

BUILDING RECORDING AND
ARCHAEOLOGICAL WATCHING
BRIEF AT A FORMER
RACKETS COURT AND HOP-
WAREHOUSE, LAMBS FURNITURE
REPOSITORY, SANSOME WALK,
WORCESTER

WCM 101378, WCM101408



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Building recording and archaeological watching brief at a
former rackets court and hop-warehouse,
Lambs furniture repository,
Sansome Walk, Worcester

WCM 101378 and WCM 101408
January 16th , 2006

Summary

In response to conversion of the former Lambs Furniture Repository, Sansome Walk, Worcester a building survey was undertaken in August 2005. This was followed by a watching brief during conversion works. The northern warehouse proved to be the substantially intact shell of an enclosed rackets court which opened on the site in July 1861. There was also considerable evidence that the eastern end of the building represented an earlier open rackets court, apparently constructed after 1845. Documentary sources indicate that the Worcester court of 1861 was "in all respects similar to the best court at Princes Racket Club in London" which had been built in 1853 and set the standard 60 by 30 foot dimensions of all subsequent match courts. The vertical playing surfaces of the court survived largely intact, although the roof (originally part glazed) and floor had been altered. The spectators gallery, which was at the west end of the building, survived only as scars on adjoining walls. The building was originally heated by two fireplaces, one in the room beneath the gallery and another on the gallery itself. The original fenestration in the end elevations survived as blocked openings, and could be reconstructed with the aid of a 1960s photograph which showed the original sash windows at the gallery end and an oculus in the pediment. Some internal window architraves survived. Tentative evidence of a possible earlier gallery building, relating to an open court, was seen as wall-scars on the south side of the building.

During the 1870s the building was converted to a warehouse, windows were inserted in the northern elevation and subsequently internal timber floors were constructed, standing on cast iron stanchions and relatively independent of the original structure. Also in the 1870s the original lightweight part glazed roof was modified to accept the addition weight of a full slate roof, reusing the original trusses with additional stiffening and some of the original purlins. Following insertion of the floors further fenestration was added at the eastern end of the building and the building converted to a hop-warehouse.

In 1878 a further hop-warehouse was built adjoining the southern side of the rackets court – this building was carefully designed to mirror the original structure, and was similar in size, external finish and outline. The second building, being of commercial intent, was however built to a less finished standard, and was not internally plastered, nor were there opening sashes or architraves. The cast-iron stanchions of the 1878 building were made by Hardy and Padmore, the Worcester iron founders, and supported iron-flitched principal floorbeams.

The buildings remained as a hop-warehouse until circa 1969. In 1974 they were acquired by GW Lamb Ltd as a base for removals and furniture storage. The buildings were little altered for this purpose and remained in more-or less their 1878 state until GW Lambs relocated in the summer of 2005. The buildings are currently undergoing conversion to apartments by Court Properties Ltd.

The rackets court building is one of very few mid 19th Century and earlier courts to have survived, possibly the earliest civilian enclosed court in the country. Rackets Courts are, as a monument class, rare (there is only one other, 1880s, example in the county) as very few were built even at the peak of their popularity in the 19th Century. The sport was in the Victorian era almost entirely limited to three groups – officers in the services, the public schools and the very rich. The latter were responsible for a small number of private courts, mostly on large

estates. The present court appears to have been founded, and was certainly run, by two local bankers, G E Martin and J S Isaacs, who both came from very wealthy family backgrounds, and in 1861 were junior partners in Worcester Old Bank. The Worcester rackets court apparently operated as a private club to which admission was granted to the public, (presumably for a fee intended to exclude the common horde) and flourished briefly in the 1860s whilst the adjacent Pleasure Grounds were in operation, but vanished from the record after 1865, the year the Pleasure Grounds went into liquidation.

1 Introduction

- 1.1 An archaeological building recording project was undertaken by Mike Napthan Archaeology prior to conversion of the former hop-warehouse buildings, later Lambs furniture repository, Sansome Walk, Worcester (SO 8507 5537SO; Fig 1). The site is in the Historic Core of the Roman and medieval city Archaeologically Sensitive Area. Worcester City Council has granted planning permission for the conversion of the building to provide 14 flats and associated parking (P05A0263). The scheme involves the formation of new window and door openings, stairwells etc, though it retains the bulk of the historic fabric. The warehouse building is registered on the Worcester City Historic Environment Record as WCM 98521 and the rackets court as WCM 98563. A watching brief was subsequently undertaken during building and groundworks. The project was undertaken on behalf of the developer Court Properties Ltd.
- 1.2 This report represents the findings of the building recording and watching brief. The project was designed to meet a brief prepared by Worcester City Councils Archaeology Officer (05/12 issued 30 June 2005). The project design was prepared in accordance with the Standard and Guidance for Archaeological Building Recording issued by the Institute of Field Archaeologists (1994).
- 1.3 The buildings were surveyed at 1:50, with details recorded at 1:10 or 1:20 as appropriate. Measurements were principally obtained using a laser rangefinder and hand tape. Resulting elevations and plans are presented as Figures 5-15. The photographic record of the building was undertaken using a digital SLR camera, representative photographs are presented on Plates 1-5 and the whole photographic archive is presented with this report on .JPEG CD ROM format. The watching brief was recorded using similar methodology.
- 1.4 Documentary searches were made at the Worcestershire Family History Centre and at Worcestershire Record Office. Microfilmed copies of Berrows Worcester Journal for the relevant period were scanned for references to the rackets court and land sales in Sansome Walk. All available 19th C local trades directories were also scanned. Research into rackets courts nationally was undertaken mainly on the internet.
- 1.5 Building works, including the creation of new openings and stripping of internal finishes together with groundworks for new internal walls and drainage were observed during the watching brief. The building works were recorded photographically and by annotation of plans and elevations where features of interest were exposed.
- 1.6 Nothing of great significance was revealed by the groundworks (which were of very limited extent as existing floors were to be retained). Natural sand or sandy gravel was generally present at a depth of 0.5-0.6m below current floor surfaces, this was overlaid by 0.4m of dark grey brown loam, apparently buried topsoil. The present asphalt surface sat on a make-up layer of crushed mortar brick rubble and ashes over loose brown sand. There were some indications that the present floor of the rackets court was slightly above the original level, as the render of the court walls continued 0.05m below the floor. Of some interest was a discrete area of deep disturbance (over 1.8m) centrally located in the rackets court, towards the western end. The fill included broken 19th C brick and soft clay. This feature may have represented a small scale extraction of sand for the original construction of the court. No artefacts were recovered, but 19th C glass was present.

2 Archaeological Background

- 2.1 The present investigation of the site is registered on the Worcester Historic Environment Record as WCM 101378 (building recording) and WCM 101408 (watching brief). The site is located to the north-east of Worcester city centre, to the east of Sansome Walk and the north of Little Southfield Street. There is vehicular access from the latter, and a pathway from Sansome Walk.
- 2.2 The site (Figure 1) is currently occupied by two large adjoining warehouses and a small storage building to the east. The remainder of the site is laid to hardstanding. The building was, until 2005, in use as a furniture repository and storage facility operated by GW Lamb & Co. No previous archaeological fieldwork is known to have occurred within the immediate vicinity of the site. The nearest observations of archaeological deposits have been WCM100904, where a shallow CCTV cable trench was observed at the corner of Sansome Walk and Pierpoint Street. No significant deposits were observed at this point but possibly cultivated soils and late 18th or 19th C foundations were observed in the same trench further along Pierpoint Street (Napthan 2002). More recently there was an archaeological evaluation in Taylors Lane (Figure 1) which identified further deposits of cultivated soils and a brick structure probably of late 18th Century date. Also present were the part-demolished remains of three large underground air-raid shelters of circa 1939 (WCM 101342; Napthan 2005c). Only a single medieval sherd, and no Roman material was recovered from this site. Natural gravely sand was found to survive to a level of 21.65m AOD on this site (surface level 23.01m AOD).
- 2.3 Three desk-top evaluations (Figure 1) have also been recently undertaken for sites at the southern end of Sansome Walk. The nearest of these, (the Sansome Walk Car Sales site) lies directly opposite the buildings presently under discussion. Cartographic and documentary evidence identified the presence (in 1764) of a small building on the northern edge of the Car Sales site. This building was probably horticultural in nature as there was no evidence of the use of the site for other purposes prior to the 20th C. (WCM101319; Napthan 2005a). The site to the south (Pierpoint House) has also been studied – other than the construction of the Public Library building (WCM 98054) in 1830, there appears to be little evidence for earlier activity other than horticulture (WCM 101331; Napthan 2005b). A further desk-top evaluation of the former BT telephone exchange site immediately to the south of the railway bridge indicated that this site had slightly higher potential for remains associated with medieval back-plots, and possibly post-medieval occupation, however it was felt that the present BT building had probably removed most, if not all surviving significant deposits (WCM101271; Napthan 2004b).
- 2.4 Previous observations in this area have been very limited. The depth of man-made deposits at (what is now) the western end of the Lion Walk development (south of the railway) was recorded in 1956 by Richardson as less than 1m to natural Keuper Marl (WCM100967; Richardson 1957). Foregate Street appears to follow a ridge of gravel and sand, and observations to the rear of the Gaumont Cinema recorded “two feet of made ground over 3 feet of dark sandy soil” over the natural sand and gravel (WCM100962; Richardson, 1955). An evaluation of the former garage showrooms site in Pierpoint Street (and subsequent on-going watching brief) identified medieval back-plot deposits at the western end of the site, but found that the majority of the area had been affected by shallow sand or gravel extraction and earlier horticulture. Very little residual Roman, medieval or post medieval material was present at the eastern end of the site (WCM101294; Napthan 2004a).
- 2.5 There were two other hop-warehouses in Southfield Street, both of which have been converted to other uses in recent years, without a formal archaeological record having been made.

3 The racket court building - background

- 3.1 The present northern warehouse building was constructed on open fields to the north of Sansome House. Sansome House was built before 1741 (when it was marked on Dohartys plan of the City) but its origins are uncertain. A memorandum of 1701 refers to what is now Sansome Walk as “the way to Mr Blurtons” (Worcester City Quarter Sessions Memorandum

3.2 Whilst this plot cannot be certainly identified as including the present property, the 1839 and 1843 surveys of the Sansome Fields Estate shows only a small amount of agricultural land adjacent to Sansome Lodge, and the present site is only 50m to the north east of the house. As there is no mention of the rackets court it is very unlikely that the construction had been started by this date.

3.3 Berrows Journal of May 3 1857 reported a Public meeting at Guildhall on 1st May to form a Joint Stock Company for the purpose of purchasing the land immediately to the north and east of the present site, intended to be the pleasure grounds, as freehold property, the Worcester Public Pleasure Grounds Company Limited was therefore launched, the intended capital being £5,000 in shares of £10 each. In the event only the land to the north of the present Baptist Church was purchased, the southern part being leased from the Ecclesiastical Commissioners. The rackets court plot was never referred to as part of the Pleasure Grounds, and its alignment suggests that it followed an existing field boundary rather than the cross axis of the Pleasure Grounds, which opened in July 1859 (Berrows Journal, July 23 1859)

3.4 The purchase of the land for the rackets court appears to have preceded proposals for a public Pleasure Grounds mooted in 1857 - the land was certainly not amongst that considered for the scheme, which strongly suggests that it had already been sold by Barneby or his successors some time between 1845 and 1857. As the court was not mentioned by Turberville (writing in 1852), or any previous writers, it is unlikely that the court was present before 1852. Unfortunately the first (and only) specific reference to the Rackets court in the the local press was an advertisement of July 6th 1861 announcing its opening (see below). The opening (to the public) naturally doesn't necessarily reflect the date of original construction if it was previously a private facility. It is likely that a building of this height would have taken at least two years to build – Peter Nicholson (the writer of the most respected early 19th C building manual) recommended that walls should not be carried up more than four or five feet at a time, to allow for shrinking and settling of the mortar "nothing but absolute necessity can justify carrying the work higher...than one scaffold" (Nicholson, 1823 p355) - in a high-sided building with no internal stiffening and vulnerable to cross-winds this would be particularly important.

THE WORCESTER RACKET COURT.
THIS fine COURT, situated in **SANSOME WALK**, adjoining the **ARBORETUM**, is now completed and **OPEN TO THE PUBLIC** for the first time. It is in all respects similar to the best Court at Prince's Racket Club, in London.
 All particulars may be learnt from the Marker, at the Court, who is in attendance after 9 a.m.

THE WORCESTER PLEASURE GROUNDS COMPANY, LIMITED.
THE DIRECTORS intend holding a **BAZAAR AND FANCY FAIR** in the **GROUND**s of the above COMPANY, under distinguished Patronage, **ON THURSDAY AND FRIDAY, THE 1st and 2nd DATES OF AUGUST NEXT.**
 For the purpose of raising the necessary Funds required for the **ERECTION** of a Suitable Building for holding **FLORAL** and other **EXHIBITIONS**, and for the **SALE** of **REFRESHMENTS**.
 The Directors earnestly solicit the assistance of the Ladies of the City and County of Worcester, by contributions of **NEEDLEWORK** and **ORNAMENTAL ARTICLES**.

