

NEWSLETTER

Issue 32 February 2008



· INSTITUTE · OF · HISTORIC ·
BUILDING · CONSERVATION

WEST MIDLANDS BRANCH

DIARY DATES

BRANCH MEETINGS 2008

- ❖ Tuesday 11th March 2008, to include Branch AGM. To be hosted by Wychavon DC at Pershore, and including a visit to Grade I Mere Hall to look at secondary glazing. For further details, see the Agenda.

CHAIRMAN'S COLUMN

Dave Burton-Pye

ABSENT FRIENDS

I'm afraid that this message comes to you *in absentia* as I will be on holiday when the next branch meeting and the AGM are held. Whilst there may be little to choose between Droitwich and Prague I'm forced to admit that the latter just nosed ahead in a close finish. Any liquid refreshments that I may enjoy around lunchtime on the 11th March will hence be genuine Czech lagers rather than whatever prevails at your venue(s). Notwithstanding the respective merits of the two locations and their hostelries, your visits that day should be particularly productive.

I don't recall any previous meetings in Wychavon so this will be a welcome first, and the photographs that I have seen of Mere Hall – the focus of the afternoon visit – promise an exceptional opportunity to see a very large and elaborate timber framed house at close range. Here you will see examples of the sort of secondary glazing produced by Storm Windows, a Halesowen-based company whose engineering background lead them to develop a system whose slender profiles and minimal intrusion were clearly borne from a tradition of working to close tolerances. I am obviously pleased to be visiting Prague but at the same time I am genuinely extremely disappointed to miss the chance to see these products in action and will try to “engineer” an opportunity to do so for myself at some future date.

Another year has flown by and whilst I have had moments of doubt about continuing in this role, I do enjoy the different perspective that being chairman rather than secretary brings. In any event twelve months does not really give anyone chance to achieve whatever aspirations they may have for their

time in office so I'm here for another year at least. My colleagues in their roles as branch officers have been enormously supportive and in thanking all of them, I want to record my particular appreciation of Mizzy Marshall who is standing down as treasurer. Mizzy and I have served this branch together in different capacities for many years and her knowledge, enthusiasm and insight have been invaluable to me and indeed all of us. She has kept us in the black and provided healthy returns back to “HQ”. I hope that our shared sense of irreverent humour, often expressed in earthy innuendoes, is not lost so..... Keep sending the messages Mizzy!

I had hoped to finish this chairman's piece on a bright note, but a recent occasion has pointed me in a somewhat different direction. As some of you may know I am the local authorities' representative on the Lichfield Diocesan Advisory Committee and at its December meeting I heard the sad news of the tragic death of Stuart Davies who founded and lead Croft Building and Conservation Ltd. Stuart trained as a mason with Linford Bridgman and worked there for many years before leaving to establish his own company and I am sure that many of you will have had the privilege of working with him and the pleasure of seeing first hand the results of his wonderful work.

I first met him at Weston Park when he was in charge of repairing and cleaning the porte-cochere. I remember the meeting well as it had followed one of my annual reviews with the agent and clerk of works for Weston. At these meetings we would discuss their forthcoming programme of works and agree what were repairs and what needed consent. On this occasion I was not asked for my views but was *told* that the porte-cochere would be repaired. I was informed that “the message has not come from The Palace – but was from the next down the line”. The implication was clear ... “Don't even think about asking us to make an application”, and I got the message! I spent a few moments reflecting on this new approach to work at Weston. I thought about recent headlines and forthcoming events and then surmised, quite innocently, whether this might possibly be connected with a certain G8 conference. I was told, in those immortal words from House of Cards, that “you might possibly say that, I cannot possibly comment” and sure enough Weston Park (not, repeat not, the ICC and Symphony Hall) was

the venue for the really important meetings. In later discussions I was amused to learn that whilst I may have had some misgivings about the extent of the works, my contacts at Weston had their grey cells exercised by slightly more pressing concerns – namely “where to hide the gun emplacements”!

Croft Conservation subsequently carried out other projects in my neck of the woods – notably at Enville Hall, superb repairs to the stonework at the pretty little ancient Church of All Saints in Bobbington, and latterly the reconfiguration of the roof and leadwork repairs on the tower at St Peter’s Church in Kinver. All of these are characterised by the supreme craftsmanship, close attention to detail, and pride in the finished work that is the hallmark of Stuart and his company.

Many of us over the years have spoken about and recognized what privileged jobs we hold. We are paid to do what we enjoy and we get access to buildings and places within them whose very existence is unknown to many people. We are privileged to work with gifted people and sometimes our days are spent with the privilege of seeing first hand the labours of master craftsmen and women and learning from those experiences.

I certainly consider myself privileged to have known Stuart and I am sure that many of these thoughts will be fully shared by those of you who also experienced his works.

EDITORIAL

Writing up the Branch’s Birmingham event, which took place on Friday 30th November, proved to be a ‘rush’ job. I was flying to the USA the following Wednesday and had to set up and run a charity auction on the Monday night! Fortunately, I managed to do the necessary on the Saturday. So the write-up was ready and waiting for me, when I got back from the USA, to put together Newsletter 32.

