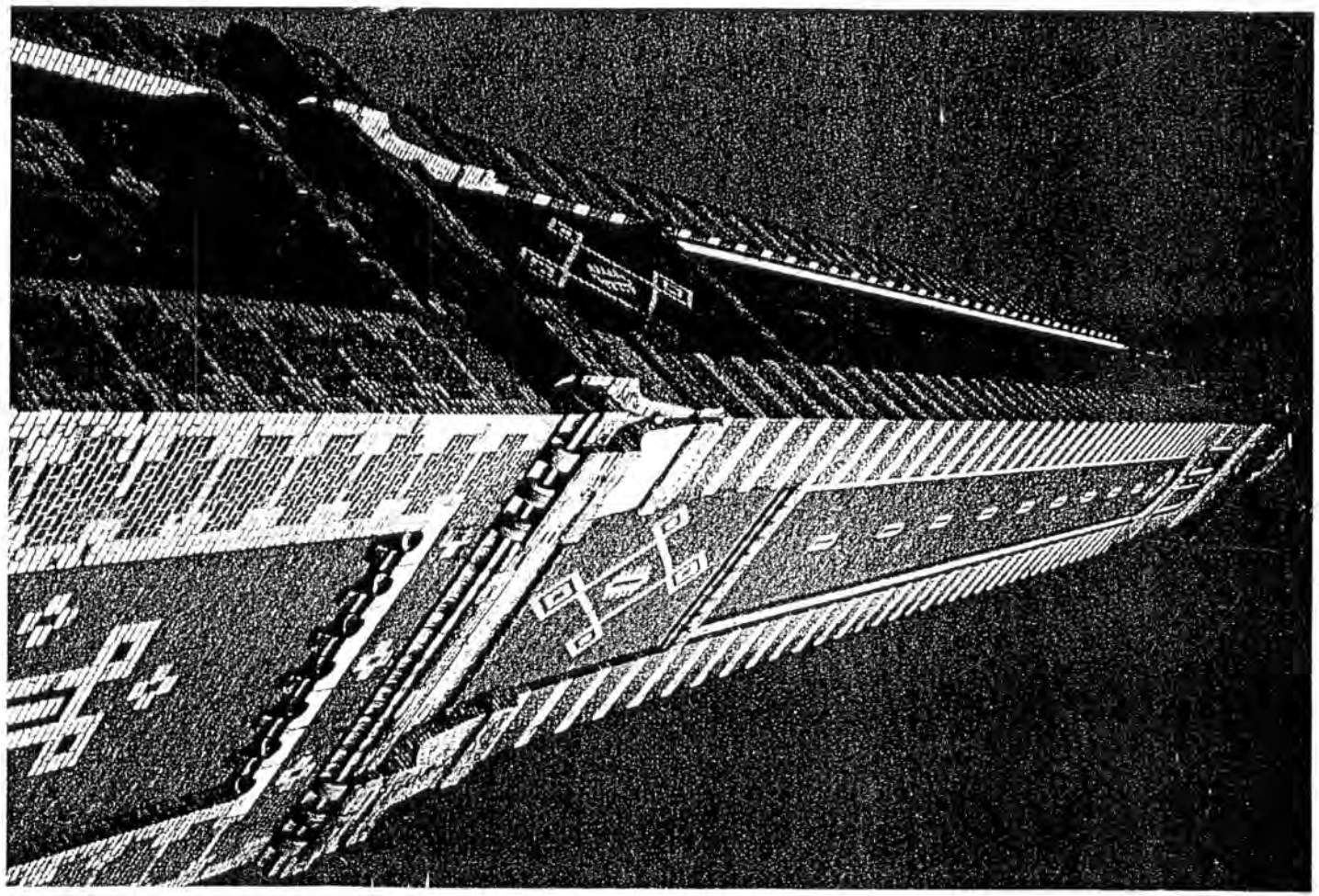
ISSN 0960-7870



BRITISH BRICK SOCIETY

MAY 1995

INFORMATION 65

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Cover: Cox's Stack, Lochee, Dundee, Scotland

The stack was used by the hon. secretary to publicise a request for information about Brick Industrial Chimneys

EDITORIAL: CUT-PRICE CHICAGO

Looking west from the left bank of the River Irwell one day last winter I was struck by the resemblence of the forest of tower blocks that is inner city Salford to what I imagine from the many published photographs to be the view from Lake Michigan of Chicago a city I one day hope to visit.

The tower blocks of Pendleton differ from those of Chicago in several respects. Inner city Salford has first-generation tower blocks. They are separated by traditional English housing and even from a distance offer a series of towers rather than a continuous facade as in the Michigan Avenue Cliff, or the LaSalle Street Canyon and North Michigan Avenue. The tower blocks in Lancashire's forgotten city are used almost exclusively for housing. Many have a single shop on the ground floor: in Chicago the downtown is office accommodation as it has been from when William LeBaron Jenney designed the Home Insurance Building. The last named was being erected when John Bradshaw Gass, of Bolton, visited Chicago in 1885 on his tour of the eastern and mid west states of the U.S.A. and an adjacent part of Canada as Godwin Bursar of the Royal Institute of British Architects, (1).

What unites the buildings of Salford to those of Chicago is that the buildings have

> a structural steel frame with masonry acting as a skin rather than as a bearing element, (2).

to quote from the collective biography of one Chicago firm, Holabird and Root. And that frame, as Sigfried Giedion reminded us, takes us back into early-nineteenth-century Salford:

> Watt's Salford experiment was the first step in the development of the steel frame which was finally to appear in Chicago during the (eighteen-) eighties, (3).

Salford Twist Mill was built for Messrs Phillips and Lee, originally in 1799 and extended in 1801, and was the first fire-proof cotton mill in England. It was demolished some years ago but can be clearly seen on James R. Issac's remarkable painting, 'Salford and Manchester in 1859' now in Salford City Art Gallery. The drawings for the ironwork have been published on a number of occasions (4).

The outer walls of Salford Twist Mill, as can be seen on the painting, were of brick, just as the earliest surviving cotton mill in Salford, named Islington Mill, and built in 1823, are also of brick. Members visiting Salford for the Northern Spring Meeting in 1995 will have the opportunity to see the outside of this remarkable survival. Unfortunately it lacks the original combined external chimney and staircase, (5). The type is most familiar from a mill constructed a long way from Lancashire: Bliss Mill, near Chipping Norton, Oxon., (6), but the architect was George Woodhouse from Bolton.