CAMBRIDGE HOUSE COLLEGIATE SCHOOL, STRAFFORD HOPKIN AVON.
 CONDUCTED BY THE **PRINCIPAL, THE REV. H. V. SCRIVEN.**
(Institution of 1840, and 1850.)
AT the School Parents and Pupils will find that they are provided with the best of the **MATHEMATICAL** and **GENERAL** EDUCATION, suited for the Universities, Professions, Civil Service, and Mercantile pursuits, at moderate Estimates, or exclusive Terms.
 A Prospectus and Particulars will be forwarded on application to the Rev. the Head Master.

MR. D. MASON, B.A.,
(Rector of St. John's Church), and
MRS. MASON,
Professor of Music, Teachers of the Piano-forte & Singing.
WILL be happy to give **LESSONS** in the above branches of Musical Art, as well as given to Children and Students of the highest respectability, and to give instruction in the French and Italian Languages.

PARK HOUSE, ST. JOHN'S, WORCESTER.
A FAMILIAR BOARDING SCHOOL FOR YOUNG LADIES.
MISS BURROUGHS, OF ST. ANDREW'S, (Worcester), Vauxhall, will be in attendance.
1861.

88, TYTHING, WORCESTER.
THE MISSES MACKAY.
BEG to inform their Friends that they have had the number of **NOVELS** and **ROMANCES** in usual Branches of a second English Edition accomplished.
THE SCHOOL will **COMMENCE** on the 1st of **SEPTEMBER**.

PRIVATE TUITION
 in Mathematics, Arithmetic, Writing, Book-keeping, &c.
 General Subjects.
TO the Friends of Pupils requiring above, the **REV. F. J. BAYLY, M.A.,** of Queen Elizabeth's Grammar School, Bath, and **MR. JOSEPH PENNY,** the second Master, respectively.

- 3.5 The Sansome Walk Court was opened to the public shortly before July 6th 1861 as “ in all respects similar to the best Court at Princes Club London” (Berrows Worcester Journal, July 6th 1861 p 5) . Subsequent documentary sources are sparse: The building was first mapped as a Racket Court in 1861 (map in Deighton's Guide to the City and Cathedral of Worcester, 1861) – but probably surveyed a little before this date). It is of note that the Rackets Court was one of only three places of entertainment named on the plan, and therefore presumably a fairly well-known facility. The next mention was in Slater's Worcestershire Directory, 1862 as “*Racket court, Sansome Walk*”, under “miscellaneous public buildings” on p102. The subsequent year The Post Office Directory of Worcester 1863 had the following entry: “*The Worcester racquet court is in Sansome Walk*” (p1236).
- 3.6 The most informative source was however the listing in the same directory of 1863 under “Public Establishments” - “*Worcester racket court Sansome Walk, G.E. Martin, Treasurer, and J.S. Isaac, Secretary*” (p1252). Isaac lived locally - Casseys Directory of 1860 lists “*Isaac John Simpson, Boughton House, Banker*” and there was a similar entry in Slaters Directory of 1862 He was the son of J Whitmore Isaac, a banker of the same address. Perhaps it is appropriate (in view of his sporting interests) that his former home (now Boughton Park, Bransford Road) is now a golf club. Martins address is uncertain, as he cannot be found in the Worcester City local directories. It is probable that this was the George Edward Martin (of the Martins of Overbury family), who was to become Sheriff of Worcestershire in 1882, and who died in 1905. If this was the case, then he lived at St Cloud (Old Hills, Callow) in 1878, and was a founder governor of Worcester High School for Girls (now Alice Ottley) in 1883 (VCH IV). He was the father of Granville Edward Bromley-Martin (born October 18, 1875, St Cloud, Callow End, Worcester) who played cricket for Oxford University and Worcestershire (www.cricinfo.com).
- 3.7 Both G E Martin and John Simpson Isaac were bankers, junior partners in Worcester Old Bank, of which Isaacs father was a director. By 1868 both Isaac and Martin were also directors of the bank - Kellys Directory of 1868 names the business as “*Berwick, Lechmere, Lechmere, Isaac and Martin (Worcester Old Bank) High Street, draw on Robarts, Lubbock and Co, London*”, p1393. It is clear from the character of these known officers of the club that the Sansome Walk Rackets court was operated as a private club, rather than as a purely speculative commercial venture as both treasurer or secretary were “gentry” and had presumably more than sufficient other income to fund their sporting pursuits.
- 3.8 The Baptist Chapel (Figures 1 and 3) was built immediately to the north in 1863-4 and opened for worship on 19th July 1864 (Berry, 1914). The juxta-position of the church and rackets court is rather odd, the court having been located in the eastern corner of the field, the church was then placed in front, taking almost all of the Sansome Walk frontage, leaving only a narrow path down to the court.
- 3.9 The last documentary mention of an operational Rackets Court was in the Worcester Calendar (1865) “*Worcester racket court (Sansome Place) open daily from 9 to dusk. Particulars obtainable from the attendant*”. In the Worcester Post Office Directories of 1868 and 1869 and subsequent editions there was no mention. It might be tentatively suggested that the court failed to cover its costs following the liquidation of the neighbouring Worcester Public Pleasure Grounds Company in 1865, which must have severely restricted the passing trade.
- 3.10 The footprint of the Racket Court, clearly of its present full length, but with no buttresses other than the four at the east end is shown on the plan of the Worcester Pleasure Grounds dated 1864 (BA372 ref 6899.25). This plan also shows a small square building on the south east corner of the Racket Court.
- 4 **The surviving fabric**
- 4.1 The building appears (from internal inspection) to have been constructed against a pre-existing single storey structure to the south. The scars of equally spaced return walls were visible on the southern face of the 1860s structure, and the brickwork between them was very irregular

suggesting that the wall had been built “over-hand” – (that is with the bricklayer only able to work from one side). A line of projecting snapped off headers appears to mark the former 1st floor/ roof level of the building to the south. It is of particular note that the three westernmost buttresses all slope at varying angles and only become plumb and vertical above this 1st floor/roof scar. This building possibly served as a gallery for viewing the game in the open court from first floor level. The extent of this structure to the south is uncertain – it is not shown on the 1860s or later plans and was possibly demolished prior to the secondary buttresses being carried up to eaves level. As the original south-eastern buttress does not mirror the clasping buttress to the north it appears that there was some form of structure abutting the whole length of the southern wall, or that the court was built right against a property boundary, though this does not fit easily with the original entrance to the court being on the southern elevation.

- 4.2 The sequence of construction, apparent during building recording, suggests that the building was originally built as (or intended to be?) an open court, and only subsequently enclosed and roofed, probably in at least two stages. The principal evidence for this is the additional thickness of the walls of the playing area (18" thick), and the variation in design of the buttresses. It is probable that there was a building break sufficiently long for the open court to be used for a season or two, but this is not definable in the surviving fabric. The brickwork of the western end has weathered less well, though this may be due to differential exposure (Plates 1 and 4). It is possible that the building to the south formed a gallery overlooking the open court. The additional buttressing of the long walls appears to have occurred only when the roof was added, possibly to avert spreading. The roof appears to originally have been a very lightweight construction, possibly a mixture of glazing or oiled cloth and slate, the form of the gable indicates that there was no clerestory, and it is unlikely that there was a lantern (a full length clerestory or lantern glazing appears to have been the norm in later rackets courts) . Even with some form of overhead glazing and windows at the west end the playing court must have been very dark as the walls of the playing area were painted dark grey/black.
- 4.3 It is apparent that the windows of the west end were in fact enlargements of earlier fenestration, as the brick coursing is broken at the reveals (with frequent use of brick slips particularly evident on reveals of the first floor windows) , snapped or cut bricks are also apparent in the sash recesses. The enlargement of the windows almost certainly represents a design change during construction, as there is no material difference in fabric or mortar. The oculi (circular windows) in each gable end (Plates 1 and 4) appear to be original, that at the western end being of rubbed red brick (with false headers marked on the face of alternate stretchers). The western example also retains an ornate plaster architrave to the interior. The eastern example is of more simple form, being all of blue engineering brick headers.
- 4.4 On completion the rackets court appears to have consisted of a standard 30x60ft court with walls 30ft high. The only fenestration or opening in the playing area was the oculus in the eastern gable end, some 40ft above the playing surface. The remainder of the side lighting came from two large windows and a further oculus in the western gable end above a gallery. The gallery ran the full width of the court, and was heated by a fireplace at its northern end. The gallery area was plastered in conventional lime/hair plaster in contrast to the harder "composition" or render of the playing area. The playing area appears to have been entirely painted dark grey, the gallery limewashed. Below the gallery there were further rooms, the northern one heated by a fireplace and probably panelled in matchboarding up to dado level (a small fragment of such boarding survived to the east of the chimney breast. The original stairs up to the gallery almost certainly rose from the southern room, which served as a lobby, but no certain evidence survives of their location. It would seem probable that the head of the stairs was at the rear of the gallery, to provide maximum space along the viewing rail. No evidence as to the height or form of the viewing rail survived at the time of survey. Entrance to the court for players was presumably from a doorway beneath the gallery, as there were no original openings in the playing surfaces. The entrance to the building lay in the south-eastern corner, probably in the southern elevation where a blocked entrance is apparent. This would have left the principal (west facing) elevation as a balanced architectural composition, the present doorway to Sansome Walk being almost certainly a conversion of an original window opening.

- 4.5 No trace of the original floor has been identified; it appears to have been replaced when the present asphalt floor was laid. Early courts sometimes had flagstone floors, and such a floor when lifted leaves little trace. Some form of mortar screed floor is also a possibility.
- 4.6 The present roof contains earlier elements, including light-weight braced timber trusses and purlins with regularly spaced small mortices to one face. It is postulated that these mortices were intended to receive glazing bars, and that the remaining purlins lay above the glazing, though possibly not in their present positions. Given the design and height of the building access for maintenance of any form of roof covering would have been difficult, and a glazed or oil-cloth-covered roof is not likely to have stayed weather-proof for very long. The roof has clearly been much altered, and as the trusses do not have the same intervals as the buttresses it may well have been completely dismantled and re-erected to a new design when it was converted to a slated roof. Whilst not aesthetically pleasing the roof structure carries a substantial loading with minimal use of materials, and does not seem to have spread to any appreciable extent, as the tie rods, at the time of survey, did not appear to be under any great tension.
- 4.7 Subsequent to the disuse of the rackets court windows were inserted in the north and east facing elevations, possibly in two stages. The six north-facing windows were probably the earlier, and clearly pre-dated the insertion of the upper floors as the central two windows were subsequently bricked up to allow the stanchions to be bolted through the wall. From the surviving example it appears that these were 20 pane hopper windows. The sills of the five (originally six) windows on the eastern elevation of the former rackets court are all higher than their equivalents on the northern side. Since there were opening hoppers on all but one of these windows it is likely that they were inserted only once there were internal floors (otherwise they could not have been opened from ground level). It is interesting to note that no windows were inserted in the southern elevation, presumably because expansion of the building to the south was already contemplated. The loading doors would almost certainly have been inserted at the same time as the upper floors, though the present arrangement shows some signs of modification, particularly the widening and raising of the ground floor doorway. The hoist was also inserted at this stage. At the time of survey an electrical motor hoist was installed, but parts of the framework and mounting of an earlier mechanical hoist were present. It appears to have had a large cable drum mounted at high level, and the main roof had been modified with a barrel-roofed dormer to accommodate the drum. None of the mechanics of the hoist survived.
- 4.8 The inserted floor was supported on fifteen cast iron stanchions seated on brick and concrete bases approximately 1m square. The two outer rows of five stanchions were also through-bolted to the walls with exterior spreader plates. Other than these bolts the new floors were almost independent of the former rackets court structure. The stanchions were linked in groups of three by bridging beams formed of substantial softwood scantlings. The beams were paired and linked by square headed through bolts. Common joists ran across each bay supporting a softwood floor. The joists of the end bays were located in pockets cut in the existing gable ends. The first floor level lay just above the earlier gallery floor level, allowing part of the gallery to be retained as a ceiling for the room beneath. At first floor level a further fifteen stanchions (of slightly different design) were each socketed into the beams beneath, directing the load down the lower level stanchions. No makers names were found on the stanchion castings within the former rackets court, but it is likely that they were cast by Hardy and Padmore of Worcester (see below). The asphalt floor of the northern warehouse was laid by the Val de Travers Asphalt Company, who inlaid their name "Val de Travers" in brass lettering in the floor just inside the doorway from Sansome Walk.
- 4.9 The dating of the conversion to a hop-warehouse cannot be presently tied down to closer than the late 1860s or early 1870s, such conversions probably fell outside the then planning regulations, which were rather haphazardly applied, no planning application for the conversion can be traced, and the earliest detailed evidence we have comes from the next phase of building. Hops were a well established trade in the City, the first documented occurrence of the crop in Worcestershire being a hop-yard in South Littleton sold in 1636 (Gaut, 1939 98). Hops came into popularity as a crop in the early years of the 18th C, following an Act of 1710 which prohibited the use of any other bitter ingredient for beer. "The city of Worcester from

the early part of the century was intimately interested in hops" (Gaut 1939, 135). In 1731 an "Act...for continuing the Hop Market of the City in the workhouse there.." was passed confirming the presence of the hop-market in Foregate Street.

- 4.10 A detailed plan of the building dated December 1877 was submitted by W Caldicott & Sons as part of the Planning Application (No 549) to construct a hop warehouse to the south of the former Rackets Court, which had already been converted as a hop-warehouse. The plan shows a ground floor layout that had been little changed from the original court. The only major changes had been the insertion of stanchions to support the upper floors, and the removal of part of the back wall of the playing area to create space for new stairs. The present (2005) roof structure appears to have been present by 1877, though some of the metal cross bracing may be later.