In No 32 I have taken the opportunity to inflict on you some pictures and text resulting from my US visit. I have also added a short piece about a fascinating church visited on a rare ‘day out’ in February.

The only bit of the US I really saw was Pennsylvania. US planning, as evidenced by PA, is clearly a deal less rigorous than in the UK, and still firmly wedded to the use of the motor car. I encountered an open-air shopping precinct miles from anywhere (and far from any houses) at the foot of a dead-end mountain road. The only way to get there was to drive. The whole densely-populated Wyoming Valley was criss-crossed by an abundance of railway lines but there was not a single passenger service anywhere in the 65-mile-long valley. If gasoline (aka ‘petrol’) runs out tomorrow, US society will collapse. Pennsylvania is still taking no thought for tomorrow. Or perhaps not the State Government. The State is subdivided into counties, who seem to be the bodies exercising what Planning powers there are. Strategy seems to be lacking at county level. Even a simple strategy aimed at diminishing gasoline-dependence!

BRANCH MEETING

Day Theme :

TOWN HALL REFURBISHMENT

30th November 2007

The 30th November Branch Meeting took place in the Lower Bar of Birmingham Town Hall. Though it must be said that the bar itself was shut! Besides the

morning Branch meeting the numerous participants heard a presentation by Mark Balham (Rodney Melville and Partners, Architects) and Barry Adams (Birmingham City) on the repair, refurbishment and re-activation of the Town Hall, after which there was a guided tour. After a short lunch break our host Richard Hudson led a City Centre walkabout, looking particularly at significant office buildings of the early C20 and public house conversions of banks. The problems facing the future of the Grand Hotel (Listed Grade II* recently) were described. Finally, the group had an opportunity to visit the School of Art – the subject of a previous Branch visit some ten years ago, when the refurbishment scheme designed by Associated Architects was in the process of completion. Particular thanks go to Richard Hudson for organising our day.

VIEW OUT OF THE WINDOW

30th November 2007

Not something that was possible on 30th November. The ‘Lower Bar’ is in the basement and has no natural lighting. Design was very simple, all surfaces being off-white plaster. The particular benefit was that the ample public toilets were just next door. Both were created as part of the newly-completed refurbishment scheme.



In the Lower Bar before start of the meeting

BIRMINGHAM TOWN HALL – Its repair and refurbishment

30th November 2007



Town Hall – North Pediment

Architecturally the Town Hall is a Classical temple, with a Corinthian colonnade throughout and end pediments. The designer was J A Hansom, who won a competition in 1830. Hansom also gave his name to the Hansom cab, and much later in his career designed the remarkable Gothic Revival church of St

Walburgh in Preston, now threatened with redundancy.

Hansom and his partner E Welch went bankrupt in 1834, and the building was altered and completed in 1835 under the supervision of local architect Charles Edge, who added two further bays to the north to accommodate the present great organ.

The 'temple' stands on a high rusticated podium, punctured by arched openings. The podium stands forward of the colonnade, stepping up to it by shallow steps on all sides.

Extensive alterations took place in 1927, when the original single gallery was removed and double galleries inserted, with accompanying access arrangements. The main ceiling was also replaced, to the design of Sir Charles Allom.

Until the creation of the Symphony Hall further to the west at the end of the C20, the Town Hall was Birmingham City's principal concert hall and home to the CBSO. The building was closed to the public in 1996 and later falls of stonework and plaster led to the erection of a security fence around the outside for the public protection.

Birmingham City's original intention was to re-activate at minimum cost. However, other counsels prevailed and a Project Team was set up to develop a scheme to undertake the full repairs necessary and fit the building as a C21 performance auditorium. A Conservation Plan was written and the results of a condition survey added. These documents, when submitted to the Heritage Lottery Fund, resulted in a Stage 1 Pass.

This was followed by an 'enabling phase' costing £250,000 involving substantial exterior scaffolding and interior opening-up, together with a look under the then zinc roof covering to get a clear picture of the building's full repair needs. Design and specification followed, with the resultant scheme received an HLF Stage 2 pass and a grant offer of £8.5m. Developed repair cost information led to a revised total offer of £13.7m. ERDF funding was also obtained.

The project cost in total £36m. Contract period was 2 years, and the scheme was completed to timetable and within budget. Principal contractors were Wates, whose role was largely to administer the contract, procuring and managing the services of other sub-contractors, who included StoneWest and St Blaise. The HLF encouraged the City to take the opportunity of developing the building's front-of-house and backstage facilities to the best C21 standards. Design and specification was corporate effort, with Building Regulation and Fire officer participation from the first. John Yates from EH was virtually a member of the Project Team too.

A radical decision was taken to remove the two galleries of 1927 and reinstate a version of the original single gallery. This had two main benefits – (1) improving the auditorium acoustics and (2) simplifying the access arrangements through the podium, eliminating many stairs and changes of level, and allowing reinstatement of the original plaster-vaulted corridors.

The exterior stonework had been executed in Anglesey marble. This was a very hard stone that, however, was heavily crazed. The crazing allowed moisture to penetrate and cause substantial erosion. Much replacement proved necessary. A search for compatible stone led to a small family-run quarry in Anglesey producing fireplace stone. Another source was found in Cumbria. Interestingly, the Cumbrian source proved to be less reliable than the tiny family business in Anglesey.

