ranges from 12 ins x 9 ins x 2 ins to 12 ins x 9 ins x 9 ins, while a series of gabled blocks, stop ends and other decorative forms are available. The finish can be rough or smooth, while a combination of smooth on one side and rough on the other is manufactured. In addition to these standard walling types, flooring blocks are made, and of these there are two kinds.

TO BE CONTINUED

ITALIAN PERFORATED BRICK

This was found on an airfield in Sardinia, adopted by No. 41 Squadron, Coltishall, and given the name "Luigi". In Germany in 1979 it was made a Pilot Officer and married to a local German brick called "Eva". It has flown in 29 different aircraft, including Concorde, and now awaiting a flight in a hot air balloon.

(From Eastern Daily Press spotted by member M.G. Reeder).

ENQUIRIES

Perforated Tiles

Can anyone tell me the dates when perforated tiles for kiln floors with "Stanley Bros Nuneaton Patent" impressed on the side were made? There are a lot of these stacked in an out-house at Preston Mill, East Linton, East Lothian. Identical ones have turned up in the garden of a house in Bodenham, Herefordshire where a malthouse existed in 1808. The malt house was pulled down in 1830. Replies please to Mrs. A.D. Brian, Bodenham Hall East, Bodenham, Herefordshire.

Russian Brickmaking

If anyone has any details of this topic would they please contact T.L. Dilliplane, 619 Warehouse Dr., Suite 210, Anchorage, Alaska 99501.

Layer Marney

Edward Gripper was a farmer from Layer Marney who came to Nottingham in 1854 and took over Mapperley Top Yard. With his partner William Burgass, a Nottingham coal merchant, he founded the Nottingham Patent Brick Company (now known as the Nottingham Brick Company) in 1866, and obtained the sole rights to build Hoffmann Kilns - the first went into production on 12th May 1868. He subsequently became Lord Mayor of Nottingham. Can any local members supply any further details re the connections in Layer Marney for the AGM?

M.D.P. HAMMOND

Duffield I.J.

If any one has any details of bricks stamped "DUFFIELD" or "I.J." will they please forward the details to John Sheldon, 9 Gloucester Avenue, Nuthall, Nottingham, NG16 1AH.

EDITORIAL

All items for INFORMATION 26 should reach me by 3rd January 1982, at "Peran", 30 Plaxton Bridge, Woodmansey, Beverley, East Yorkshire. The thanks of the Society along with our best wishes for Christmas and the New Year go to the staff of the BDA concerned with this production.

PLEASE HELP!

Have we lost contact with some members? Attached to Information 23 was a note regarding the review of our membership list and pointing out that it would be brought up to date following payment of the then due subscriptions. The "reviewed" list seems to reveal that several former members have withdrawn from the Society. However, it seems that some members are "Life Members" or "Honorary Members" and as such do not pay annual subscriptions, and in their case they may not be receiving the Society's mailing now.

Please, can you help? If you correspond or meet fellow members would you please ask if they have received "Information 25". If not, please will they contact Mrs. Karen Galpin at the BDA so that the mailing list is truly complete.

THE BRICK TAX AND LARGE BRICKS

When in December 1783 William Pitt the younger, became Chancellor of the Exchequer (for the second time at the age of 24) and Prime Minister, he was probably aware of the parlous state of the country's finances in consequence of the American War of Independence. So in his first budget the following June he found it necessary to increase some taxes and introduce new ones on such things as felt hats, ribbons, saddle horses and bricks and tiles.