Islington Mill offers a salutary example of the need to put in enough columns. Within eighteen months of its opening, the cast-iron floor beam on the uppermost floor gave way: it had been supported by a single row of columns, as were each of the lower floors. The weight of machinery was simply too much for the load-bearing structure. Twenty-one people died (7). Extra rows of columns were inserted in the rebuilding of the interior: the external brickwork remained intact. Later cotton mills were so designed that the load-bearing framework was positioned so that the machinery was screwed into the beams, (8).

Out of early cotton mills grew the framework for the tall office building. From the tall office building came the idea of the high-rise block of flats.

I would suspect that the most famous Chicago example of these is 860-880 North Lake Shore Drive, completed in 1952: Mies van der Rohe was the lead architect (9). A guide to Chicago's buildings reports:

> As much as any other buildings anywhere, these two towers provided a model for the vitreous, rectangularly prismatic high-rise structures that dominated the international architectural landscape of the 1950s and 1960s, (10).

Part of that landscape is the tower blocks of inner city Salford.

Sometime after the air photograph which appears as plate 1 of The Buildings of England: South Lancashire, (11), was taken, Salford City Council began to redevelop Ordsall and Pendleton. Ordsall is to the right of the main road on the photograph which runs from centre top to centre left and thence from there to left of centre bottom; Pendleton is to the left of this and north of the church spire which can be seen on the left-hand edge. North is at the top of the photograph.

Ordsall was redeveloped mainly as semi-detached and terraced housing. That which was system built is now being refurbished with brick walls.

Pendleton, on the other hand, was given seventeen tower blocks, interspersed with lower ranges of flats at the west end and some four-storey maisonettes to the east. The maisonettes are currently (February 1995) being replaced. Some have been taken down completely and replaced by brick-built semi-detached houses with gardens. Others have lost their upper two floors and are being convered into terraces of brick-built houses. Yet others are in progress as tenants move out and the buildings are boarded up. In the rebuilt brick terraces interesting diaper work has been done, where panels have been replaced by cavity walls.

Of the tower blocks, ten follow the emphasis given to Lake Shore Drive:

> widely admired for their openness and frank admission of the frame (12).

Five of those in Salford have white concrete panels within the externally emphasised frame and five have panels with asphalt as part of the concrete mixture. Window openings are part of the standard panels. Five more of the tower blocks have concrete slabs bolted on to the frame. All have identical floor plans: six flats per floor, the outer four with two bedrooms, a living room, a kitchen and a bathroom, and the two inner ones with a single bedroom, with the other accommodation. As a rapid transition from the close-packed streets of late-nineteenth-century Salford it did provide a means of trying to keep the community together: this editorial is not about success or failure in that area but rather about structures. What is noticeable about the various blocks is that the two which no one really wishes to live in are two of the five with plain concrete panels and no external emphasis. There is a rumour that the University of Salford is seeking to take these two blocks over as student accommodation: you do get a very good view of the Pennines from the upper floors on the east side. One good piece of planning was to orientate the buildings north-south, so that there would be some point in the day when all dwellings gained some natural sunlight.

These tower blocks are seventeen storeys high. On the north-east corner of the Pendleton development are two remarkable blocks, both twenty-two storeys, with eight flats per floor. These, named Spruce Court and Thorn Court, are steel-framed, but the exterior walls are brick, with the windows set in inset vertical panels. The bricks were laid on site. Members who attended the society's second annual general meeting, held at London Brick Company's headquarters at Stewartby, Bedfordshire, in 1975 may recall experiments being conducted to pre-fabricate wall panels of brick. But the tall blocks in Salford retain the put log holes from the scaffolding pole ends. I am not a bricklayer but I would not wish to lay bricks in a high wind up in the sky. Salford shares

with Chicago a reputation as a windy city: no, it does not have echoes of the Deadwood Stage unless one counts the Liverpool to Manchester railway line!

Certainly what one can say of the tower blocks of Pendleton is that the two brick ones seem the most humane, perhaps because they are of the most natural material, brick.

Among the lower blocks, at the western end of the parish, those which have worn the best and show the least signs of wear are those which are totally of brick. Here the mistake was made to orientate some blocks east-west and others north west-south east. Those which have extensive use of panelling show the greatest scars from being now thirty-five years old.

As a final remark it is interesting to come back to the industrial structures. Salford never had that many cotton mills. The modern city which includes Eccles, Worsley, Walkden, and Swinton and Pendlebury, as well as Salford, Ordsall, Pendleton, and Broughton, the places within the borough, later city, boundary of 1853 to 1974, had only fifty-four mills according to the listing of over eleven hundred for the former metropolitan county of Greater Manchester (13). The most famous mill of all was not in Salford but in Pendlebury: Acme Mill, the subject of several of the paintings of L.S. Lowry (14).

More recently, and since the editor of British Brick Society has lived in Salford, Lancashire, new structures have appeared on Regent Road, which can be made out on Pevsner's photograph (15) running horizontally across the centre from the church spire on the left. These are steel-framed low-rise, perhaps with a brick-faced ground floor. A new one appeared in February and March 1995: the bricklayers enjoyed creating diaper patterns on the external walls. Another, perhaps two years old, crumpled when it caught alight one evening in mid March. Clearly this was not a building with iron columns, iron beams and brick arches giving fire protection. Sigfried Giedion quotes the distinguished engineer, William Fairburn:

> the pioneer of that system of fireproof structure which now distinguished the manufacturing districts of this country (16)

referring to Salford Twist Mill. This was the first I-beam. At Salford's mills it was of cast iron. In 1880s Chicago both cast iron and steel were used. By the time the idea of a framed building going up many storeys came back to Salford in the 1960s, the beams were of steel and the need was to erect high structures as cheaply as possibly could be done, hence the title of this editorial, 'Cut-Price Chicago', but it is salutary to remember that it all began in a little-regarded English city.

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The society held a successful visit to look at the brickwork of St Albans on Saturday 8 April 1995. The Spring Meeting attracted members from as far away from St Albans as Wiltshire, deepest Suffolk, and even beyond Manchester. A report on the meeting will appear in the next BBS Information.

Forty members and friends attended the St Albans meeting. The numbers venturing to Salford on Saturday 13 May 1995 were fewer but from distant parts. Life does exist north of Watford or Watford Gap, wheresoever people think the North begins. Again a successful meeting was held, and a report will be in BBS Information 66 (October 1995).