The 'Enabling Phase' had identified the use of a stonework coating in the original scheme. This provided the justification for limewashing the repaired stonework. The limewash had the special benefit of penetrating and sealing the surface crazing and so prevented the water ingress that had proved so damaging. Future erosion was thereby radically slowed down. A compromise necessary to keep the project within budget involved stone-cutting by angle-grinder rather than by hand. The original masons had not fully-carved details out of public view, and this was repeated where replacement carved work was necessary.



The new coating

C20 fears for the structural stability of the high roof had led to the replacement of the original lead by lightweight zinc. However, the zinc was laid to an entirely different seam pattern involving additional steel framing. The loss of the weighty lead loading had also caused movement. The Enabling Phase had carefully investigated the chaos within the roof void and the decision was taken to reinstate the original leadwork. Surviving documentation from the original construction enabled the original seam pattern to be reinstated.



Plinth with lead-sheathed steps above

The stone steps topping the podium (and thereby forming the roof of the circulation spaces within) had leaked seriously, leading to C20 overlaying with asphalt, which had crept and fissured, letting in more moisture which had then not been able to evaporate out again. This trapped damp had caused serious problems with the plaster groined and barrel vaults inside, which had been very much patched. There was no easy solution to the problem. The option of lifting the stone steps and relating them on a water-tight membrane was considered, but dismissed, as the result wouldn't allow the structure to breathe. The ultimate compromise solution was to clad the steps in ventilated leadwork. This kept moisture out and enabled the fabric to breathe, but as the expense of external appearance, where 'roof' character lead topped the stone that should, ideally,

have been visible. Internally, the plaster vaulting was largely replaced in the correct lime plaster, with one or two sample areas of the original consolidated and lined-out.



Below the reinstated vault

The glazing in the high windows of the auditorium retained its original high-quality softwood framing. The old secondary glazing, to a pattern that did not match the originals, was replaced by single plate glass sheets that were hinged to the reveals, allowing opening for servicing. Each sheet weighted 0.33 tons!

The building envelope imposed constraints on space. For that reason the plant was taken out of the building and inserted to the north in a car park previously used by Councillors. Huge ducts underground connected the new plant to the building. This freed up space to create the lower bar, cloakroom and toilets in the basement. The decision was also taken to glaze the arcade at the south end of the podium. This provided essential foyer space and also enabled the area to be secured against misuse after hours.

The installation of services generally required considerable ingenuity. Another spin-off from the removal of the two 1927 galleries was the freeing-off of sufficient space within the podium to install lifts. The internal balustrades below the auditorium windows concealed folding acoustic blinds which could be raised to cover the windows if necessary. All lighting within the auditorium was recessed within the repaired 1927 plaster ceiling. One plain panel in this ceiling was hinged in front of spots, aligned to illuminate the platform. When the spots were needed the panel was opened.

The building's acoustics had been the subject of much attention. The two galleries of 1927 had reduced the reverberation time and created 'dead' areas. The rake of the new, single gallery had

been carefully chosen to benefit the auditorium acoustics. In addition, these acoustics could be 'tuned' through the raising, lowering or swivelling of a complex construction suspended through the ceiling. This construction, with a lightweight frame, included a series of see-through, dimpled lightweight panels that could be swivelled. Further spots were also suspended on it. Air circulation used the original ducts where possible. New grilles on the ground floor were carefully aligned on the pilasters above.



Auditorium with multi-purpose translucent 'rig'

The stalls seating was moveable, and could be folded and rolled forward under the platform to clear the floor for balls or dinners.



New gallery and seating

All the visible conversion work was of contemporary design, with the fire doors in the podium corridors being single glass sheets. Seating was natural-wood-finish shaped plywood. Upholstery was in quite a bright blue. The acoustic 'tuning array' was in effect a piece of C21 abstract sculpture, combining framing and see-through panels. All this contrasted with the ornate painting on the pipes of the original organ. The original design produced an impressive amount of natural lighting.

The 1927 galleries were largely in concrete. They had been broken up and the pieces fed into a 'cruncher' machine, enabling the demolition materials to be barrowed out of the building without causing any problems.

During the work original features and discoveries were carefully recorded and added to the documentation. Remains of the original Patrons' Gallery had survived behind the stage, as had elements of the original ceiling in the roof space.

Particular thanks to Mark Balham (of Rodney Melville) and Barry Adams (Birmingham City) who talked us through the features, decisions and discoveries as we walked through and around the building.

VICTORIA SQUARE

30th November 2007

The Town Hall flanks the west side of Birmingham's main Civic space, Victoria Square. This was totally remodelled some years ago to create a public space of particular dignity, involving steps, fountains, water and sculpture. Principal Sculptor was Dhruva Mistry. His work in bronze and stone is all figurative and only lightly stylized, his stone items having a distinctly 'Persian' air to them. The focus, though, is a large bronze symbolic woman, definitely reminiscent of Maillol's work. The sculpture and layout have 'gravitas' which is unlikely to date very much, trendy (and therefore ephemeral) presentation having been avoided.