- 4.11 The works of 1878 are fortunately well documented and include the following specification for the new building:

Specification of works proposed to be done in making certain additions to Warehouse, Sansome Walk, Worcester for Messrs Caldicott and Sons according to drawings and specification prepared by Yeates & Jones architects, Shaw St, Worcester July 1878.

The walls to be built with Builder Bricks upon concrete foundations.

Slate damp course to be laid in walls above finished ground line.

Ground floor to be laid with $\frac{3}{4}$ inch asphalt 4 inch and 6 inch glazed Earthware socketed drain pipes jointed in clay to be laid from Rainwater pipes from roof.

The roof to be covered with Bangor slate of best quality laid on 2 inch x $\frac{3}{4}$ clean deal or pine battens and each slate nailed with 2 copper nails.

Ridge to be covered with Blue Broseley ridge tiles.

The timbers for Carpenters work generally to be of good sound Memel. The deals for joiners work to be Christiana (ie Swedish deal) , Onega or Petersburg (ie Russian or Polish pine).

The scantlings of floor and roof timbers to be as follows:

<i>Floor plates</i>	<i>4 inch x 3 inch</i>
<i>Joists</i>	<i>9 x 2 $\frac{1}{2}$</i>
<i>Fitch girders supported in centre with cast iron columns</i>	<i>11 x 9</i>
<i>Wall plates</i>	<i>5 x 4</i>
<i>Tie beams</i>	<i>10 x 4 $\frac{1}{2}$</i>
<i>Queen posts in waist</i>	<i>4 $\frac{1}{2}$ x 4</i>
<i>Principal rafters</i>	<i>5 x 4 $\frac{1}{2}$</i>
<i>Strawing beam</i>	<i>6 $\frac{1}{2}$ x 4 $\frac{1}{2}$</i>
<i>Sill</i>	<i>4 $\frac{1}{2}$ x 3</i>
<i>Braces</i>	<i>3 $\frac{1}{2}$ x 2 $\frac{1}{2}$</i>
<i>Ridge</i>	<i>7 x 1 $\frac{1}{4}$</i>
<i>Common rafters</i>	<i>3 $\frac{1}{2}$ x 2 $\frac{1}{2}$</i>
<i>Purlins</i>	<i>8 x 5</i>

4 $\frac{1}{2}$ inch O.G. cast iron gutters to eaves and 3 $\frac{1}{2}$ inch round cast iron down pipes.

7lb lead gutter between roofs

5lb lead flashing

Wood and iron work to be painted 4 coats in oil

Yeates and Jones

Architects and surveyors

- 4.12 The building of the adjoining hop-warehouse required very few alterations to the existing building - the new building was bonded into the existing corner buttresses. The housing of the sack hoist drum was possibly also altered at this time. Internally a wide doorway was opened between the two warehouses at each level. The floor beams of the new building were also passed through openings in the southern wall of the rackets court to rest on the existing iron stanchions, which possibly had new or modified heads to accommodate the additional beam. It was unclear during the building recording whether the stanchion castings were in one piece or had separately cast heads sitting on spun cast columns (Fig 15).

- 4.13 The new warehouse was almost a mirror image of its predecessor, but of a lesser build quality. Some considerable attention was given towards creating a balanced facade, though the fenestration was altered (the large first floor windows of the new building had no rebates for sash boxes, and appear to have been some form of timber fixed casement – no evidence of which survives) The principal oculus of the second warehouse has been cut from place bricks (cheaper than the best rubbing bricks of the earlier oculus) and no attempt has been made to disguise the bond with false jointing. Internally the new building was lime-washed, but not plastered (with the exception of the underside of the roof).
- 4.14 The new warehouse was well lit with natural light, with four windows on the south facing elevation and nine on the eastern elevation. The main west facing elevation was designed with two large windows on the first floor, and two at ground floor level. All the windows were of cast iron construction, all but the west facing ground floor windows being of 16 pane arch-headed design, some having opening hoppers. The surviving window facing west on the ground floor was flat-headed, 36 panes, without an opening.
- 4.15 It was not a particularly auspicious time to expand in the hop-business - the year of 1879 was one of the worst on record "*unprecedented bad weather and a heavy blight combined...of hops there will be next to none...of inferior quality and quite unfit to use*", though the next couple of years were better and subsequent technical improvements revived the trade in the county (Gaut, 1939 pp338-9).
- 4.16 The buildings remained as a hop-warehouse for the next 90 years -W Caldicott & Sons were still present at Sansome Walk in 1922 and operated from an office in Sansome Street into the 1940s (Kellys Directory).The building was subsequently, until the late 1960s, a hop and seed warehouse operated by George Gascoyne & Co Ltd (who appear to have acquired Caldicotts business by 1955) George Gayscoyne originally from Sheffield went to work about 1891 for Firkins, the hop merchants, who then occupied the South Quay warehouse now known as Gascoyne House. However, armed with a £1,000 loan from his father-in-law, George set up on his own as a hop and seed merchant and, such was his sharp and successful business acumen, that he eventually took over seven established local hop merchant firms including Firkins, Bucklands, Kents, Harringtons, Caldicotts and Allesters. The firm flourished until Gascoynes death in 1953, but subsequently declined and ceased trading in 1969 (Grundy, 2002).
- 4.17 The subsequent occupants were GW Lamb, a local removals and storage company, who used the building both as offices and a storage facility. Removal lorries were also operated from this site. The change of use required few alterations, other than the construction of partition walls to create office facilities. The external alterations included widening of the main warehouse door and bricking up a number of windows for security. The doorway linking the two warehouses was also increased in height, presumably to permit operation of a fork-lift truck. A small storage building was also created on the eastern side of the yard, behind 19 Little Southfield Street.

5 Phasing

5.1 Phase 1

The presumed Open rackets court 40 (or more?) feet long by 30ft wide, at least three walls, four buttresses to eastern end. The side walls 40ft long, of four bays coped at heads, each bay stepped up to next – western bay steps 3' (36"), remaining bays each step up 4' (48"). Buttresses 18" wide at 8'6" intervals. Front wall (playing surface) 30ft high (projects 8ft above side wallsIndeterminate brick building to south west of court, with north-south walls at 10ft intervals. Almost certainly single storey, probably a gallery for viewing the open court. The western end of the southern side wall is later than this structure. This structure not shown by cartographic evidence, and its full extent is uncertain.)

5.2 Phase 2

Side walls to eastern four bays either added or raised in height, requiring addition of further buttresses, court lengthened to 60ft, side walls built up against existing structure to south.

5.3 Phase 3

Side and end walls raised to full present height, court fully enclosed with partially glazed roof. Western façade constructed with four windows and an oculus to gable end. Internal gallery

- constructed at west end of court, heated by fireplaces at north east corner of building.
- 5.4 Phase 4
Windows to western elevation enlarged (nb Phases 4 and 5 may have been almost contemporary if there was a change of plan whilst the building was being constructed)
- 5.5 Phase 5
Building to south demolished.
- 5.6 Phase 6
1865-70 End of use as rackets court, new entrance created in western façade, old entrance blocked up.
Metal framed windows inserted in new openings in northern elevation. Roof structure partly replaced and reconstructed to accept slated roof. Probable use as warehouse.
- 5.7 Phase 7
1870-75 Middle windows to northern elevation bricked up, six new window openings inserted in eastern elevation. Internal suspended floors created, the first floor joist soffits being immediately above the existing gallery floor level. Floor structure independent of brickwork, being carried on cast columns. External walls stiffened by through bolted tie plates extended from columns. Floor laid in "Val de Travers" asphalt (a specialist floor coating, both smooth and damp proof). The company (named after the Swiss source of the raw material) flourished from the late 1860s, and appears to have ceased trading in the 1960s. Goods access consisting of three double doors and hoist created at eastern end. Southern part of gallery wall demolished to create new stairwell. Entrance doorway widened.
- 5.8 Phase 8 1878 Construction of new hop warehouse immediately to south. Hoist housing modified, internal doorways created to link north and south warehouses on all levels.
- 5.9 Phase 9
After 1902— cant roofed brick single storey extension to west end of new hop-warehouse, serving as office. Insertion of doorway to east end of southern warehouse. A pedestrian doorway in the north-eastern corner of the building was possibly also inserted in lieu of the northernmost ground floor window on the eastern elevation. The doorway was apparently short lived as it was blocked before the 1940s. Lavatory installed (accessible from new door in southern elevation)..
- 5.10 Phase 10
Mid 20th C – construction of "walk-through" lean-to at SE corner of building, insertion of doorway to southern elevation (external access to new WC). Bricking up of windows to north elevation. West facing 1st floor windows of 1878 building bricked up before 1960
- 5.11 Phase 11
1974 onwards, purchased by G Lambs in 1974 for use as a furniture repository and office. Insertion of new doorway to western façade (linking office and southern warehouse), construction of internal partitions and installation of heating or fuel-oil tank. Lean to building to west serving as reception area/front office.
New lavatory facilities installed in south west corner of southern warehouse. First floor of southern warehouse partitioned with hessian cubicles. Windows to western elevation bricked up, windows to southern elevation bricked up, ground floor windows to eastern elevation bricked up.
- 5.13 Phase 12
2005 Purchase of property by Court Properties Ltd for conversion to residential use.

6 The game of rackets

- 6.1 The origins of Rackets (also known as racquets and racquettes) are uncertain, there being two main schools of thought. Conventionally it was considered to be a product of the debtors prisons - the Fleet and Kings Bench, where the game was played in open courtyard in the 18th Century. There was a reference to rackets at the Fleet in a poem of 1749 and in John Howard's report on the state of prisons in England and Wales published in 1780. It was not until the early 1800's that rackets was played outside the prisons. The rules of the fully developed game are given in Appendix 1.
- 6.2 In Pierce Egan's "*Book of Sports and Mirror of Life*" (1832), there was a description of rackets mentioning several open rackets courts other than the King's Bench and the Fleet. One of these was at the Belvedere Tavern, Pentonville, where most of the Open Court Championships were played, amongst others in London (all public houses); the Eagle Tavern

on the City Road, The White Bear Kennington, White Conduit House, the Rosemary Branch Peckham. Mention was also made of courts at Bristol Bath Birmingham and Belfast. Early courts outside the prisons had a front wall only, about 40 feet wide and 45 ft high (www.racketsonline)

- 6.3 Dickens mentions rackets in the Pickwick Papers, as Mr. Pickwick was imprisoned in the Fleet. From Dickens' description the court there appears to have had a front wall and one sidewall. In 1814 there were four courts at the King's Bench and six racket masters to look after them.
- 6.4 Outside prisons and taverns, Harrow was the first school at which rackets was played, probably from the early 1820s when the schoolyard was enlarged. In the middle of the 19th Century, rackets played in covered courts began to predominate. The MCC built a court in 1844 next to the old tennis court and Old Princes Club opened in 1853 with several courts as well as two tennis courts. The main competition court at Princes set the standard dimensions for most closed courts built from then up to the present day, being 60' long by 30' wide.
- 6.5 Another possible origin for the indoor game is that it derived from real tennis - this hypothesis is favoured by the Encyclopaedia Britannica. Other than Egan, The sport is very poorly documented in contemporary 19th C sources, the second being "*The Book of Racquets, with Original and Practical Illustrations*" by J.R. Atkin (1872), a small book of 108 pages it contains almost all the known facts about the game, but is extremely rare. The only later major studies were written in 1894 and c1930. The 1894 book was "*Tennis, Lawn Tennis, Rackets and Fives*" in which the rackets section was contributed by C. G. Bouverie, published in the Longmans, Green & Co "Badmington Sports Library" series and edited by J M Heathcoat. "*First Steps to Rackets*" was written in 1926 by EB Noel & CN Bruce, and concentrated mainly on the rules, but included a brief history and bibliography of the game. The Seeley Service and Co. "Lonsdale Library" of sports books edited by Lord Aberdare and published circa 1930, Volume XVI was *Rackets, Squash Rackets, Tennis, Fives & Badminton*. Subsequent publications, appear to be almost entirely based on these three sources, none of which cover the history of the sport in any great detail, though Atkin listed a number of courts.
- 6.6 The earliest surviving rackets court building appears to be The Globe Theatre, Durnford Street, Plymouth, which is dated by some sources (eg. www.plymouth.gov.uk) to 1788 and others to c1830, it was remodelled as a theatre after 1850. The Listed building description (LBS 473371) is not helpful, but it appears that few original features survived the conversion to a theatre. The court was built to serve the naval base at Stonehouse, but as Durnford Street was "a fashionable residential centre for the families of naval officers" (Richardson and Gill, 1924, 102) it is likely that the Court was for officers only. It is believed that there is another (unlisted) rackets court in Stonehouse (near Millbay), converted to use as a three squash courts in the 1930s and now part of the Royal Marine Base (Dixon, R, 200 Years of RMB Stonehouse).
- 6.7 Another early military rackets court survives (disused) at Fulwood Barracks, Watling Street Road, Preston Lancs, Dated to 1842-8 it is described as roofless and of sandstone construction. The sides of the open court are raked up to the back wall (LBS 472876)
- 6.8 A rackets court survives at 10 Parsonage Lane, Market Lavington Wiltshire - the Listed Building description indicates that it is now partly converted into a house called "Fives Court". It appears from the description to have been an enclosed court (LBS 312077) A history of Market Lavington on the Wiltshire online web-site (<http://www.wiltshire.gov.uk/community/getcom.php>) dates the court to the late 1860s.
- 6.9 An 1874-5 rackets court (now laboratories) survives at the Royal Naval College Greenwich (LBS 399181), the architecture is neo-classical and deliberately obscures the form of the court, the internal arrangements are not described on the Listed building description. A similar court of 1882-3 lies to the east.
- 6.10 Of similar date is the former rackets court now a prison blacksmiths shop built by the Royal Engineers circa 1875 at The Verne, Portland, Dorset (LBS 382028). The building is aligned

north-south and built of the local stone, with a highly detailed exterior. This building has a moulded string course, pilasters, a raised coped roof verge and an oculus – all of which are details present on the Sansome Walk building