The editorial has been written to reflect some of the wealth of brick and brick buildings in Lancashire's third city: the forgotten one.

Unfortunately, the pressure of space on the pages of BBS Information has meant that a further item on Brick in Museums: the Lancashire Mining Museum, Salford, has had to be held over.

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Members will notice that this issue of BBS Information has fewer pages than many since 1990. The editor has been requested to keep issues to twenty pages, including contents page and editorial.

Members may not have been aware that until 1994, the Brick Development Association had been subsidising the production of BBS Information and also paying the postage costs. Unfortunately with inserts an issue of BBS Information even marginally over the twenty pages pushes the costs to the British Brick Society up quite considerably as the distribution of BBS Information incurs higher postage costs; twenty-two pages puts each copy into the next postage band.

The great stock of articles remains in the editor's files: several are typed and proof corrected for inclusion in future issues. Because BBS Information must observe strict limits on the number of pages for each issue, it does mean that the longer articles which members have submitted will take some time to appear.

Most of the articles in the editor's files are between seven and nine pages when prepared for publication in BBS Information. Five such articles are in stock and, hopefully, these will appear between October 1995 and October 1997. However, the editor has few articles of three to five pages in length. It would be beneficial to see some articles of this length. As also, the editor would welcome articles with good line illustrations.

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As members are aware, BBS Information 68 (May 1996) is scheduled to be an issue specifically about 'Brick in Churches'. A variety of articles have been received for this. Unfortunately, with one exception, these have been written by the same two persons. The editor would especially welcome further pieces about brick in churches, individual brick churches, county lists particularly away from the south midlands and north-west England.

DAVID H. KENNETT
Editor
BBS Information
The Feast of St Dunstan, 1995

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2 W. Blaser (ed.), Chicago Architecture Holabird and Root 1880-1992, Basel: Birkhauser Verlag, 1992,

3 S. Giedion, Space, Time and Architecture, Cambridge MA: Harvard UP, 5th ed., 1967, 193. Ibid., pp. 191-193 deals with Salford Twist Mill, with figs. 104-106, from Boulton and Watt Archive Birmingham City Library.

4 Giedion, 1967, loc.cit.; N. Williams and B.A. Farnie, Cotton Mills in Greater Manchester, Preston: Carnegie Publishing, 1992, 59-60, 69-73 with figs., 63, 65, 66; R.S. Fitzgerald, 'The Development of the Cast Iron Frame in Textile Mills to 1850', Ind.Arch.Rev., 10, 1987-88, 127-145; A.W. Skempton and H.R. Johnson, 'The First Iron Frames', Architectural Review, 131, 1962, 175-186.

5 Williams with Farnie, 1992, 176-178, with fig. 218 for early view. Members of the society saw this mill on the Northern Spring Meeting in Salford, 13 May 1995.

6. J. Sherwood and N. Pevsner, The Buildings of England: Oxfordshire, Harmondsworth: Penguin, 1974, 540; sale catalogue, 1992: writer's collection.

7 Williams with Farnie, 1992, 178 with fig. 218, citing The Manchester Guardian, 16 October 1824, 3.

8 Information from H. Lindsay of Bradshaw Gass and Hope, Bolton.

9 F. Schulze and K. Harrington, Chicago's Famous Buildings, Chicago: Chicago UP, 4th ed., 1993, 149-150, building no 79.

10 Schulze and Harrington, 1993, 149.

11 N. Pevsner, The Buildings of England: South Lancashire, Harmondsworth: Penguin, 1969, pl. 1. On internal evidence, no signs of work on the roundabout for the M602 the photograph predates 1955.
Apart from the University of Salford, top centre; the pair of gasometers, centre; and the spire but not the church of the Stowell Memorial Church, Salford Central Mission and government offices, little survives from the buildings present forty years ago.

12 Schulze and Harrington, 1993, 149.

13 Williams with Farnie, 1992, list 1112 mills in all, ibid., 189-198.

14 Williams with Farnie, 1992, figs. 14 and 15. Acme Mill was the first Lancashire Mill to be driven solely by electricity and had no chimney.

15 Pevsner, 1969, pl. 1. See Williams with Farnie, 1992, 22 with n. 38 for the outsider's view of the City of Salford.

16 Quoted, Giedion, 1967, 192. Giedion gives no source.

Brick across Two Continents: Recent Exhibitions Reviewed

ARCHITECTURE AND PROCESS: ALBERTI AND IDEALS IN RENAISSANCE ITALY

The Matthew Architecture Gallery,
The University of Edinburgh,
Chambers Street, Edinburgh

September - October 1994

LEON BATTISTA ALBERTI

Palazzo del Te, Mantua

September - December 1994

Neither the presence of Kitty Tabitha nor the absence of funds would permit an extended escape from the rain of Manchester to the gentle light of Mantua. However, much that was explored in detail in the larger retrospective could be seen in the smaller exhibition in Edinburgh.

Most of us will know Leon Battista Alberti through The Ten Books of Architecture, of which two versions are now available in English. Theory, however, was supported by practice.

The oeuvre is not large but much of it is in brick, although the facades are of stone and marble. Few of the buildings were actually completed. The two exhibitions attempt to show what they might have looked like if Alberti had actually finished them. Drawings derived from a complete remeasurement and reassessment of the original buildings have been fed into a suitable software package to produce, through the use of CADCAM, both drawn images and wooden models of unfinished buildings as they were intended to appear.

Despite the paucity of finished buildings, the fineness of the work is not in dispute. In Mantua, there are the churches for Ludovico Gonzaga, Sant'Andrea and San Sebastiano; in Florence, the rotunda of Santissima Annunziata, also for Gonzaga, as well as the facade of Santa Maria Novella and a copy of the Holy Sepulchre in San Panxrazio; and in Rimini, the unfinished transformation of San Francesco into the Tempio Malatestiano, for the tyrant, Sigismondo Malatesta.

There are items on all of these and on the facade of the Palazzo Rucellai, Florence, which together with its loggia is all that was built, from Alberti's original design, (2).

Both exhibitions have background material. A computer programme was used to elucidate the precision of the perspective lines in Piero della Francesca, 'The Flagellation of Christ', and the same artist's 'Ideal City', (3).

What struck this observer is how much finer is the achievement of Renaissance man (and woman) because the invention included at its starting place ideals, (4).