Council House – in the sun; with steps and central sculpture – in the shade. Frankfurt Christmass Market razzle just visible

Victoria Square flows round the north of the Town Hall to the massive, modern, Central Library. A neighbour of the Town Hall is the Chamberlain Memorial, spiky, spired and Gothic, perhaps Birmingham's response to London's Albert Memorial.

Queen Victoria herself appears in bronze on top of a tall, slim, granite plinth immediately to the east of the Town Hall. This is the Victoria of the Diamond Jubilee, and old woman. In marked contrast to the Young Victoria in marble sculpted by Thomas Woolmer within the nearby Council House. This Victoria bronze has a remarkably lively facial expression – owing much to the hollowing-out of the eyes.

During the Branch visit the Square was packed tight with the booths and shanties of the 'Frankfurt Christmas Market'. A very gorbliney contrast to the civic dignity of the area – and no doubt earning the City a pretty penny in pitch rentals!

WALKABOUT

30th November 2007

Richard Hudson led a walkabout of the Waterloo Street and Colmore Row area of the City Centre, going on to Newhall Street, Edmund Street and Margaret Street. We were enabled to obtain a flavour of the *Colmore Row and Environs Conservation Area*, which had been the subject of a Character Appraisal published in 2006 [copies of which are available from Birmingham City's Conservation team].

Waterloo Street had been the City's banking Centre in the C19. However, all the surviving banking premises had become redundant and received conversion, all except one of them as pubs and restaurant. The exception was conversion into an

architects' studio. However, the conversions had retained the ornate banking halls virtually intact. Further east, redevelopment had taken place with substantial new office blocks being built.

New Oxford House (S N Cooke 1934) had a plain stone-skinned frontage that retained all its original steel 'grid' windows. The entrance porch featured two carved pilasters, topped by stylized faces rather reminiscent of Eric Gill's work. Next door was *Neville House* (W Norman Twist, 1934) with a strikingly banded and framed frontage and an overhanging cornice, again retaining its original fit of steel windows with horizontal glazing bars – a vital part of the design.



Neville House – with original steel windows

Further up on the other side of the road was *Cavendish House* (W T Orton, 1937) featuring pilasters rising through several stories and decorative panels below the (again original) steel windows. Finally, the *Legal and General Building* (S MNJ Cooke and E Holman, 1931) was now owned and largely occupied by the City Council. Again, it was stone-faced and featured a chunky grid of pilasters and horizontals, topped here by semi-abstract urns and some stylized bas-relief carvings by local sculptor William Bloye. Again, the steel grid windows were still there, but seemed to have been re-glazed in a type of Perspex, judging by the reflections.



Legal & General Building

At St Philip's Churchyard, we received a briefing on the present and future of the Grand Hotel. This is a large Second Empire style building, purpose-built as the main town centre hotel, and was recently spot-Listed Grade II*. There is one good interior suite of rooms and some interesting construction in the double-mansard roof. Unfortunately, the exterior was clad in poor quality stone, much of which was laid incorrectly, to the effect that pieces are falling off and repairs difficult – and extremely costly, probably exceeding the £4m stonework repair costs incurred on the Town Hall.

This creates a problem for the owners, who cannot easily unlock the market value of the building and its site. There is continuing pressure on the City to permit demolition. However, the process towards achieving LBC to demolish involves putting the building on the market, with the very possible effect that someone else might buy it – creating a continuing cycle of inactivity. As existing, the hotel is partly covered in scaffolding. As one branch member put it, with the intention of frightening others as to its structural state, preventing the taking of good and attractive pictures, and thirdly and more practically, to catch falling pieces of masonry.

The walkabout continued along the line of Italianate Palazzi on the north side of Colmore Row and up Newhall Street to look at the former purpose-built telephone exchange (Frederick Martin, 1896), executed in red brick with an extraordinary range of lively terracotta decorations. The, turning along Edmund Street we had the opportunity to look at a row of remarkable and largely intact Arts-and-Crafts houses purpose-built as both homes and consulting rooms for the medical profession. One unit had splendid Art Nouveau railings and rainwater goods. This was Arts-and-Crafts building of very high quality. The walkabout ended at the School of Art in Margaret Street.



Arts and Crafts house, Edmund Street

One issue was the surprisingly large number of 'Offices to Let' signs in and around Colmore Row. Clearly, the bottom is falling out of the market represented by this vacant space. If the survival of so many high-quality buildings is to be assured, then it looks as though new uses will be needed. But do the economics (and practicalities) of residential conversion stack up? Clearly, it would be a very 'green' thing to do, assuring elimination of commuter travel by the residents concerned.

SCHOOL OF ART

30th November 2007



School of Art – at dusk

We had the opportunity to enter the building and view some of its significant features. Listed Grade I (architects Chamberlain and Martin, 1881-5) the School was purpose-built. About ten years ago it had a major make-over (designed by Associated Architects) which included substantive repairs as well as intelligent modifications to maximise the building's utility. Some Branch members can recall inspecting the building shortly before the completion of that scheme.

For those Branch members who had been on that previous visit, there was a great contrast. The building had been re-occupied and was in full use, with the great top floor studio spaces partitioned into shallow bays, each bay being occupied by an individual student.



Top floor studio – in full use!