- 6.11 There is a court, still in use, at Rugby School (LBS 308504) which was built to designs by William Butterfield in 1880. The court is lit by a semi-glazed lantern roof and very large windows in the gallery end wall. The unlisted court at Malvern College is also of 1880.
- 6.12 Another of the very few 19th C rackets courts to remain in use is Manchester Tennis and Racquets Club, Blackfriars Rd Salford (LBS 471504) . The building was constructed circa 1880 and has a part-glazed slate roof, the rackets court retains its original playing surfaces.
- 6.13 Also in use is a court at Radley College, Oxon (LBS 249783) dated to circa 1885. This has an end gallery and staircase and is lit by a large round window in the end elevation and a glazed roof lantern. There are also pierced ventilation holes in the side walls
- 6.14 A rackets court at Copt Hall, Epping Forest, Essex (LBS 118703) retains its gallery, staircase and a clerestory semi-glazed roof. The other fenestration is restricted to the gallery end and consists of a very large Venetian window at first floor level, with smaller windows flanking the ground floor entrance, which is in the centre of the gallery end. The walls are of rough-cast brick. Built 1896.
- 6.15 Whilst the above, (together with Appendices 1 to 5) cannot be considered a definitive gazetteer of early rackets courts in England, as it only includes some Listed Buildings and precise dates are unavailable for a number of other courts, it certainly appears that the Sansome Walk Court (1861 or earlier) is amongst the very earliest enclosed courts in the country, and quite possibly also the earliest civilian court to have survived. It is also apparently unique amongst the surviving courts in being a stand-alone building run purely as a rackets club not (as far as can be traced) associated with any other institution. It might perhaps be seen as the progenitor of the speculatively developed, privately owned squash courts of the 20th Century.
- 6.16 A number of other rackets courts are known to exist or to have survived in Britain until recently. There is a recently restored court of 1903 at Fyvie Castle, Turriff, Aberdeenshire, also in Scotland there was once a court at Eglinton Castle (fate unknown), and a court of 1901 survives disused at Kinloch Castle. A court at Elvaston Castle, Derby survived until 1981 when it was almost entirely demolished by the local council (www.derbygripe.co.uk). Oxford and Cambridge Universities both once had rackets courts. Two courts in Norfolk were both built for the Gurney family, the East Anglian bankers, one at Ingham Old Hall, Stalham later served as a cinema for the sea training school (www.pwsts.org.uk/memoriesstalham.htm). The second court survives as an art gallery at Catton Park, Old Catton Norwich, and was built by J H Gurney. This site is of particular interest as it also adjoined public pleasure grounds. Also built by a banking family (the Caves of Bristol) was a court at Ditcham Park, Hants, probably built at the same time as the house (1888), by the 1950s it was being used as a chicken run – (www.buriton.org.uk). Further courts are documented at Torquay, the Seacourt club Hayling Island (though this was apparently built as a real tennis court in 1911) and Devonshire Park Eastbourne (built 1870). Military or naval courts survive at Greenwich, Dartmouth and at Sandhurst. The remaining surviving courts mainly appear to have been built by schools or colleges, the earliest being the covered court at Harrow built in 1865, and the most recent at St Pauls School Barnes (completed in 2001). References to a total of 60 courts have been identified (Appendices 2-4), and the nature of the passing references to many of these buildings suggests that perhaps 80-100 courts were built in Britain the 19th and 20th Centuries. Many of the courts may have passed into other uses and their true origins are now apparently forgotten, or like the Market Lavington example they are now known as Fives Courts.
- 6.17 Overseas rackets courts have been studied even less than their British counterparts, but are believed to have been built in several former colonies (India, Burma, Canada, Australia, and Ireland). There are also courts in the United States, but naturally of the post-colonial period. Study of overseas courts is beyond the scope of this project, but it would appear that there were no 19th C courts outside the British Empire.

7 Discussion

- 7.1 Whilst the general outline of the history of the building has been determined, it has proved difficult to tie down the fine detail of the chronology in the absence of any primary documentary evidence. The structure of the building has several features that suggest either inefficient planning of the construction, or design changes during construction.
- 7.1.1 Possibly the earliest of these eccentricities of plan is the use of a clasping buttress for the north-eastern corner of the rackets court, with a straight buttress on the southern corner (Fig 5). The latter suggests that the building to the south extended the whole length of the court, though there is only limited evidence of a former building scar at the eastern end. Both buttresses appear to be original. The location of the original entrance is also a point of interest, as it appears to have been peculiarly placed on the south-western corner of the building. This permitted the construction of a well balanced façade, but a centrally placed doorway in the western elevation might have served equally well. As nothing is presently known about the form of the building to the south it is unclear whether this presented a doorway towards Sansome Walk
- 7.1.2 The change of design from open to enclosed court seems to have been a logical progression, though it cannot now be determined if, and for how long, the open court was used in the interim. The most cogent evidence for an open court is the additional thickness of the walls at the eastern end (Figs 5 and 12) – it is improbable that this thickness was required purely to withstand the impact of the ball, but presumably indicates the need for additional stiffness in a structure not braced at the heads of the walls by roof trusses. The building, possibly a gallery, to the south is also evidence for a change of design. Its short life (less than ten years at most) strongly suggests that it became entirely redundant once the court was fully enclosed, something which would not be true if it was merely earlier changing rooms.
- 7.1.3 The roofing raises further points of eccentric design, even allowing for the fact that the present arrangement is a modification of an originally glazed lightweight structure. The bay intervals of the roof do not correspond with the buttress intervals of the side walls, and this is clearly apparent even from the exterior where the sandstone pad-stones are visible between the buttresses. As only one truss corresponds with a buttress (the westernmost bay – Figs 8,9 and 10) it might be speculated that the roof originally only spanned the gallery area (protecting the spectators) and was subsequently extended to the east. This does, however seem unlikely in view of the limited life-span of the covered court, and it may simply be a matter of poor design. The braced trusses were clearly designed to exert minimal outward thrust on the walls, and perhaps did not directly require the relief provided by the buttresses, but it is hard to explain why the trusses were not placed either on the buttresses or equidistant between them for aesthetic reasons if nothing else. It is possible that the sandstone pad-stones are part of the secondary phase of roofing, but this would have required un-building and re-building the tops of four buttresses which could readily have been avoided by different placement.
- 7.1.4 The insertion (sometime after 1865) of the central pair of windows in the northern elevation (D-D – Fig 9), and their blocking (within ten years at the maximum) may more reasonably be explained by a change of use or the intention to insert the new floor structures in the mid 1870s. It is worthy of note that both the original insertion of the windows, and the subsequent blocking were undertaken extremely neatly, so as to be virtually un-noticeable from the exterior. As the interior was entirely rendered the blocked windows were also patched over in plaster for a neat finish, suggesting some pride in the appearance of the building.
- 7.2 It is clear that the rackets court was relatively short-lived – the earliest elements cannot have been constructed before 1843 (as there is good cartographic evidence for their absence in the form of the Tithe Awards plan), and there is structural and documentary evidence that indicates that the court was no longer functional by 1875 at the very latest. The advertisement for sale of land in 1845 does not mention the court even as an abuttal, which is reasonably firm evidence of its absence. Documentary evidence suggests that the court may have been proposed around 1857, and had a *floreat* between 1861 and 1865, after which there is no mention in the local directories. Unfortunately the cartographic evidence for the key period is

all small-scale and rather unreliable as a guide to presence or absence. The rackets court, being neither residential nor commercial, was reported somewhat erratically in the local directories. The subsequent hop-warehouse was also regularly omitted, presumably because it was only a storage building and the company offices were in Sansome Street.

- 7.3 Rackets was never a popular sport, and after the early years of the 19th Century does not appear to have been played in pubs and taverns (which presumably had open courts). Its later renaissance in the mid 19th C was at a different social level. The expense of building an enclosed court was so great that they were almost entirely limited to the estates of the very wealthy, military and naval bases and the public schools. The other locations all prove to be in areas or resorts where there was a concentration of the moneyed classes – the better seaside resorts, London and the principal industrial towns (Cardiff, Manchester, Liverpool and Newcastle). Worcester appears as something of an anomaly, although it was experiencing great economic growth in the 1850s and 1860s, partly resulting from the arrival of the railways and a boom in agriculture fuelled by the food requirements of Birmingham and the Black Country. Although there was wealth in the county, and a number of substantial country seats in the neighbourhood there were few residences of the very wealthy in the City itself. Foregate and the new suburbs along the Tything were home to the upper middle-classes, and it was perhaps this section of the public that the court was intending to attract. There were, as far as can be determined, no other rackets courts in the county, (that at Malvern College being built in 1880; Chesterton, 1990), and most players must have been previously introduced to the sport either at a public school or in the services.
- 7.4 The reasons for the closure of the rackets court may only be speculated on, but a building of this scale was clearly well suited for storage, even though its position off the road frontage made access difficult. The subsequent owners appear to have purchased additional land in Little Southfield Street to construct a short private road, which with a new eastern entrance then made for a convenient warehouse. As the hop-merchants offices were all in Sansome Street, it made good business sense to utilise a warehouse nearby, and Caldicotts set a precedent that was followed by other merchants establishing purpose built ware-houses in Southfield Street.
- 7.5 Little can be determined about the organization of the hop-warehouses, as the layout was clearly very simple. The presence of small chutes in the upper floors suggests that hops were possibly blended or transferred to new pockets (sacks), but there was no evidence for the bulk movement of hops between floors, other than up the stairs (which were wide enough to permit the carrying of hop pockets). There was also no evidence that the building was used for hop-drying.
- 7.6 At the time of the building recording the 1860s rackets court survived very substantially intact up to roof level, the only major losses being the court surfacing original gallery and stairs, and the alteration of the original entrance. The original windows had also been lost, but fortunately were recorded in a 1960s photograph (Anon, *The Arboretum Story*, p47). The roof appears to contain elements of the original structure, but has lost its original glazing and has been otherwise modified. The insertion of the floors had occasioned surprisingly little disturbance to the original fabric. Localised loss had occurred through the insertion of fenestration and doorways, but the visual sense of the court was retained. Some additional loss of fabric has occurred during the conversion process – particularly where additional openings have been inserted and render stripped from the ground-floor interior, but this is to be offset by the re-opening of the original fenestration which is intended to restore something of the original appearance of the western elevation. It has been possible to recover much additional information about the structure during the conversion process – particularly important has been the opportunity to examine the window reveals in detail and to establish which were later insertions.

8 Conclusions

- 8.1 As the earliest rackets court, of only two known, in Worcester or Worcestershire the building is clearly of great local significance. Only five courts of 1860s or earlier date are thought to survive in England (though it has been difficult to determine dates for a number of 19th C

courts, most appear to be late 19th C where photographs are available), and as such any court of this date is of national significance. Internationally there are few surviving courts of this date, and rackets appears to have been restricted to the British Empire, though there are later courts in the United States. No thorough survey of the survival of rackets courts in Britain appears to have been undertaken, and the identification of courts throughout the Empire would be a major undertaking as there are passing references to courts in a number of former colonies including India and Burma.

- 8.2 The building, including the 1878 addition, is also of great local significance as the last unconverted hop-warehouse in the City and probably the county. The hop industry has not been well archaeologically recorded or documented nationally or regionally despite its importance in Worcestershire agriculture of the 19th Century.
- 8.3 Whilst the present conversion has resulted in some loss of fabric a substantial proportion of the buildings and many original features have been retained by sympathetic conversion. As a number of these features are now masked, and not readily apparent to casual inspection, any future building works should be carefully controlled to avoid further loss of fabric, such restrictions on future owners may only be enforceable if the building is given Listed Building status.

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Appendix 1: Extract from Cassell's Book of Sports and Pastimes 1891

pp44-47 Manly Games and Exercises

RACQUETS.

A Racquet-Court (Fig. 1) resembles a fives-court, just as the game of racquets resembles fives; but it is very much bigger, and can be erected only at a large cost. Hence, it is for the most part only in the large public schools and at the Universities, and a few great towns, where one can be found to play in. These courts are of various sizes, ranging from fifty to fully eighty feet in length, and from thirty to forty feet wide, with a very high roof and a back wall of less height, having at the top of it a gallery for spectators, who can thus look into the court from above. Across the front wall, which is black, is fixed a board, or baulk, about two feet two inches high, and a white line, called the "cut" line, is also traced across it, about seven feet nine inches or eight feet above the floor.