DAVID H. KENNETT

PARKINSON CENTENNIAL EXHIBITION:
JOHN AND DONALD B. PARKINSON, ARCHITECTS:
PURSUING THE DYNAMICS OF MODERN AMERICAN
DESIGN 1890s - 1930s

Bolton Museum and Art Gallery,
Le Mans Crescent, Bolton

21 January - 18 March 1995

John Parkinson (1861-1935) was born in Scorton, near Lancaster, but began his working life as an ironmonger's errand boy in Bolton at the age of 13. He studied building construction and design at the Bolton Mechanics Institute, where a contemporary was John Bradshaw Gass.

Later Parkinson moved to Los Angeles. His architectural practice earned him a place at the forefront of the development of the American metropolis. The exhibition highlights some of his most notable achievements in Los Angeles like the Federal Reserve Bank. Los Angeles City Hall, Bullocks department store on Wiltshire Boulevard, and the Union Station. His most famous building is the Los Angeles Coliseum, built for the 1932 Olympic Games and used also for the 1984 games. It was damaged in the most recent of southern California's earthquakes.

The exhibition showed 23 renderings, 30 drawings, and 23 photographs from the Parkinson archive. One was especially struck by the conceptual clarity of several of the drawings. Many concerned terracotta facades and elaborations in this material.

Bolton was the only UK venue for this exhibition. A further exhibition is planned.Donald B. Parkinson was an artist of considerable talent whose watercolours recorded buildings and landscapes in Europe in the 1920s. If as fine as the architectural drawings, these will be a pleasure to anticipate.

DAVID H. KENNETT

THE MAKERS OF 'BROSELEY TILES'

P.S.BROWN & DOROTHY N. BROWN

Broseley, in Shropshire, has long been involved in the ceramic industries (1), and during the second half of the 19th century was noted for the production of two different types of tiles. Its roofing tiles were of sufficiently high repute to be known generally as 'Broseley tiles': and the factories of Maw and Craven Dunnill established the area as a major producer of decorative tiles (2). In addition, brick making flourished; the traditional production of clay tobacco pipes continued (3); and Broseley supplied a section of the work-force for the Coalport pottery across the River Severn.

The census enumerators' books for the 19th century give fascinating glimpses into Broseley families with several members working in the clay industries (4). But, in the earlier censuses, one is frequently frustrated by finding an individual described simply as a "tile maker". Did he or she make a roofing tile in the environs of a brickyard, or a decorative tile with rich majolica glazes ?

For the purposes of the Factory Act (5), ornamental tiles were classified with earthenware rather than the products of the brickyards. In the same spirit, enumerators of the 1891 census qualified entries such as "tile maker" by adding either "(Earthn)" if the tiles were ornamental, or "(Brick)" if they were not. So it should be possible to distinguish those in Broseley who were engaged in producing the different types.

In the Broseley area (6), which included Benthall and Jackfield, 702 individuals were identified as working in ceramic industries (7). Of these, 106 were described as concerned with roofing tiles or with tiles (Brick), as makers, moulders, pressers, burners, etc. Against this, 176 were engaged in making decorative tiles (mostly termed "encaustic") or tiles (Earthn). These numbers suggest that decorative tile making had outstripped that of roof tiles, at least in terms of work-force. But there are many pitfalls in compiling data from enumerators' books: in this case, many roof-tile makers may have been missed because they were classified simply as working in brickyards.

Broseley was, of course, not an isolated community. Just across the River Severn, on the northern bank, were major industrial complexes. Individuals crossed in both directions to reach their work, and 'Broseley tiles' were also made by Broseley's northern neighbours. These areas across the river, from Coalbrookdale to Coalport, were all included in the census subdistrict of Madeley (8). Here there were a further 140 individuals concerned with decorative or earthenware tiles, including several employers and tile designers, decorators and painters. But there were only 26 identified in the roofing tile and tile (Brick) group.

In 1879, John Randall had traced the history of some of the Broseley tileries (9) and, in 1886, the architect C.Stanley Peach read a paper on Broseley roofing tiles to the Architectural Association (10). He explained that the clay had to be mined from a depth of 100 to 300 feet and was rock-like until it had weathered for 6 months or more.

Fig. 1 Advertisments for makers of 'Broseley Tiles' from Kelly's Directory of Shropshire, 1891, courtesy of Birmingham Public Library.

Mechanisation, he said, was progressing quickly in most tileries but there were still some where "hand-labour and hand-made tiles are the order". Firing in down-draught kilns produced a grading of colours so that Broseley tiles varied "from pale strawberry-red to dark brindle (a deep reddish-brown), or even to blue".

Peach estimated a million roofing tiles as an average weekly output for the district, which employed "over 1000 hands". The latter figure was probably based on all those in brick and tile works throughout the area. Although saying that "there are but few firms engaged in this work", he went on to name 12 principle ones. Nine of these were on the Broseley side of the river. Six of the employers were found in the census returns for 1891, three calling themselves manufacturers of tiles and three of brick and tiles. The list included Exley & Sons, who were also builders and coal masters, and the Broseley Tileries who also made decorative tiles. Three on the Madeley side of the river included the brick and tile branches of two major industrial concerns which had grown from iron working, the Coalbrookdale and Madeley Wood Companies (11).

Roofing tile manufacture was clearly of major importance to these firms. In 11 of the 12, and in one of a pair of well-established manufacturers not listed by Peach, roofing tiles were the leading items mentioned in their advertisements or on their letter-heads. In 7 instances these were clearly specified as Broseley roofing tiles.

Around 1890, tile makers formed two associations to protect their interests. One was the Plain, Decorative, Encaustic and Earthenware Tile Manufacturers' Association, founded in 1890 with a country-wide membership (12). The other, directly relevant to roofing tiles, was the Broseley Brick and Tile Manufacturers' Association, founded in 1889 with ten of the firms on Peach's list as its original members. Fortunately documents of the Association's solicitors survive at the Shropshire Record Office (13). Members signed articles of agreement which set minimum prices to be charged for various types of roof tiles, as well as maximum prices at which "inferior or discoloured tiles" could be sold. The only concern of the Association reflected in the solicitors' documents appears to have been roofing tiles.

When prices were fixed initially, and again in 1898, the firms were asked to supply lists of outstanding orders which had been accepted at pre-existing prices. These lists, now in the solicitors' files, are a rich source of material, but we only want to extract a few figures to indicate the dimensions of the Broseley roofing tile industry. The numbers of tiles on individual lists were often in hundreds of thousands, twice exceeding the million: and the recorded destinations of the tiles included London, Birmingham, Cardiff, Glasgow, Dublin and other towns in 27 English counties.