There was also an opportunity to view the mezzanine floors inserted by Associated Architects with their construction details, which involved bracketing-out from load-bearing walls and suspension from original iron beams. All the late C20 interventions were attractively detailed in a contemporary style.

There had been some thought about the School of Art moving out. However, both staff and students were strongly committed to remain in this character-ful building, which, by its very design encouraged the creative process. Moral, as a Branch member pointed out, the best use of a building is that for which it was designed.

SCULPTURE

30th November 2007

The bronze Queen Victoria has already been described above, in the context of Victoria Square. However, Chamberlain Square (to the NW of the Town Hall) included a battered limestone figure of James Watt, neighboured by a good bronze of Joseph Priestly, both teetering on top of very high plinths.



Priestley – elegantly posing in front of concrete inelegance

BIRMINGHAM – a historical note

The Colmore Row CA Character Assessment (mentioned above) points out that the CA occupies the high point of the Birmingham ridge. As was pointed out during the walkabout, the elevation is disguised by the height of the buildings. It is only during development when it becomes clear what an extensive view the site commands.

The earliest surviving property is probably St Philip's Cathedral (early C18), built at the northern extremity of the then town, which later expanded to lap round the church and churchyard. Development activity thereafter was largely occasioned by the falling-in of leases at the ends of their term.

CHIMNEYS - STABILITY CONSIDERATIONS

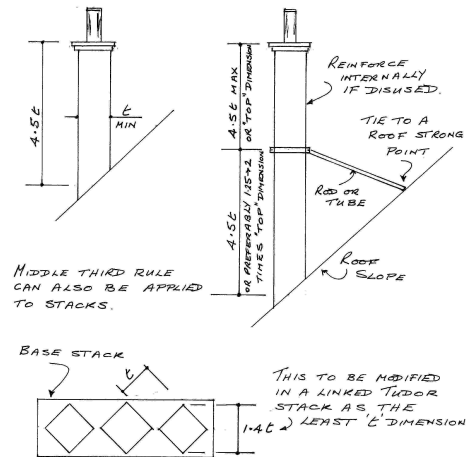
Charles Shapcott

Most of the domestic buildings that have historical significance have masonry chimneys, which like walls, are a cause of problems. It usually comes down to a lack of maintenance, and their location for access, but not usually lack of observation. The physical size of the stack, and possibly the pots if any

on top, are not often appreciated from ground level. The first thing is to get the scale of the problem by counting brick courses and using the 'nominal' parameters to convert into dimensions. Typically four courses to a foot or 300mm, and 225mm or 9" for a brick face including a joint.

There is adequate published information provided in design codes and general guidance for building of new structures, with older structures, not necessarily very historic ones, there is a shortfall of readily accessible general data, a search for old text books, for a guide to previous 'design rules' is invaluable. The Building Research Establishment has produced a series of Good Building Guides (GBG) documents for both new and older construction. These documents are intended for lay persons, and other building professionals, in true engineering terms they are rather coarse, being related to a global Factor of Safety of TWO is presumed to apply.

There are two GBG's that relate particularly to stacks GBG 2 and 4, and chimneys are covered again in British Standard 5628 and Building Regulations. These generally assume the slenderness of the height being equal to 4½ times its least lateral dimension. The latter GBG gives guidance on procedure for repointing and maintaining stability during the works.



Chimney Proportions.

Figure 7

These proportions are not 'engineered' in that they apply to stacks globally across the country irrespective of the basic wind loading applied to them, which is where there are some improved analysis could be undertaken and economies general engineering standards could be applied. In this I am advocating some sensible reduction in Factors of Safety to align with others within the design remit. Values of between 1.5 and 2.1 feel would be acceptable, with even a reduction to 1.25 for single unit in a cluster of stacks. These have to be initial assessments but detail examination is always required, to see if what has been assumed is realised in fact.

One other factor not often taken into account is the longevity of what we have been asked to assess. Sometimes longevity defies the results obtained from calculations.

The stack not only has to be stable but also function, which results in tall stacks and these are

disposed about the structure resulting in them sometimes being in areas of high turbulence. Also the surrounding environment for the stack is usually far from ideal it can easily range from being close to earlier well intentioned decorative planting, with branch impact damage potential. The structure can be covered with a water retaining creeper or ivy & even being within the drip line of a large tree can have an adverse effect. Not only in damaging the structure but keeping it moist but also increasing its windage, with its 'head growth' under full leaf.

With a visual, often binocular aided, assessment made on the structure as found and with historic guidance from other professionals, structural judgements can then be made about how the stack could be best saved. It is useful to consider under what former control it was built, whilst the design code may be superseded, it originally had a validity, and thus was deemed safe and with a reasonable life expectancy. The next phase will then be in Conservation Engineering, to check the structure for stability if it were properly repaired.

The 'Middle Third Rule' is that which is applied by Engineers and others to get an early idea as to the potential for instability of a structure. Whilst it is acceptable for solid structures it has to be treated with care in respect of chimneys as they don't have the mass of a solid wall to resist wind loads. Most stacks have only half-brick thick walls, with withes or mid-feathers that aren't bonded to the perimeter walls. The degree of permitted lean of a chimney is restricted to 1/100 of its height. This I feel is too tight a tolerance as it closely approaches that which could be achieved when it was built.