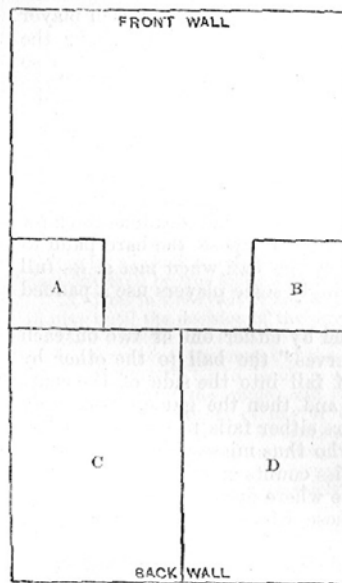


Fig. 1.—RACQUET-COURT.

The floor itself, which should be of smooth stone, asphalt, or concrete, perfectly level, is divided into sections, as shown in the diagram (Fig. 1). About halfway down the court, but nearer to the back wall than the front, a line is marked parallel to those walls; and the back part so marked off is divided into two equal portions, C and D, by a line traced at right angles to the back wall. The two small spaces marked A and B are service spaces, within which the person who serves must place one or both of his feet. The balls are not more than half the size of fives balls, and are played with "racquets", a peculiar kind of bat, like a battledore, with strong catgut laced cross-wise through the frame (Fig. 2).

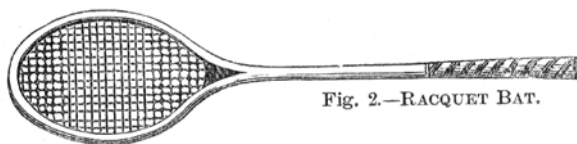


Fig. 2.—RACQUET BAT.

The game is begun by one of the players striking the ball against the front wall, above the white line, so as to fall, without bounding, into the back court opposite. Thus, if he stands at A, he must strike the ball into D, where it must be taken by one of the players on the other side, either at the volley or at first bound. If, in serving, the ball is struck against the side wall, or roof, or floor, before it hits the front wall, or if it is served below the baulk line, or is struck so hard as to go out of court, it is a "hand out" - that is to say, the striker loses his innings. If the ball is served from the wrong place, or if it hits the front wall above the baulk line, but below the white one, or if, after properly hitting the front wall, it fall into any but the right court, or hit the roof or gallery without going out of court, it is called a "fault," and the person to whom it is served is not obliged to take it. He may do so, however; and if he does, the game proceeds as if it had been properly served. Should he attempt to take it, and fail, the server then scores an ace; and the same result follows whenever his opponent or opponents, fail to return the ball above the lower line. When an ace is won, the man in goes over from A to B, and then "serves left" - that is to say, into court C. The out players stand behind the server while the ball is being served and taken; and afterwards the usual arrangement is that the server shall take all the balls which fall inside the cross line, and his partner shall take all which fall farther back. The man who is served to, on the other side, takes all which fall in the back courts, while his partner attends to those which fall nearer the front wall.

The game is made up of fifteen aces, and after the first player is put out, the others succeed one another in order, each pair of partners having to be put out before the other side goes in. Thus, supposing that M and N are playing against X and Y, and that M and X are both better players than their respective partners. The question which side shall go in first is usually decided, not by tossing a coin as in cricket, but in the following way. It will be discovered, on looking closely at a racquet, that at the thin end of it, nearest the handle, the strings which cross the frame from edge to edge are twisted round the others which go lengthwise, so as to project on one side or face of the racquet, and give it a "rough" appearance, whereas on the other side they do not project, but are "smooth". When, therefore, it is required to decide as to innings, one of the players holds his racquet downwards with the handle between his finger and thumb, so that the top part of it rests on the floor of the court. He then gives it a spin, and lets it fall, while one of the adversaries in the meantime calls "rough" or "smooth". When the racquet has fallen on its face, it is examined to see which side is uppermost, and the

question of innings is decided accordingly. Supposing, then, that M and N have called "rough", and that "rough it is", M, being the better player of the two, will proceed to serve, and as he and his partner score each ace, the game will be called "one love", "two love", "three love", &c. If he is put out after making three aces, X will succeed him, and as he serves the game will be called "love three". As he makes his score it will be called "one three", "two three", "three all", and so on, until he also is put out, when his partner must go in, and serve from the court opposite to that from which the last service was made. When he is out M will go in, and be followed by N. When a game has been won there is no change of innings, but the player who was serving when the game ended begins the next game at "love all", and when he is out his two adversaries go in in what order they please. Thus it will be seen that at the commencement only one hand is allowed to go in, but afterwards the two hands on each side go in successively till the game is won. It will also be remarked that a player who is good at serving has a great advantage, as whenever he scores the game, which he is sure often to do, he secures not only this benefit, but that of first innings in the next game. It is generally the rule, that when the game is called "thirteen all", it may, upon the demand of the out-player, be "set at five" -that is to say, a sort of complementary second game is started, in which five aces must be won before the same can be counted to either side. In a similar way at "fourteen all", the game may be "set" at three.

The rules as to touching a ball, with the body or racquet, are rather difficult. If, in serving the ball touches either the server or his partner before it has made a second bound, it puts him out. If any striker, in returning the ball, hits it against the racquet, or any part of the body, of his partner, it counts an ace, or a hand-out, as the case may be, against him. If, however, it hit an adversary, it is for the umpire to decide whether it would have gone up or not. If not, it scores an ace against the striker, but in the other case it is a "let", and the ace must be played over again. It is a "let," also, if an out-player get involuntarily in the way of the Striker, or baulks him in getting to the ball; but if he do either of these things purposely, or touch the ball out of his turn, whether willingly or not, it counts an ace against him. It is a "hand-out" when the server makes two consecutive "faults" in his service.

These are the principal rules; and to achieve success in what is really one of the most difficult of games a good eye, a strong wrist, and, above all, a quick nerve and great activity are required. The young player should not be too ambitious of making sharp returns just above the line, but be content at first if he can return the ball at all. When he is able to make pretty sure of this it will be plenty of time to practise "drops", in which the ball is sent gently back into one corner, or those low slashing hits just above the board, which are made by the most brilliant and successful players. It will be easily perceived that for this game a great practical knowledge of angles is required, especially as regards the back corners of the court, where the play is most difficult. It is essential also to have an acquaintance with the twist of a "cut" or "boasted" ball in accordance with the principles partly explained in the remarks on tennis (p. 49). A few hints for general use in a racquet-court will be of assistance to young players.

1. Never take a ball which does not "belong to you" -that is to say, which does not fall in the court which for the time being it is your place to defend. If you do so you will not only over-fatigue yourself, but, what is much more important, will annoy and disgust your partner, who would have a fair right, if he chose, to retaliate.
2. The only exception to this rule is when your partner, seeing that he cannot get the ball, and you can, shouts out "take it", or implies the same by getting out of the way.
3. Never take a ball at the volley when there is any reasonable chance of taking it at the first bound. Never by any means do so simply to save trouble. A volley stroke is always risky, especially for young players, and has a tendency to "unsettle" one's play.
4. Never hurry to take a ball before the time when you have the best chance of making a good stroke. You may wait till it is within a very few inches of the ground, and yet make quite as good a stroke as if you hit when it was a foot or a yard high. Many inexperienced players strike wildly at a ball as it goes rapidly to the back wall, and miss it, and then have the mortification of seeing it come off from the wall behind them in the easiest and most inviting style.
5. Do not be continually trying to do fancy strokes, and win the ace at one coup, but play a safe game, and let your partner think that he can depend upon you.
6. Do not stand too far "up" in the court; it is easier to run forward than backwards; but you must be ready to start forward at the first sign of a "drop" stroke.
7. When playing "up" do not turn round and face the strikers behind you: you may be cut over by a ball in the eye or face. It is better to crouch down and cover the head with your racquet as a shield than either to receive a nasty blow or to spoil a good stroke of your partner's by blocking up the way.
8. When playing "back," if you cannot judge whether a ball will hit the wall or the ground first, allow rather for the former event. If you are wrong, you will still very likely have time to get back; whereas, in the other case, if you have miscalculated, the ball will easily outstrip you beyond hope of recovery.

Appendix 2: Active rackets courts 2005

(members of the Tennis and Rackets Association)

- date of construction in brackets (where known)

Clubs

Britannia Royal Naval College, Dartmouth
Manchester Tennis and Racquet Club (1880)
Newcastle Rackets Court
Queen's Club, London (1888) Royal Military Academy, Sandhurst
Seacourt, Hayling Island (built as a real tennis court 1911)

Schools

Charterhouse School
Cheltenham College, Glos
Clifton College, Bristol
Eton College, Berks
Haileybury College (original enclosed court 1865, present court 1908)
Harrow School (1865)
Malvern College, Worcs (1880)
Marlborough College, Wilts
Radley College, Oxon (1885)
Rugby School, Northants (1880)
St Paul's School, Barnes, Middlesex (2001)
Tonbridge School, Kent
Wellington College, Berkshire, (recently refurbished)

The Public Schools Rackets Competition was started in 1868, all the above are still in competition use.

Uncertain :

Cambridge University (had a court by 1855) The University Racquet and Fives Courts, in Portugal Street, were built in 1892 by a company, at a cost of £7,000, and have two racquet courts - not clear if these are still in use, (not members of the Tennis and Rackets Association).

Appendix 3: Surviving courts in other use 2005

- date of construction in brackets (where known)

Avebury Manor, Avebury, Marlborough, Wiltshire, (listed building, but disused)
Belmont House, Tyntsfeld, Wraxhall, North Somerset (recent planning application for re-roofing)
Copt Hall, Epping Forest, Essex (1896) – function room/exhibition space
Catton Park, Old Catton, Norwich (late 19th C?) - art gallery
Elvaston Castle, Derbyshire – part of one wall only survives (mostly demolished 1981)
Fulwood Barracks, Preston (1842-8) - disused
Fyvie Castle, Scotland (1903) – restored and used as Playhouse/exhibition space
Kilwinning North Ayrshire, listed “Racquet Hall”
Kinloch Castle, Rum, Scotland (house completed 1901, court similar date, now disused)
Liverpool, the Racquets Club (1874) - hotel
Market Lavington, Wilts (1860s?) – part converted to house
Portland, Dorset (1875) – prison blacksmiths shop
Royal Naval College, Greenwich (1874 and 1882) – two courts both converted to laboratories
Stonehouse, Durnford Street (1788 or 1830) – Converted to Globe Theatre c 1850
Stonehouse, Millbay (1850s?) – converted to squash courts in 1930s
Wokingham, Park Place Estate – (?late 19th C), awaiting completion of redevelopment proposals
Worcester, Sansome Walk (enclosed court of 1861), including earlier open court structure of after 1845
- presently being converted to apartments

Appendix 4: Courts with unknown fate

Bath
Birmingham
Belfast
Bristol
Buckhurst Park, Sussex
Cardiff Racquet & Fives Court Co. Limited, Westgate St, Cardiff (Listed in Slaters Cardiff Directory for 1880)
Devonshire Park, Eastbourne (1870)
Ditcham Park, Buriton, Hants (house built 1888, court probably similar date, in 1950s a chicken run)
Eglington Castle, Scotland
Ingham Old Hall, Stalham, Norfolk late 19th C? (temporarily used in 1950s as cinema for sea training school)
Old Princes Club, London (1853)
New Princes Club, (1870-90)
Oxford University (before 1855)
Portsmouth HMS Excellent (naval training school – court used for anti -zeppelin training in 1918)
Torquay (1859)
Weasenham Hall, Norfolk (VAD Hospital in WW1)

Appendix 5: Demolished courts (all London late 18th C-early 19th C, and all open courts)

Kings Bench prison
The Fleet prison
Belvedere Tavern, Pentonville,
Eagle Tavern on the City Road,
The White Bear Kennington,
White Conduit House
Rosemary Branch Peckham
Middlesex Cricket Club (1844)