Another indication of the importance of 'Broseley tiles' was the concern of their makers for the proprietary right to the name. This they defended in the Architect's Compendium where, in 1890, the Broseley makers inserted a notice, over the names of all the members of the Association and of two other firms. It claimed that some manufacturers of roofing tiles were wrongly describing their products as 'Broseley tiles' (14). The Broseley makers maintained that they could only be called this if made of the peculiar Broseley

clay. Certainly, in the same issue, three Staffordshire manufacturers used the word 'Broseley' in describing their roofing tiles; but it was used ostensibly as a description of colour. The Broseley makers expanded their notice, first to a half page and then to a full page, but the advertisements persisted: new advertisers from Nuneaton and Stoke-on-Trent joined those who used the word 'Broseley'.

In 1902, the Association took legal advice about whether it might successfully prosecute manufacturers from Staffordshire and elsewhere who implied that their products were 'Broseley tiles'. The legal opinion was not encouraging but, even so, the Architect's Compendium for 1904 carried a notice from the solicitors of the Association (now described as the Broseley Tilemakers' Association). It warned that they would prosecute manufacturers describing their "spurious imitations" as Broseley tiles if they were not made of the Broseley clay. The notice included a map showing the location of this clay, and a list of brand names of genuine Broseley tiles (15).

One member of the Broseley Brick and Tile Manufacturers' Association, not yet mentioned, was a surprise to us. This was Maw & Co who, like the others, listed outstanding orders for roof tiles and stamped their letter-head with "Roofing Tile Dept.". While the Broseley Tileries are well known as producers of both roofing and decorative paving tiles (16), Maw & Co. was such a major maker of the decorative variety that we had overlooked their roofing tile production - though many years earlier Matthew Digby Wyatt had designed elaborate roof tiles for them (17). Presumably the manufacture of Broseley Roofing Tiles was a worthwhile concern.

Notes

1. John Randall, The Clay Industries including the Fictile and Ceramic Arts on the Banks of the Severn, Madeley, Salopian and West-Midland Journal Office, 1877.
2. Tony Herbert, The Jackfield Decorative Tile Industry, Ironbridge, Ironbridge Gorge Museum Trust, 1978.
3. D.R.Atkinson, Tobacco Pipes of Broseley, Shropshire, the author, 1975.
4. P.& D.Brown, "Who made that tile?", Glazed Expressions (Tiles & Architectural Ceramics Society), 13, 1986, 5-6.
5. As explained by George Smith, The Cry of Children from the Brickyards of England, 6th edn, London, Haughton, 1879,p.118.
6. 1891 Census District 350. Subdistrict 3, Broseley.
7. Numbers of individuals described as associated with the following were: Brick 169. Brick & Tiles 15. Roofing Tiles 29. Tiles (Brick) 77. Decorated Tiles 159. Tiles (Earthn) 17. Tiles (not specified) 7. Terracotta 1. Clay Tobacco Pipes 84. Pottery 87. Clay Mining 51. Kilns (not specified) 6.
8. 1891 Census District 350. Subdistrict 2, Madeley. Numbers, in addition to those quoted in the text were: Brick 112. Brick & Tiles 20. Tiles (not specified) 3. Kilns (not specified) 1. Clay Tobacco Pipes 19. Clay Mining 26.
9. John Randall, Broseley and its Surroundings, Madeley, Salopian and West-Midland Journal Office, 1879.

10. C.Stanley Peach, "Broseley tiles", Architect, 35, April 1886, 240-241.
11. For the two companies see Barrie Trinder, The Industrial Revolution in Shropshire, London, Phillimore, 1973.
12. We are grateful to the Gladstone Museum, Longton, for access to the minutes of this association.
13. Shropshire Record Office 1681/Box 191/9. We are grateful to the Record Office for access to these documents.
14. The Architect's, Surveyor's & Engineer's Compendium and Complete Catalogue, 1890, p.86. The same notice appeared in Architect, 45, 1891, suppl. 2 Jan. p.21.
15. Architects' Compendium and Complete Catalogue, 1904, p.93.
16. See undated catalogues in Shropshire Records and Research Unit, Local Studies Library, Shrewsbury (M77/5703) and in British Library.
17. Wyatt's designs are reproduced in Simon Jervis, High Victorian Design, Woodbridge, Suffolk, Boydell Press, 1983, Fig. 116, 117.