Methods of Repair - Chimneys

Many actions enumerated in the walls repair section are applicable to chimneys. Due care has to be taken in the choice of mortar mixes to combat flue-acid degradation, unless the repaired element is protected by a liner.

The general exposure to the elements due to the flue's elevation, for both masonry and mortar, has to be considered. There are recommendations as to the phasing of pointing repairs, and delay periods between doing faces to allow for curing. It should also be questioned whether the stack should be temporarily supported during these works, due to the 'loss of section' intimated in the raking out of joints.

Often stacks can be strengthened and/or restrained by the introduction of a band and a tie/prop off adjacent construction. There has to be care executed in the way as the structure that will need to accept the extra load has to be checked for integrity. The proper restraint strap is one engineered to take advantage of both the stacks inherent strength and that of that supporting structure.

Another and often practised method of strengthening of a stack, primarily if unused would be to put a liner down it and fill the annulus between it and the inside of the masonry with a concrete. This method does however require that the stack be straight for a length at least four times the flue diameter below the roof, or with a mass of masonry, provided by walls below. It is imperative to allow the stack to breathe. The liner could be as small as a 50mm plastic pipe, or the size of a spiral wound flue liner, used for protection against combustion products.

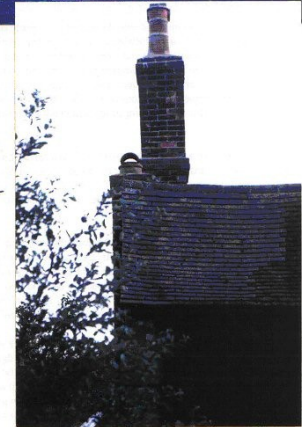
General Comments on Mortars

Pointing is the process of filling the outer part of the joints between masonry units in a wall, either during the process of building, or to restore full section of the stack when the original material has weathered

back from the surface. Compatibility between the main stack mortar and the new pointing is essential. Mortars for reconstruction of any structure should relate to that with which it was originally constructed. Additionally the prevailing weather during the rebuild period, and the staff used to be carefully considered. Sampling is the best way of checking for parity, sampling locations and sizes are specified in UK Codes of Practice.



CAREFUL ANALYSIS
REQUIRED



Mixes no stronger than 1:3 lime:sand are considered reasonable for historic work but may not achieve a good set or durability if built in autumn or winter, despite best endeavours at protection. A winter mix may be as strong as 1:2 lime:sand to overcome the incompatibility problem, or a hydraulic lime used with suitable weather protection. It may be permissible to add a coarse grit into the mix which when exposed by brushing will enhance the durability of the mortar.

It should always be remembered that 'hard onto soft' will not work. Often one sees 'new' shallow pointing falling off the front of the joints. This is not only because it was shallow but in application the joint may not have been 'wetted in' properly. Any mortar if cementitious or stronger it has a greater potential for shrinkage and is loosened on initial drying out. Pinch points can be caused with a hard mortar putting stress on the hard fired brick edges.

The present building trades will try to insist that cement be added, partly because that is what they are used to, and secondly it is better for productivity. However a hydraulic lime can give comparable results and lime mortar walls need more protection in their construction or repair period, as the constituents take longer to set. Historically time was not of the essence, and the labour element of construction was relatively cheap, compared with the raw material cost.

Conclusions

While producing an economic scheme should be in the forefront of all the design teams' minds, the importance of the structure to be salvaged should be emphasised to all in the design and construction teams. An argument that is most useful to use is that

we have the best of the remaining historic structures left, because all the badly built ones have fallen or been taken down.

Some of the requirements, such as reversibility of a repair, as often viewed as unusual by some practitioners, but it paves the way for future alternative repairs using new technology and still leaving the subject relatively undamaged.

We must be allowed to do some 'lateral innovative thinking' and be aware enough to recognise that the first method for solving any problem is the only one. These ideas must be allowed to be tested by all parties in the design team, for what suits one member of the team may prove an obstacle for another. All design processes are meant to be interactive but there are a few 'extra' factors in working with a historic structure.

IHBC THINGS

Lydia Porter, IHBC Office

Help your IHBC branch win the AGM of its dreams (*well..., within reason*)

Join the IHBC recruitment drive now.

The IHBC is running an **internal competition between branches** to see which branch can recruit the most **NEW, FULL-SUBSCRIPTION PAYING members** (Full, Affiliate or Associate) between November and the end of March.

The attractions of getting conservation and historic environment specialists that you know to join up now include: - easy application for Affiliates and Associates: simply **tick, sign and send** the new membership form (on our web site) - easy start-up for qualified professionals: simply join as an Affiliate and we will guide applicants through the process- up to 5 months free membership for new members (until April 2008) - tax deductible fees (in line with Inland Revenue guidance on professional fees) - all the usual IHBC benefits, from branch newsletters to events, national journals and yearbooks- and as well you're helping the only professional body and charity specifically dedicated to conserving our historic places.

Remember, the IHBC includes members from all disciplines that can shape conservation: project managers, architects, engineers, planners, managers, landscape architects, historians and archaeologists *etc.* If you know someone who should enhance their professional role in conservation and the historic environment, get them to think about joining up **NOW**. If they do, you both just might be able to have the AGM of your dreams!!