The Act introducing an excise duty on bricks and tiles (24 George III c24) came into force on 1st September 1784, and the duty on bricks was not repealed until 17th May 1850 (13 and 14 Victoria c9). In the intervening period the legislation on the tax was changed no less than 14 times. Many of these changes were concerned with the definition of the type of tile to be used for field drainage, which were exempted from 1794 onwards, if used for that purpose, but that is another story. For Students of Bricks the important Acts are:-

1784	24 George III c24	Introduces duty on bricks at 2s 6d per 1000
1794	34 George III cl5	Increases duty on bricks to 4s per 1000
1797	37 George III cl4	Increases duty on bricks to 5s per 1000
1803	43 George III c69	Introduces size bar: bricks over 10" x 5" x 3" charged double duty
1805	45 George III c30	Increases duty on normal bricks to 5s 10d per 1000
1839	2&3 Victoria c24	Size bar changed to 150 cubic inches
1850	13 and 14 Victoria c9	Repeals all duties on bricks

Since the duty was levied per 1000 bricks, irrespective of size it soon led to increases in brick size. Ironically Parliament had found it necessary only 7 years earlier to legislate against small bricks by laying down the minimum size of bricks (and pantiles) in "An Act preventing abuses in the making and vending of bricks and tiles" (17 George III c42, 1777 - The "Chronological table of Statutes" gives the year as 1776, but the version of the Act in "Statutes at Large" gives the date of coming into force as 1st July 1777). This Act laid down minimum sizes of burnt bricks as $8\frac{1}{2}$ " long, $2\frac{1}{2}$ " thick and 4" wide. (This is the only Act I know of for controlling the size of bricks applicable to the whole of England; there are earlier Acts which control the size in the London area.)

In May 1794 the Commissioners of Excise (who were responsible for the collection of the duty) warned the Treasury about brick makers in Nottingham who ".... in order as much as possible to evade the duty are preparing to make their bricks of an extraordinary size.... whereby the revenue might be considerably diminished".

The Treasury is reminded of the matter three times, but not until July 1803 is the law changed so that bricks not exceeding "ten inches long, three inches thick and five inches wide" pay the normal duty of 5s per 1000, but bricks "exceeding any one of these dimensions " are charged at los per 1000. So a brick say $10\frac{1}{2}$ " x 4" x $2\frac{1}{2}$ " (105 cubic inches) would pay the higher duty. Bricks were assessed for the tax between the moulding stage and the removal to the kiln for burning so since shrinkage by drying (after having been assessed) and burning may be 10% or more, the final brick may be less than 10" x 3" x 5" and yet have paid double duty.

Nathaniel Lloyd's "English Brickwork" incorrectly states the 1803 size bar as 150 cubic inches, an error followed by several authors after him. The size bar was not changed to this format until 1839, three years after the Commission of Excise Inquiry had argued about the inconvenience of the then current size bar.

Several authors have erroneously assumed that the 1803 Act meant the end of the large brick, and that any large brick can thus be dated to the period 1784 - 1803. But it is not as simple as that. The duty on bricks above the size bar was never more than double the standard rate. Bricks 18" x 6" x 9" to be seen near Kidderminster (are these Wilke's Gobs?) each take the place of eight conventional bricks, but a thousand of these paid a duty of 10 shillings whilst the 8000 conventional bricks needed for the same volume of brickwork paid 40 shillings. So considerable tax savings continued after 1803 by using these large bricks. The "great bricks" referred to by Neve in his "City and County Purchaser" in 1723, as used for garden walls, measured 12" x 3" x 6" and were still apparently made to the same size for the same purpose in 1819 according to Peter Nicholson's "Dictionary of Architecture". Tax wise these were still an economic proposition after 1803.

We have statistics for the four years 1833 - 1836 when 4561 million common bricks paid tax and in addition nearly 12 million large bricks or 0.26%. So 30 years after the introduction of the size bar, manufacture of large bricks continued. What we need is more information on datable large bricks before we can draw conclusions on the effect of the various phases of brick tax on the size of bricks.

November 1980 MAURICE EXWOOD

The author would welcome any information on large bricks used in any part of the country, where possible with the date of structure. All replies please to M. Exwood, 64 The Green, Ewell, Epsom, Surrey KT17 3JJ

Based on British Brick Society information bulletin No.24.