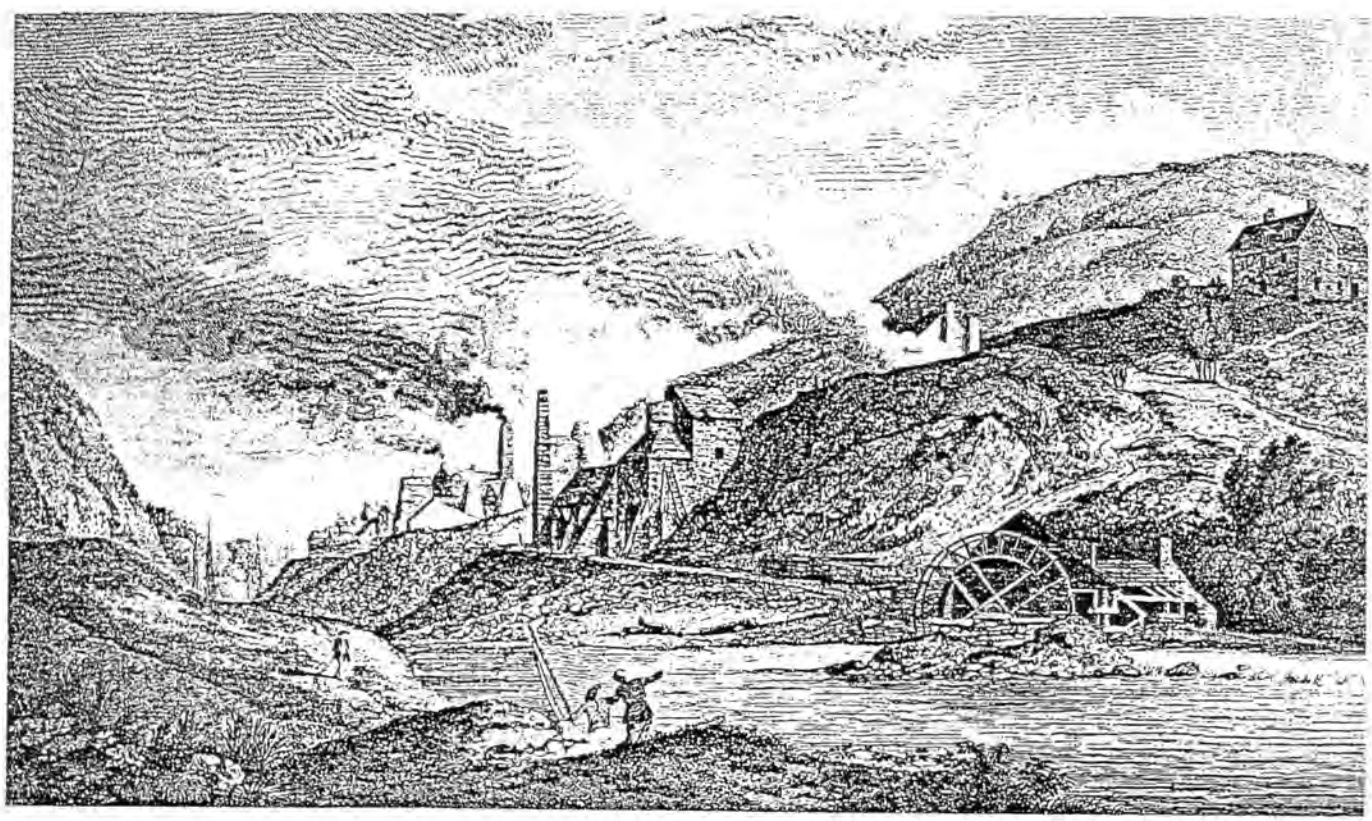

Fig.2 The gorge of the River Severn, near Broseley (undated print: collection, D.H. Kennett).

Note the variety of brick-built structures.

BRICKMAKING IN NORTHERN IRELAND

Desmond Sloane

INTRODUCTION

I started my career in clay bricks in September 1949 when, on leaving school, I joined the family firm of Samuel McGladery & Sons Limited, at that time probably the largest single brick manufacturer in Ireland.

The company had three works: at Colin Glen in Belfast, completed just after the Second World War, at Killough near Downpatrick, and the Becchmount Street Works near the Royal Victoria Hospital in Belfast.

I will relate a brief history of McGladery's to put into perspective how brickmaking has progessed through the years. McGladery's only goes back to 1859 but clay bricks were made in the Belfast area for many years before that, particularly in the Sandy Row and Lower Donegal Road areas. However, since the 1860s although there were many other works at various times none is perhaps as well-known as McGladery's.

Brick making has a long history in the Belfast area. In the seventeenth century, for instance, when Lord Chichester was rebuilding his castle in Belfast after it had been destroyed by fire he was using clay brick probably made and fired on the site.

SAMUEL McGLADERY & SONS, 1859 - 1970

My great-grandfather who had founded the firm of Samuel McGladery & Sons in 1859 had come to Belfast from Sligo and because there was a boom in building in the Belfast area he decided that the brick trade would be a lucrative proposition. He took land at Ardoyne and started to manufacture his bricks. These were hand moulded and made out of boulder clay which was dug in the winter months then left to sour with the action of the weather.

Brickmaking was only carried out during the summer months when wet bricks could be dried satisfactorily: the season was usually reckoned as from 17 March to 31 October. The bricks would be dried in the open under straw covers, known as 'Hacks', and then burned in clamp kilns.

After some seasons at Ardoyne a move was made to Donaghadee, a village east of Bangor, County Down, but only one year was spent there for reasons unknown. The next move was to Lawnbrook Avenue, off the Shankill Road, Belfast, where brickmaking was carried on using the same methods as before for a number of years. No facing bricks were made at this time: only common bricks which were used for inside and outside. The best of these would be used to face with.

The operation then moved to Sunnyside Street, Belfast. This marked a turning point in the manufacture of clay bricks. A steam engine and a brickmaking machine were installed. A drying shed was later built, the floor of which was heated by exhaust steam from the engine. Bricks could now be made the whole year round.