Ask your branch chair for more details, or **e-mail Devon, our membership services officer, at membershipservices@ihbc.org.uk, for more information or leaflets for distribution.**

IHBC Gus Astley Annual Student Award

The institute is running its second IHBC Gus Astley Annual Student Award this academic year, with a closing date of the end of July 2008. The award is made to an outstanding item of taught-coursework (*i.e.* NOT research-only courses) relating to 'Conservation or the Historic Environment'. This covers coursework submitted on any aspect of conservation, from archaeology and architectural history to heritage and conservation projects, and is open to students at all levels. Applicants simply submit digital versions of their coursework to contest for an award worth at least £300. Entries must be submitted to studentaward2008@ihbc.org.uk, in accordance with the guidelines, while candidates must be able to secure validation from their course

leaders prior to any award being made. See www.ihbc.org.uk for further details.

SCENES FROM PENNSYLVANIA

The Editor

Introduction

I spent almost two months in a wintry North America December '07 – January '08. Owing to the weather I did not get about that much, but was able to travel much more widely than during my previous (and shorter) US visit in August '06.

Scranton & the Wyoming Valley

I stayed in Scranton, which is one of the two largest towns in the Wyoming Valley, located in north-east Pennsylvania. The valley is formed between two ranges of the Appalachian Mountains, long, wooded ridges rising over 1,000 feet. Scranton straddles the Lackawanna River, which runs south-west along the valley to join the much larger Susquehanna River just east of the other large town, Wilkes-Barre. The local pronunciation of "Wilkes-Barre" sounds very much like "Rooksbury" to my English ear. The valley had rich agricultural land, which made it attractive to both the Iroquois Confederation ("Native Americans") and to the European settlers of both Pennsylvania and Connecticut. There was violence as to who should have control over the Valley, including an outbreak during the American Rebellion against the British Crown in the 1770s.

The Valley was intensively developed from the end of the first quarter of the Nineteenth Century following the discovery of high-quality Anthracite hard coal there. Heavy industry followed coal-mining and the need to transport both coal and manufactured items led to the valley becoming linked to the outside world by an extensive railway network. The main line from New York (Hoboken) to Buffalo (in New York State) ran through Scranton. There is extensive survival of industrial archaeology, and railway tracks run everywhere. However, there are no passenger trains at all and only some tracks are significantly used for freight. Steamtown Railway Museum is sited at Scranton on the site of the old loco roundhouse, and sometimes steam excursions are run from there.



Steamtown Railway Museum, Scranton PA

Central ("downtown") Scranton is sited immediately to the south of the Lackawanna River immediately east of its junction with the Roaring Brook. As in virtually all North American cities, layout is to a regular 'grid' plan, with the grid running north-east and south-west. With the decline of manufacturing industry Scranton became impoverished, with the beneficial result (in some ways) that many interesting Victorian and Art Deco buildings have survived. However, the advent of the

private car for everyone largely destroyed Scranton as a shopping centre, with the result that shops are few and far between outside the vicinity of the one commercial shopping centre (which are called "malls" in the US).

Honesdale

After Christmas there was a short spell of very mild weather for about three days. I took the opportunity to leave the Wyoming Valley and visit the town of Honesdale, some miles to the north-east. The road climbed on to the shoulder of the southern mountains and gave a clear view of the small industrial towns clustering in the narrowing valley below. Then the road singled down and started climbing and twisting, descending into wooded undulating countryside.

Some miles later, there was a small village clustered around a traditional North American church. And then I was clearly entering an urban area, with a range of garages and car-related retail outlets. This was Honesdale. My intention had been to seek out and patronize the second-hand bookshop that I had spotted in the telephone directory. But there was clearly more to Honesdale than just that particular shop. There were brick buildings – and Victorian brick buildings at that. More, in a gap there was a row of railway carriages apparently being used as a restaurant – and they stood on tracks. Notices indicated that there were steam-hauled excursions in the holiday season. Having bought several bags of books, I set off to explore on foot.



Main Street, Honesdale, PA – painted brick

Honesdale had a simple 'grid' layout based on the main street running roughly N-S. The road from Wyoming valley entered at right angles from the west, paralleling the Lackawaxen River, which rushed rockily under the main street to turn abruptly southward on the east side of the town. Honesdale actually occupies the flat floor of a steep-sided valley.

To the east of the main street, there was a further grid of streets, two or three blocks deep. The remarkable thing was that the corner of each second block was occupied by a large Church. So there was a row of churches along the same alignment. First Baptist (wooden and white-painted North American Neo-Classical), Methodist Episcopal (Gothic in brick); Presbyterian (North German Romanesque in striking orange brickwork) and Episcopalian (rubble stonework Gothic with a very steep stone spire). The exception to the rule was the Roman Catholic Church, which sat on a slope the other side of the main street, stone-faced, Gothic.

There was a Library and Museum run by the local Historical Society on Main Street. It occupied what looked very like a railway office building (brick with Italianate stone dressings). Sadly, the premises

were shut. But signage began to explain things. Honesdale had started life as a transshipment point for anthracite coal, quarried at Carbondale at the north end of the Wyoming valley and delivered to Honesdale by a gravity railway. On arrival at Honesdale the coal was shipped away south by canal. Later, the canal had been partially infilled to take another railway performing the same function.