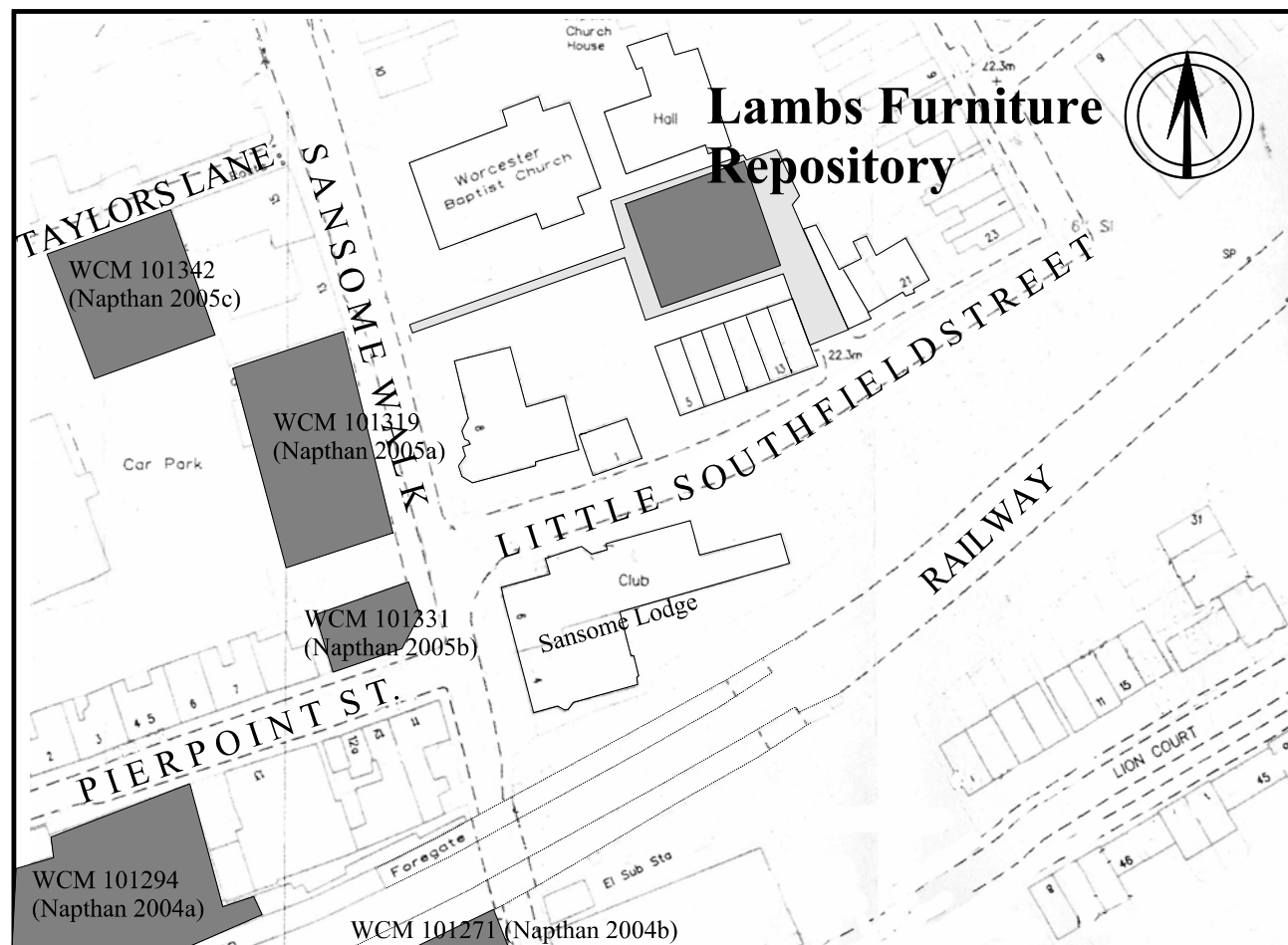


Figure 1: Site location, Lambs Furniture Repository, Sansome Walk, Worcester, showing recent archaeological interventions in the vicinity
Scale 1:1250

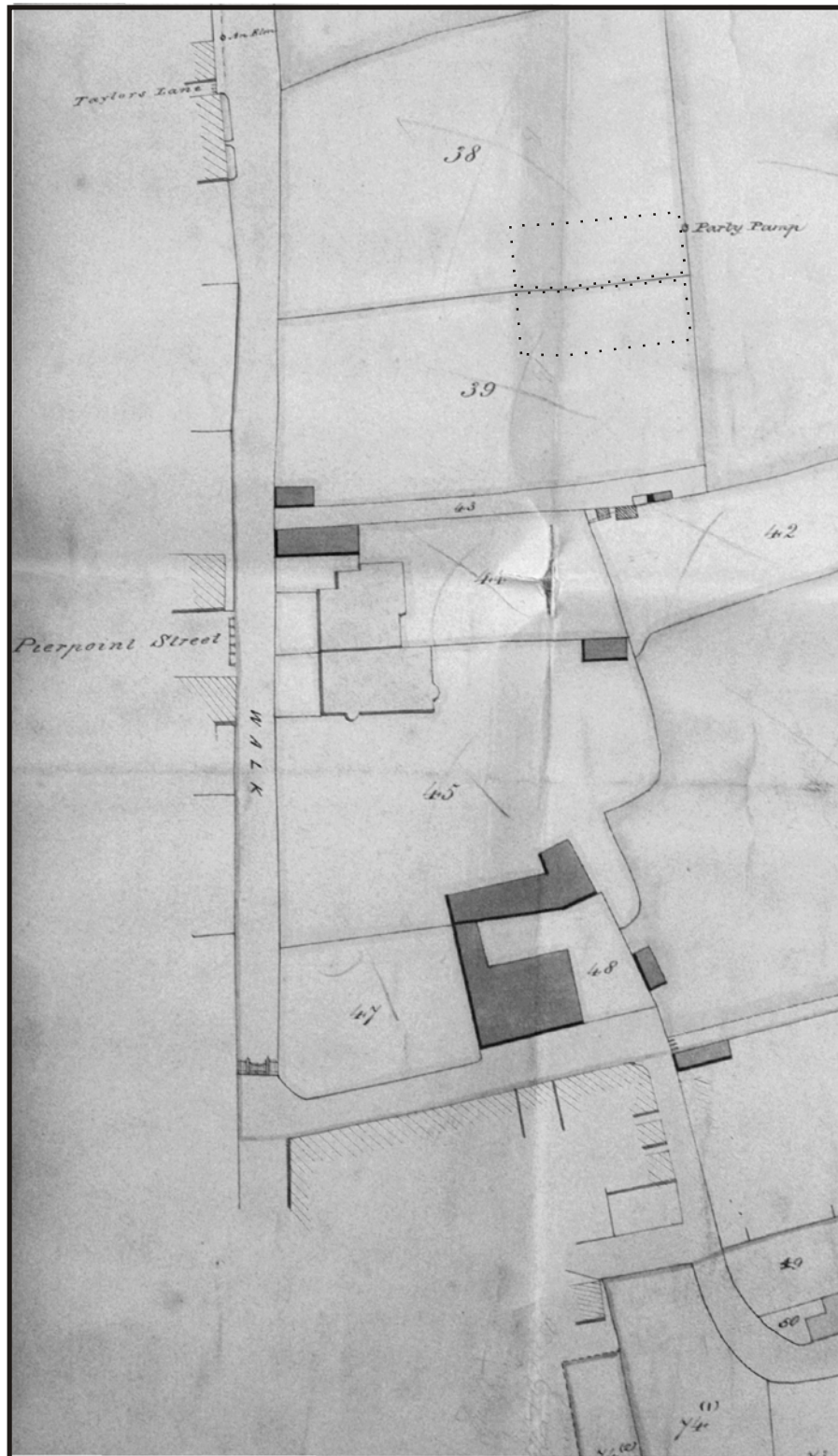


Figure 2: Extract from 1839 Plan of the Sansome Fields Estate by James Webb showing gated Sansome Walk, Sansome House and Sansome Lodge - site of rackets court and 1870s hop-warehouse shown as dotted outline

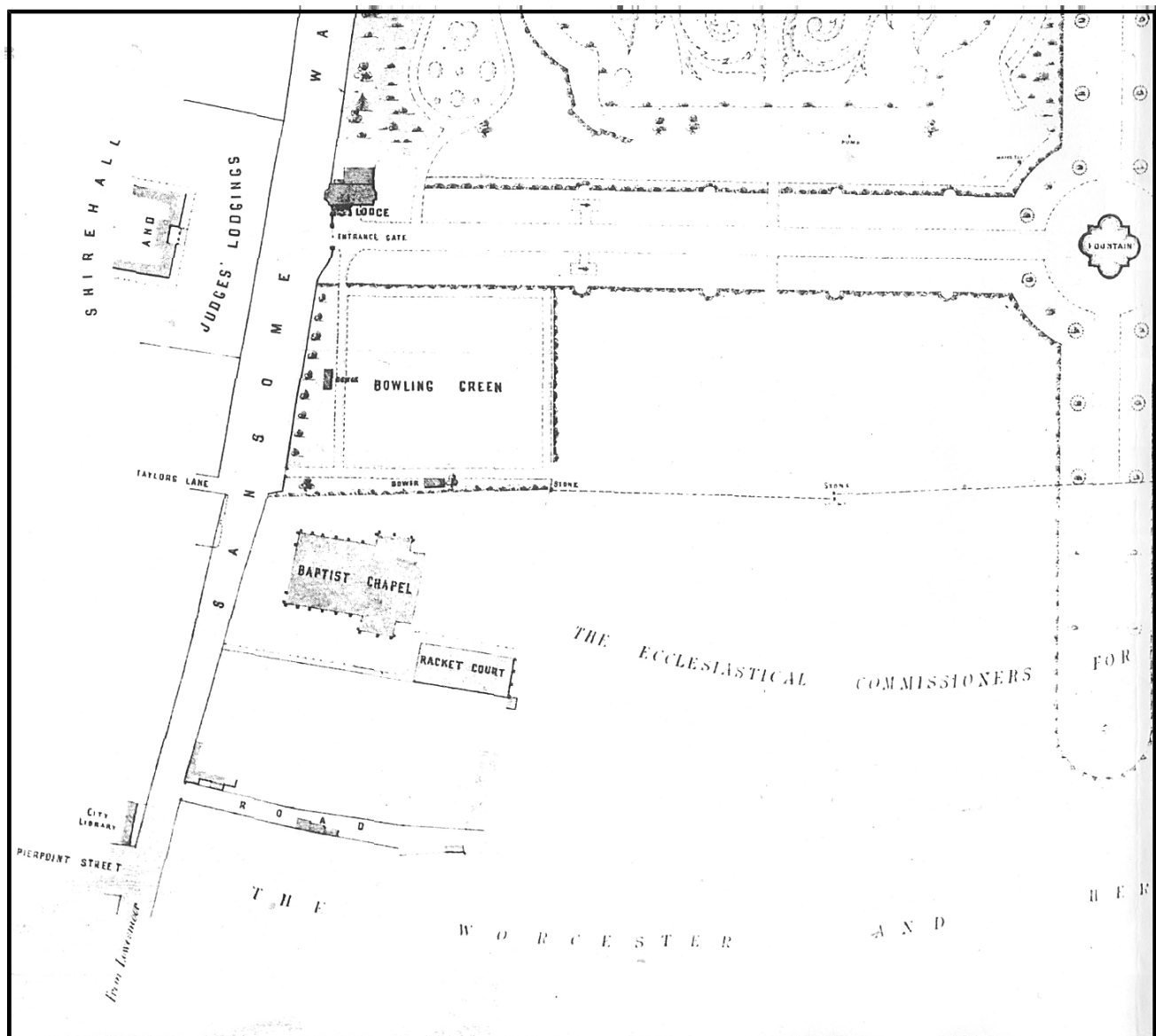
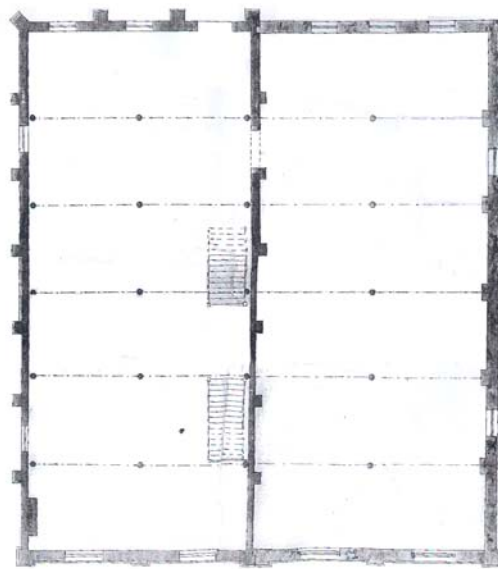
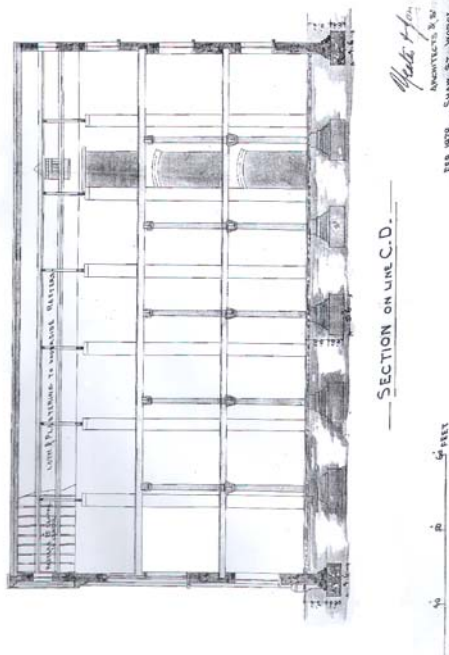


Figure 3: Racket Court marked on the “Plan of the Worcester Pleasure Grounds” 1864 (WRO BA 372 ref b899:25)