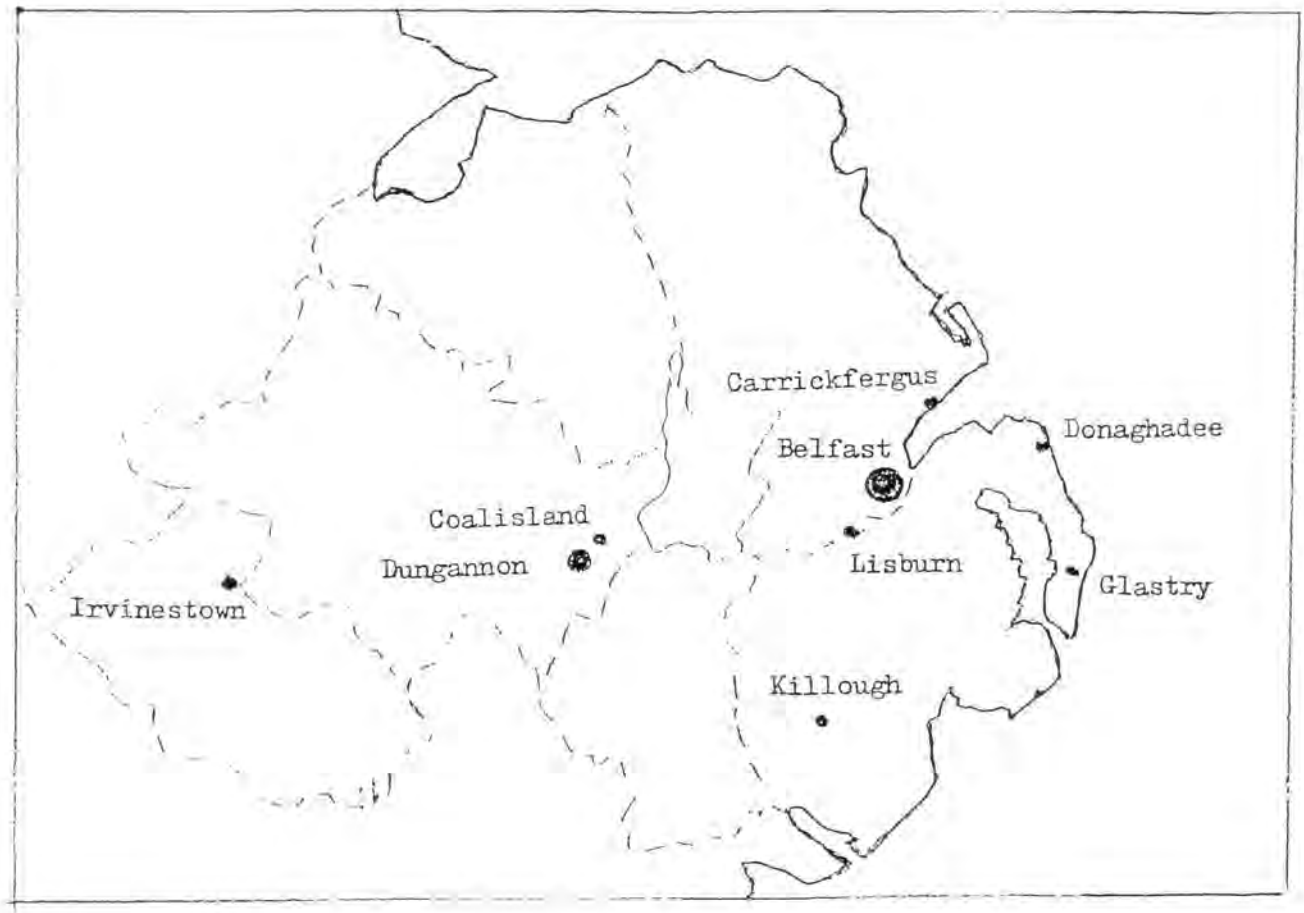

Fig. 1 Brickworks in Northern Ireland

Sometime in 1885 the company moved to Forth River Works on the Springfield Road (now Lummus Mackie) in Belfast. This works was equipped with modern machinery and hot floor drying sheds. Some draught kilns were used at first but eventually a continuous chamber kiln was built and at a later date two more brick machines were installed and two more kilns built. These kilns were later demolished in order to obtain the clay upon which they were built. They were replaced by new, larger kilns and new machinery was installed to improve production.

In 1905 machines were installed to manufacture pressed facing bricks. This works was in continuous production from 1885 until 1945 when the clay was exhausted. In 1895 a new works had been opened at Becchmount Street where common bricks were made. Then, in 1907, the Press machines were moved from the Springfield Works to Becchmount Street as the clay there (Keuper Marl) was found to be more suitable for the manufacture of facing bricks.

Samuel McGladery had five sons and two daughters. Robert and John joined Samuel and the company became Samuel McGladery & Sons. The two sons realised there was an opening for clay bricks in the South Down area and in 1913

Fig. 2 Ireland showing places where McGladery's bricks were sold.

opened a new works at Killough where they manufactured common bricks, field drain pipes, flower pots, and, at a later date, hollow wall and flooring blocks.

In 1946 a new works was opened at Colin Glen and this large modern plant was the first to manufacture Rustic facing bricks in Belfast by the wire cut method. Around twelve million bricks a year were produced.

The company bought over the City Brick and Terracotta Works in 1951. It was located on the Limestone Road, in Belfast, and had recently been closed due to lack of raw materials. Press machines were installed and production of coloured press bricks commenced. A new building was erected which became the new head office. The total production in the 1960s was in excess of 25 million bricks a year - a considerable volume for a private company in Ireland to produce at that time.

The company's bricks were sold to a wide area of Ireland, including Donegal, Galway, Sligo, Cavan, Drogheda, and Dublin. The Donabate Asylum in Dublin was built of McGladery bricks. Another big job was the Thompson Dock at Belfast Harbour where around six million bricks were used, the firm guaranteeing 50000 per day if required. The record for one day's delivery from the Becchmount Yard was a staggering 55000 bricks.

In the early days bricks were shipped to Portaferry in lots of 3000 to 6000 in a sailing ship called Witch of the Waves (I wonder what became of her).

A unique undertaking was the delivery of bricks to build the lighthouse on Achill Island, County Mayo. They were sent by ship which subsequently became stormbound in Blacksod Bay for three weeks.

When the weather moderated the ship was beached close to the site on a sandy beach and the bricks then transported by donkeys with pannier baskets up to where the lighthouse was under construction.

Clay supplies finally ran out during 1969/70 and McGladery's closed its doors after a hundred years continuously making bricks.

There was then only one works in Belfast still manufacturing and that was the old Parkview plant which had been bought over by Coalisland Brick & Pipe Works. It had been renamed Glastry Brick Company after the townland on the Ards peninsula where the clay was mined to keep the company in operation (its own supply having long since been worked out.

It was at this works in 1970 that I joined the Coalisland Brick & Tile Company.

BRICK PLANTS IN NORTHERN IRELAND, 1955 - 1969

The brick companies still in business in the Belfast area in the late 1950s were McGladerys with four plants, Haypark which was owned by the Belfast builders H. & J. Martin, Murphys owned by F.B. McKee, Laganvale, and Parkview.

Brick plants outside Belfast were: Dungannon Brick Company, Coalisland Brick, Tyrone Brickworks, Carrickfergus Brick Company owned by Henry Laverty Builders, Killough Brick which was owned by McGladerys, Maze Brick Company at Lisburn, Irvinestown Brick, Mid Ulster Brickworks, Aghadowy Brick, and one at Lisahally in Derry also owned by Henry Laverty.

By 1969 all these brickworks had disappeared except Parkview and Killough, both of which were acquired by the Tyrone Group, the only survivor of the once prolific local industry. Even on the mainland of Great Britain the trend is for amalgamation of smaller works into larger groups and their policy is often to just close down small and unprofitable units so that, at the end of the day, it will be an industry that is controlled by five or six major players with the smaller independents going for niche markets with their genuine handmade and made to order products.

Editorial Note:

These reflections on the brick industry in Northern Ireland by a longstanding British Brick Society member, Desmond Sloane, first appeared in Specify Northern Ireland's Design & Build Journal and are reproduced by courtesy of its editor, Brian Russell.

This article reprints the first of Mr Sloane's recollections and adds the information about competitors from the final paragraphgs of the second article printed in Specify.

When space in BBS Information permits the exceptionally interesting reflections about the changes in land transport of bricks which forms the majority of the second article will be included.

For the benefit of the majority of members who may not be familiar with the geography of Northern Ireland, the maps have been added.

D.H.K.