A church on every block!

One sign was specially interesting. It recorded that the first steam locomotive to arrive in North America, the *Stourbridge Lion*, had been tested here in Honesdale. Lurking behind a plate glass window in the museum was a full-size replica of the *Stourbridge Lion* itself. A later check on the map added that the tourist railway line was called the 'Stourbridge Line' in commemoration of that fact. By an odd coincidence, the West Midlands Historic Buildings is working on a project to preserve the historic Grade II* Foster and Rastrick Foundry in which the *Stourbridge Lion* was built.



Library & Museum, Honesdale PA



Coach House on back lane, Honesdale PA

Honesdale was also separated into two clearly distinct zones by the River. North of the river was largely residential. South of the river was much more a mixture of business and residential. Along

the north bank of the river was an impressive range of Victorian villas facing south, many in brick with stone detailing, two or three being topped with square roof lanterns too. This row of houses had their own dedicated coach houses facing a back lane. There were further large and handsome Victorian houses fronting the northern stretch of the main street.

To the west of the tracks there were the increasingly shabby and neglected close-boarded and clapboard warehouses that had formed part of the freight interchange business. And, here and there throughout the town, there were former industrial premises very close in feeling to those to be found in the Black Country.

Wilkes-Barre

I had the opportunity to visit the other big town in the Wyoming Valley, Wilkes-Barre, the day before I left the US.

In many ways the buildings were more exotic than those of Scranton, a tall Court House with one large and four small scaly domes being a dominant feature. An unexpected building was a very large brick mosque look-alike, with a dome and four minarets. It proved to be a Bahai Temple, and quite an old building, with much intricate brickwork and decorative tiling.



The Court House, Wilkes-Barre PA



Bahai Temple, Wilkes-Barre PA. One of four minarets and part of main gable

The Susquehanna River is a major feature. The main University has a river frontage, although the grand villas along the riverside road have to peer over the top of a very tall embankment designed to protect Wilkes-Barre from flooding. The main bridge is marked by two monumental pylons at each end. Walking across, the current was bringing down a continuous quantity of small, shallow ice floes. On the other, north bank is a continuous riverside park with grass, walks and trees.

FOCUS ON

St Edward the Confessor Church, Kempley, Glos

The Editor

This is a 'second generation' Arts-and-Crafts building, the creation of Randall Wells, who received the commission whilst working as on-site clerk of works for W R Lethaby's innovative thatch-over-concrete All Saints Church nearby at Brockhampton.

The commission came from Lord Beauchamp, who was a close friend of the Anglican liturgical reformer Percy Dearmer. Dearmer stressed the importance of design and craftsmanship in contributing towards the quality of public worship. Wells' creation involved the use of local craftsmen, including the village blacksmith and joiner. The rood sculpture internally came from a carver specializing in ships' figureheads.

Built in 1903 of local stone and roofed in Roman tiles, St Edwards deliberately avoids the Gothic pointed arch. Instead, Wells uses the straight-sided triangle. So much so that the church is almost an 'A'-frame building, with the side walls barely rising above head height and the whole topped with a steep gabled roof supported on massive timber trusses.



St Edward's, Kempley, Glos - View from SE



From W – with that lattice window!

Interior lighting was carefully calculated, with a single side dormer to the south throwing light on to the rood at the entrance to the sanctuary, the nave relying on a remarkable west window for its natural light. This is a triangle-headed diagonal grid executed in stone. The east wall is not fenestrated, there being a full height reredos curtain instead.

The north tower (with saddleback roof) acts as a porch on its ground floor. The entrance door features a three-side 'arch' within a four-sided arch.

Detailing throughout is simple and chunky, almost without ornament. However, there are two shallow bas-relief sculptures externally – rood on the east gable and a Christ in Glory on the tower face above the porch door.



Interior view – the building was locked but the sill of the west window was low enough to permit pointing and shooting!

The Lych Gate is contemporary with the Church and features a semi-circular stone arch. The traditional plinth (on which the coffin was designed to rest during funerals) is in the centre, with access through wooden gates (probably the originals) on each side.

St Edward's is still in use but the signs are that some maintenance is needed. Weeds are starting to grow in the stone downpipe hoppers when I visited early in February. Nevertheless, this is a fascinating 'Free Style' building that merits a high Listing grade (minimum II* I think) and exemplary care by its Parish.



Lych Gate

PICTURE POSTSCRIPT



Susquehanna Bridge, Wilkes-Barre PA. Pylon

EDITOR'S SHOPPING LIST

Your Editor welcomes, for the next Edition of the Newsletter (No 33), to go out in Spring 2008, the following:

- ❖ Personal news of moves, retirements, arrivals;
- ❖ Copies of announcements and press releases;
- ❖ Case Studies;
- ❖ Letters;
- ❖ Articles on Law and Techniques;
- ❖ Book Reviews.

Material for inclusion in No 33 should, preferably, arrive not later than the end of March 2008. Please contact your *Newsletter Editor*:

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01922 644219; pdarnold@care4free.net



Queen Victoria, Birmingham. Town Hall behind