1st floor plan



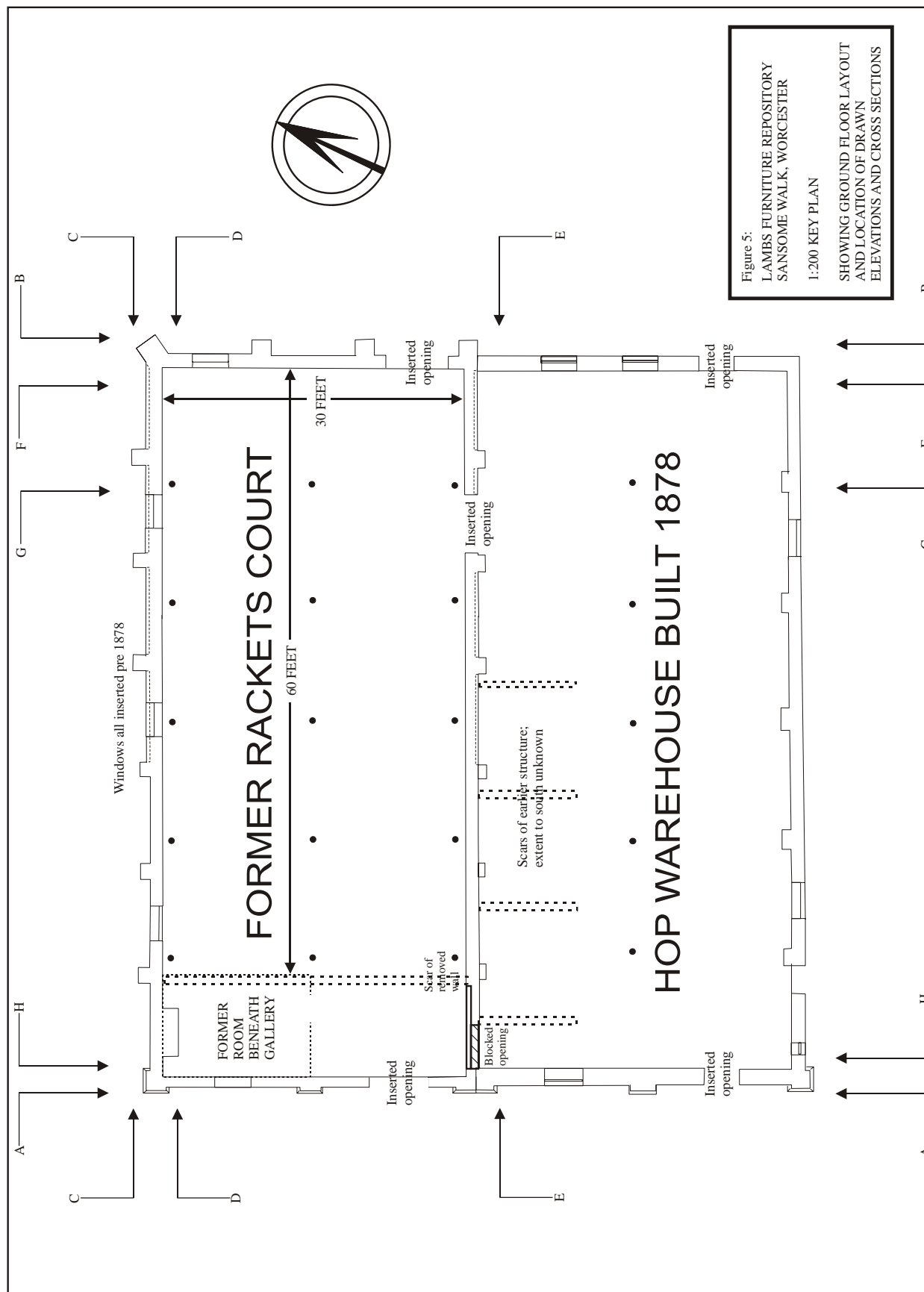


Figure 5:
LAMBS FURNITURE REPOSITORY
SANSOME WALK, WORCESTER
1:200 KEY PLAN
SHOWING GROUND FLOOR LAYOUT
AND LOCATION OF DRAWN
ELEVATIONS AND CROSS SECTIONS

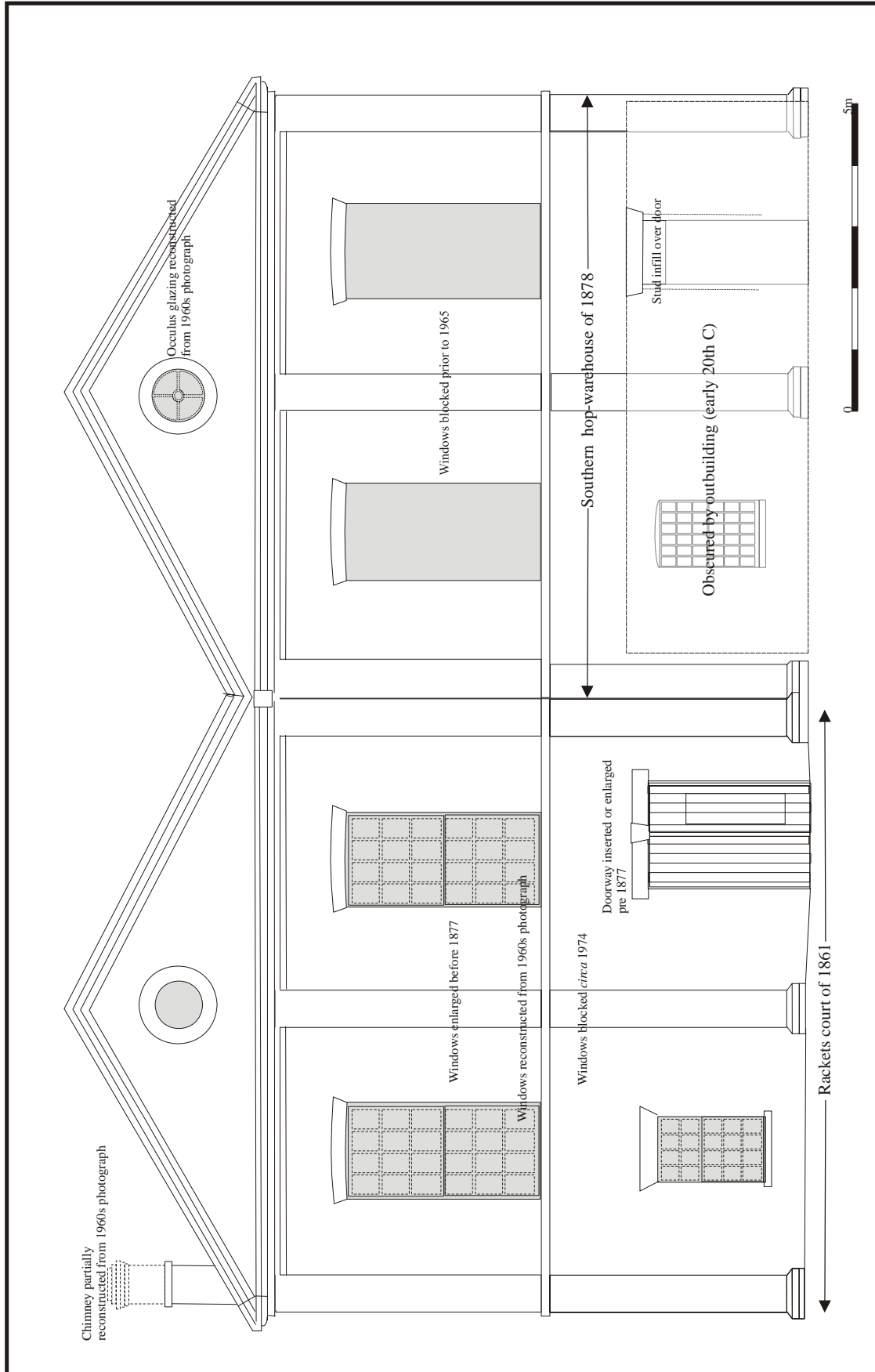


Figure 6: Lambs Furniture Repository, Sansome Walk, principal external elevation A-A (western external elevation)

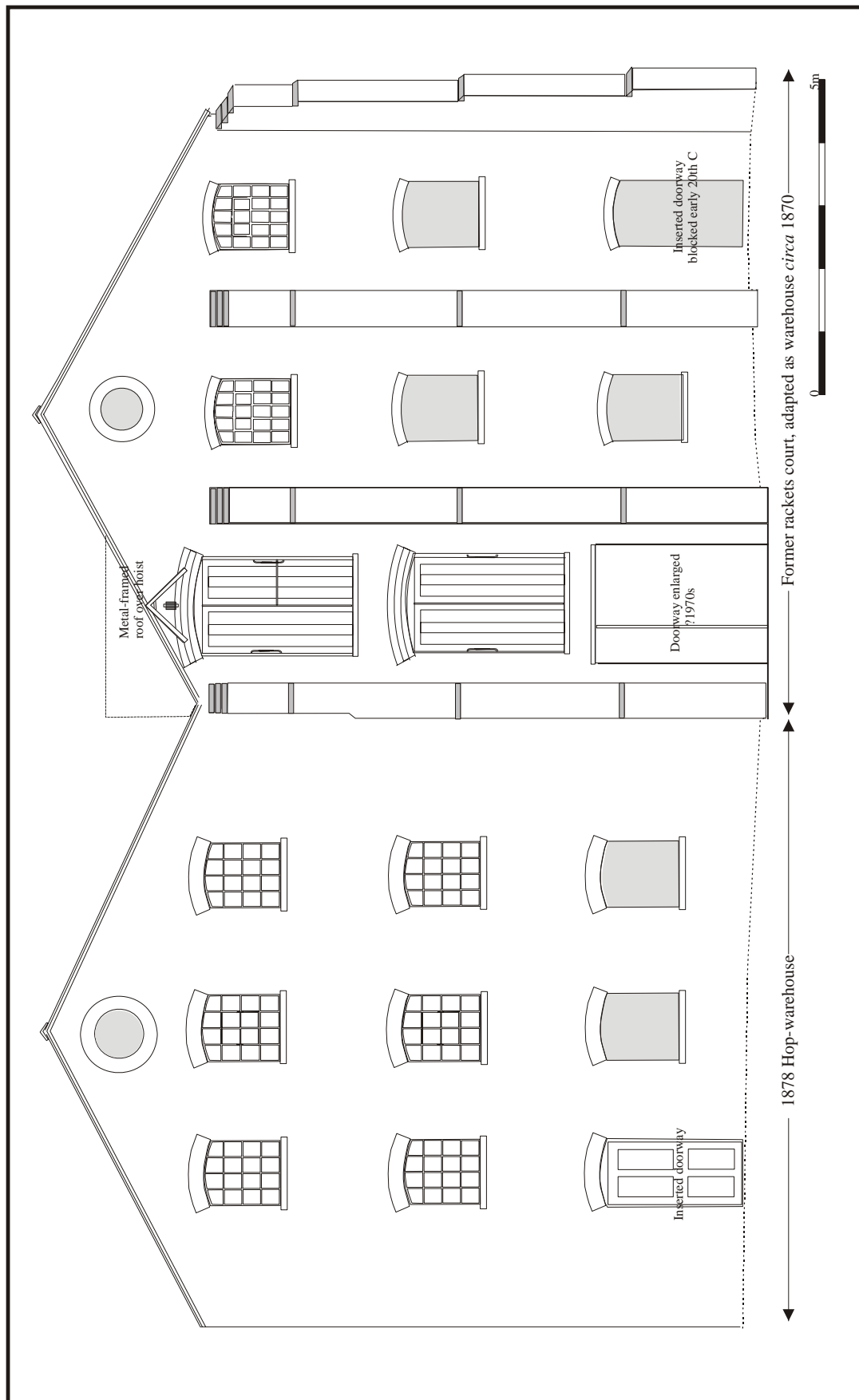


Figure 7: Lambs Furniture Repository, Sansome Walk, external elevation B-B (eastern external elevation)

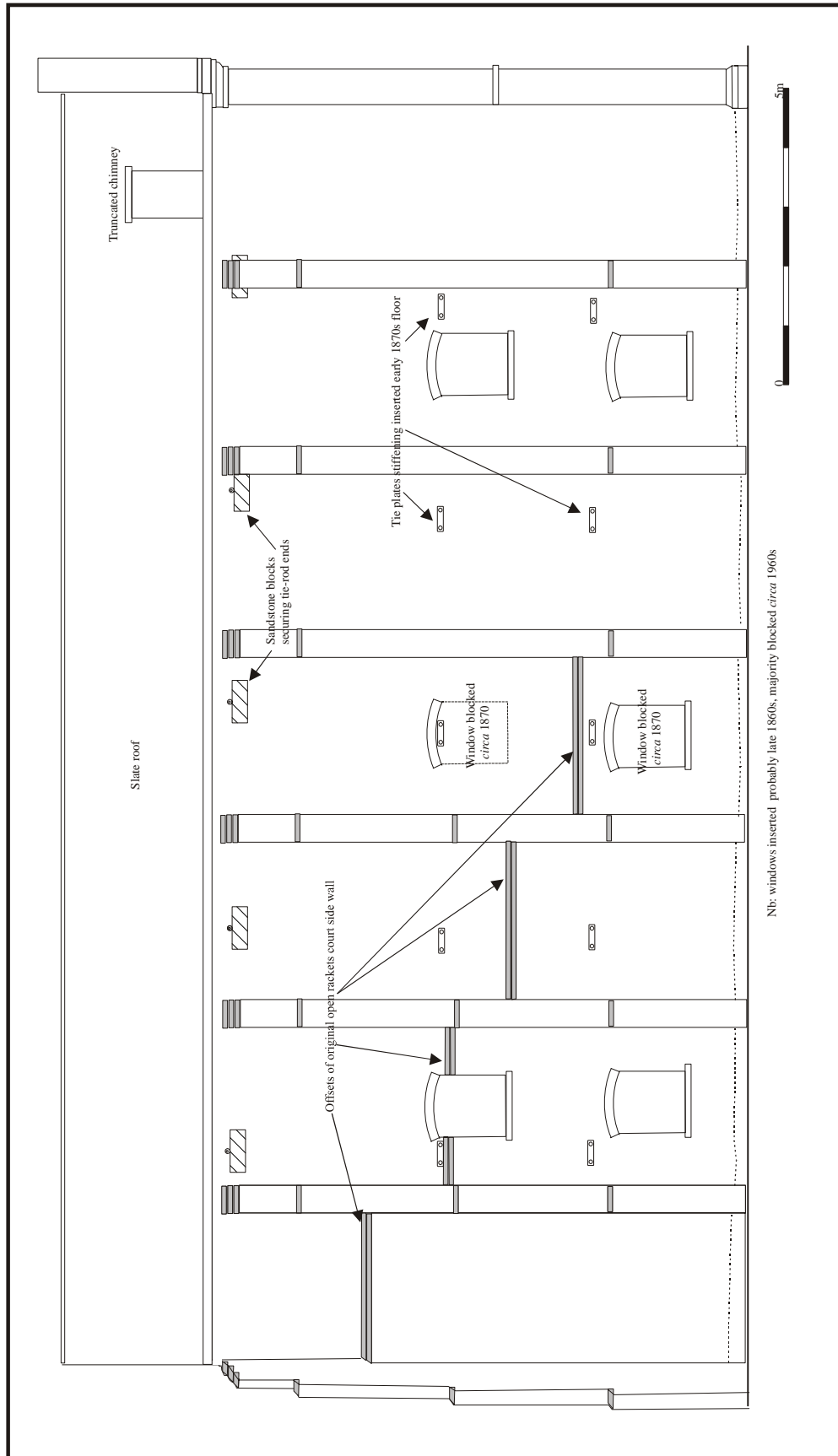


Figure 8: Lambs Furniture Repository, Sansome Walk, external elevation C-C (northern external elevation of racks court)