BRICK BUILDINGS IN THE NEWS!

INTRODUCTION

This new feature to BBS Information brings together some scattered notes collected since late December 1994 about buildings which have been in the news.

Members are invited to contribute brief notes for use in future issues of BBS Information.

The majority of items reported have been ones spotted by the editor. Several originate in illustrated items in The Guardian. The editor thanks T.P. Smith for details about the water towers of Luton.

D.H.K.

FOOTBALL STAND, WALSALL WOOD F.C.

During March 1994, the BBC Radio 4 programme 'Kaleidoscope' invited nominations for buildings to be given the protection of a statutory listing as of "historic or architectural interest". One contributor, named Captain Clarke, suggested the stand at the ground of Walsall Wood Football Club. It is 100 ft in length, brick built and the original timber roof has been replaced by one of corrugated iron. The bricks are Staffordshire Reds and Staffordshire Blue bricks. The structure dates to the 1930s.

ST ERKENWOLD'S CHURCH, SOUTHEND-ON-SEA, ESSEX

The general architectural magazine, Perspectives on Architecture, noted in its April 1995 issue that St Erkenwold's church, Southend-on-Sea, was in danger of having been demolished by the time that its readers received their magazine.

St Erkenwold's was one of the few remaining churches surviving by Sir Walter Tapper. No use could be found for the vast, unadorned brick shell. Designed in 1905 and built between then and 1910, with the adjacent vicarage, it was constructed in a lancet style: the nave has three thin lancets placed high up on the south side and a west window, also placed high up, which is an interpretation of a rose window. The south-west tower was never built. It was built in yellow brick.

Tapper's work was of high quality; until he was forty he was Bodley's chief assistant. On his own, Tapper did comparatively few churches. Another which has been sacrificed is St Stephen, Great Grimsby, Lincs., where the influence of working with Bodley is obvious. Bodley did St Augustine's, Pendlebury, (now in the City of Salford), Lancs., in 1871-1874, with internal buttresses pierced by passage arches: the liturgical need being for single file processions; the architectural origins lie in south-west France, specifically in Albi cathedral. St Augustine's, Pendlebury, has a continuous roof resting on the outer walls. At St Stephen's, Great Grimsby, there are transverse arches supporting the nave roof. Tapper designed St Stephen's in 1911-1914. It was demolished before 1987.

BATTERSEA POWER STATION

The House of Lords held a short debate about the future of Battersea Power Station on Monday 13 March 1995. Corncern was expressed about the deteriorating state of Sir Giles Gilbert Scott's building.

The design students of De Montfort University, Leicester, have submitted a design to use Battersea Power Station as a new home for the debating chambers of both the House of Commons and the House of Lords. The design was submitted to a Design Council competition to bring parliament into the twenty-first century.

BRICK CATHEDRAL AT EVRY, FRANCE

France's first cathedral this century was consecrated by the Bishop of Evry in time for Easter 1995. La Cathedrale de la Resurrection has been completed in under eight years. Designed by Mario Botta, a Swiss architect, whose own designation of his style is "post-antiquity", the church has a circular Byzantine shape.

The church is built of a million bricks. The bricks are from Toulouse and are pink in colour. The mortar is reported as coming from Italy.

WATER TOWERS AT LUTON, BEDFORDSHIRE

Luton has two brick-built water towers. Both are of considerable interest, and both are under threat from re-development.

One at Hart Lane is still in use as it is on almost the highest point on the east side of the town. This is red brick.

The other is architecturally exceptionally interesting. It is one of the few examples of the arts and crafts style in Bedfordshire.

The Luton grey bricks of which it is built are common enough in Luton, but nowhere are these used in a design so well conceived as this of H.T. Hare at Bailey Hill water tower, of 1900.

Under the roof there is a segmental arch reminiscent of the work of Charles Harrison Townsend in the Horniman Museum of Ethnology, Forest Hill, London SE23. The Horniman Museum dates to 1897 and was opened in 1902. H.T. Hare must have known the plans or seen the building being constructed when he was engaged as consultant by the Luton Water Company. This design differs considerably from much of his work: he is best known for his public libraries and municipal buildings in conventional Early Renaissance and then neo-Baroque styles.

Bailey Hill water tower was constructed by a local builder, W. Swain. It has a cast iron tank by R. & J. Dempster to which water was pumped using a Crossley gas engine. A second engine and a larger pump were installed in 1913. One engine and one pump is now in the craft museum at Stockwood Park, Luton.

The Bailey Hill water tower is now not used.

Demolition has been proposed. However, this has generated much opposition, led by the chairman of the British Brick Society, T.P. Smith.

To many, pleasant buildings to look at - rare enough in Luton - are as much an amenity as tennis courts and bowling greens, especially when set in attractive surroundings. To pull <u>this building</u> down would deprive Luton of just such an amenity and would, moreover, be an act of gross vandalism - especially to replace it with a car park!

MERCHANTS' WAREHOUSE, MANCHESTER

The Merchants' Warehouse beside the Castlefield Basin at the end of the Bridgewater Canal in Manchester was built in 1827. In 1971, a fire seriously damaged much of the structure although the four-storey facade to the canal basin is largely intact.

In April 1995, a rescue project, costing £4 million was announced to turn the derelict and damaged warehouse into studio offices. Grants have been made available by the Central Manchester Development Corporation and English Heritage.

This is the second canalside Manchester warehouse to be reconstructed. Dating to between 1811 and 1836, only the backwall of the Grocers' Warehouse survived in 1960. By 1986, this had been rebuilt to provide a reconstruction of an early-nineteenth-century warehouse, complete with waterwheel and hydraulic lift.

BRITISH BRICK SOCIETY IN 1995

Two visits remain from the programme arranged,

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. Guide: Shaws of Darwen Afternoon visit will include viewing the brick chimney of India Mill, Darwen. Further possibilities include St Gabriel's church, Blackburn, by F.X. Velarde, built in 1933.

Details are included in this mailing.

Suggestions for visits are always welcome and should be sent to

Michael Hammett
Hon.Secretary, British Brick Society
9 Bailey Close, Lucas Road, High Wycombe HP13 6QA

Arrangements are already being made for 1996 visits, to include a brickworks in Yorkshire and Eton College. As of May 1995, the one certain date is

Saturday 8 June 1996	Annual General Meeting Weald and Downland Museum , Singleton, Sussex (north of Chichester)

Dates will be included in BBS Information 66 (October 1995).