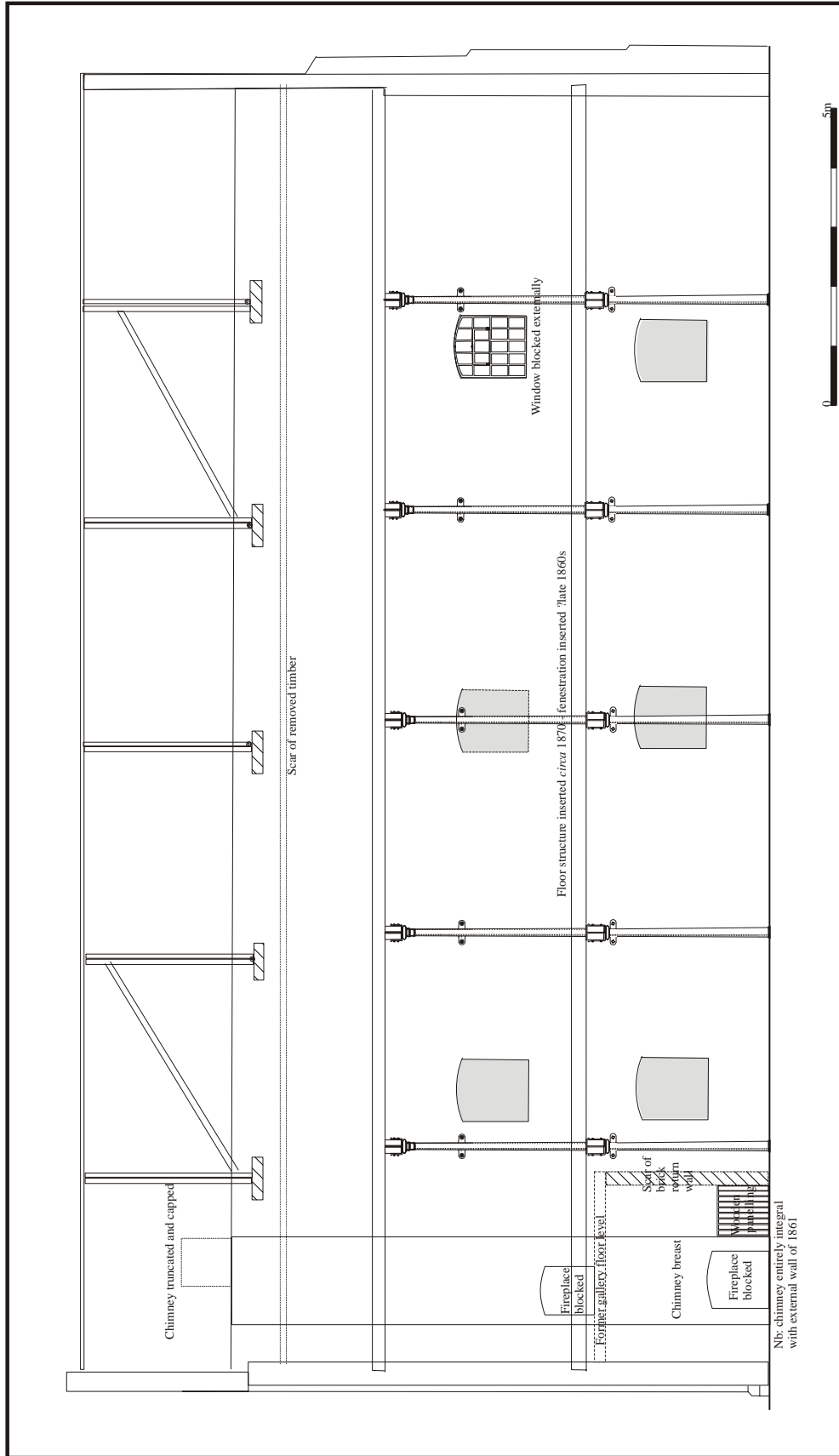


Figure 9: Lambs Furniture Repository, Sansome Walk, internal elevation D-D (northern internal elevation of rackets court)

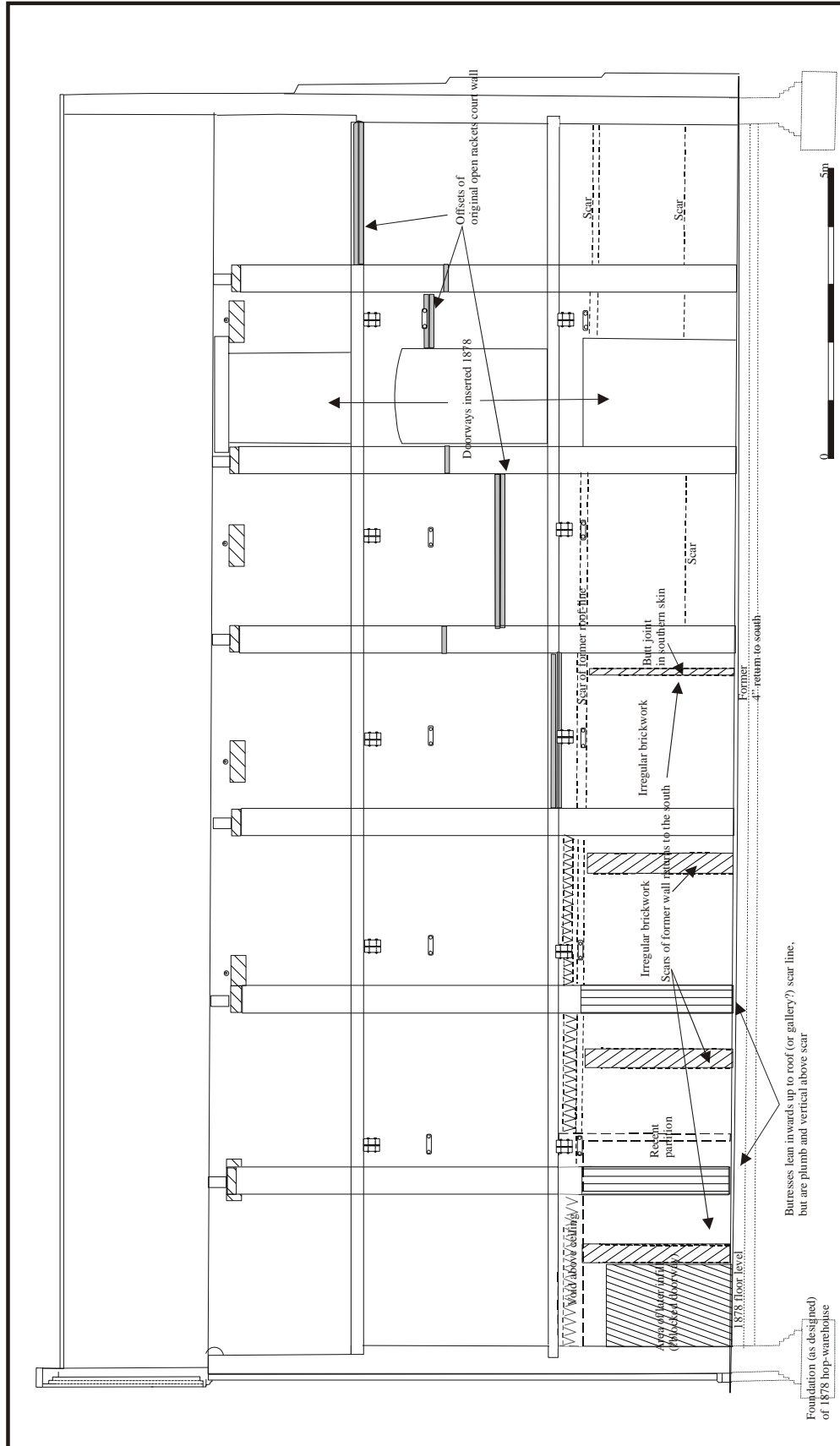


Figure 10: Lambs Furniture Repository, Sansome Walk, internal elevation E-E (former southern elevation of rackets court)

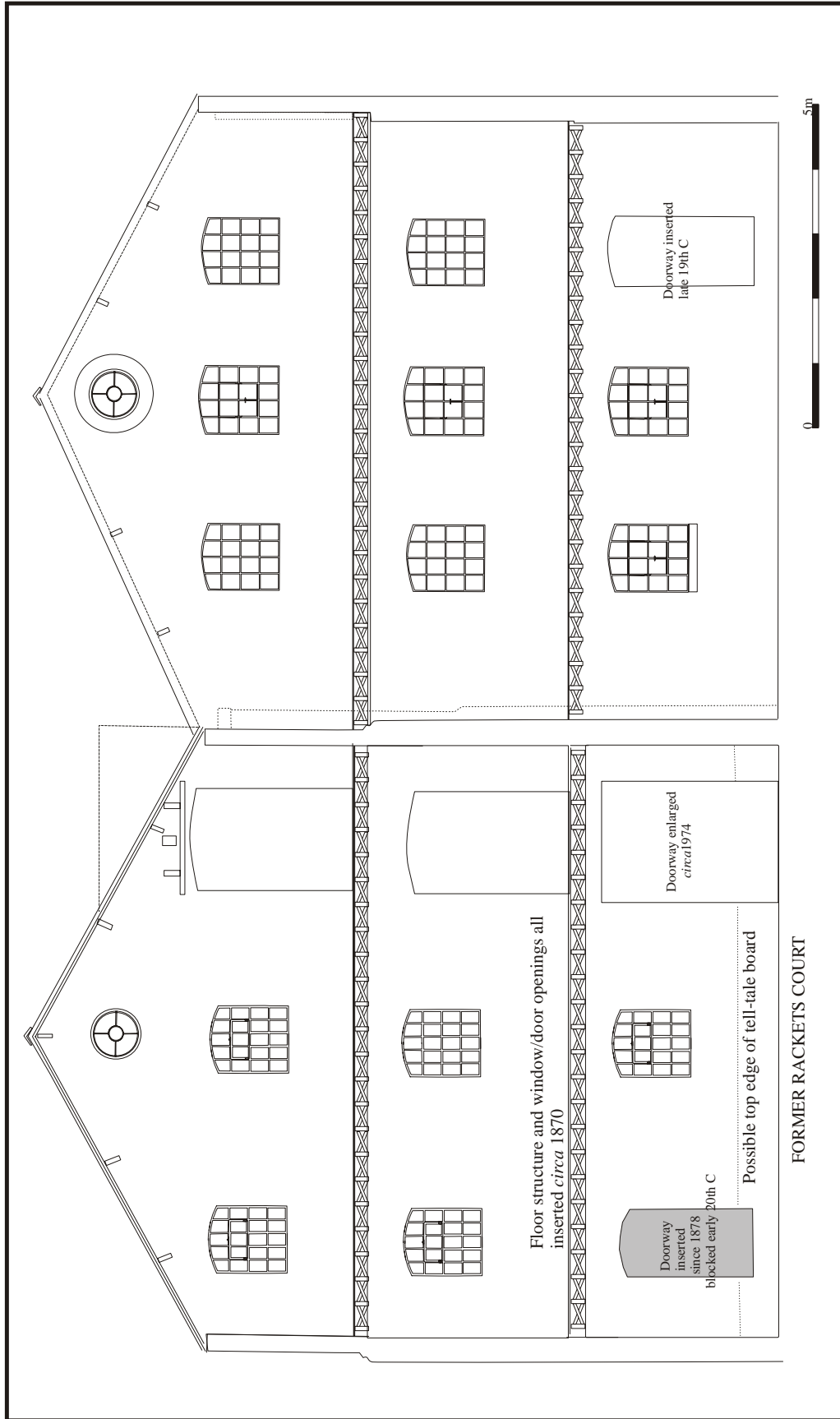


Figure 11: Lambs Furniture Repository, Sansome Walk, internal elevation F-F

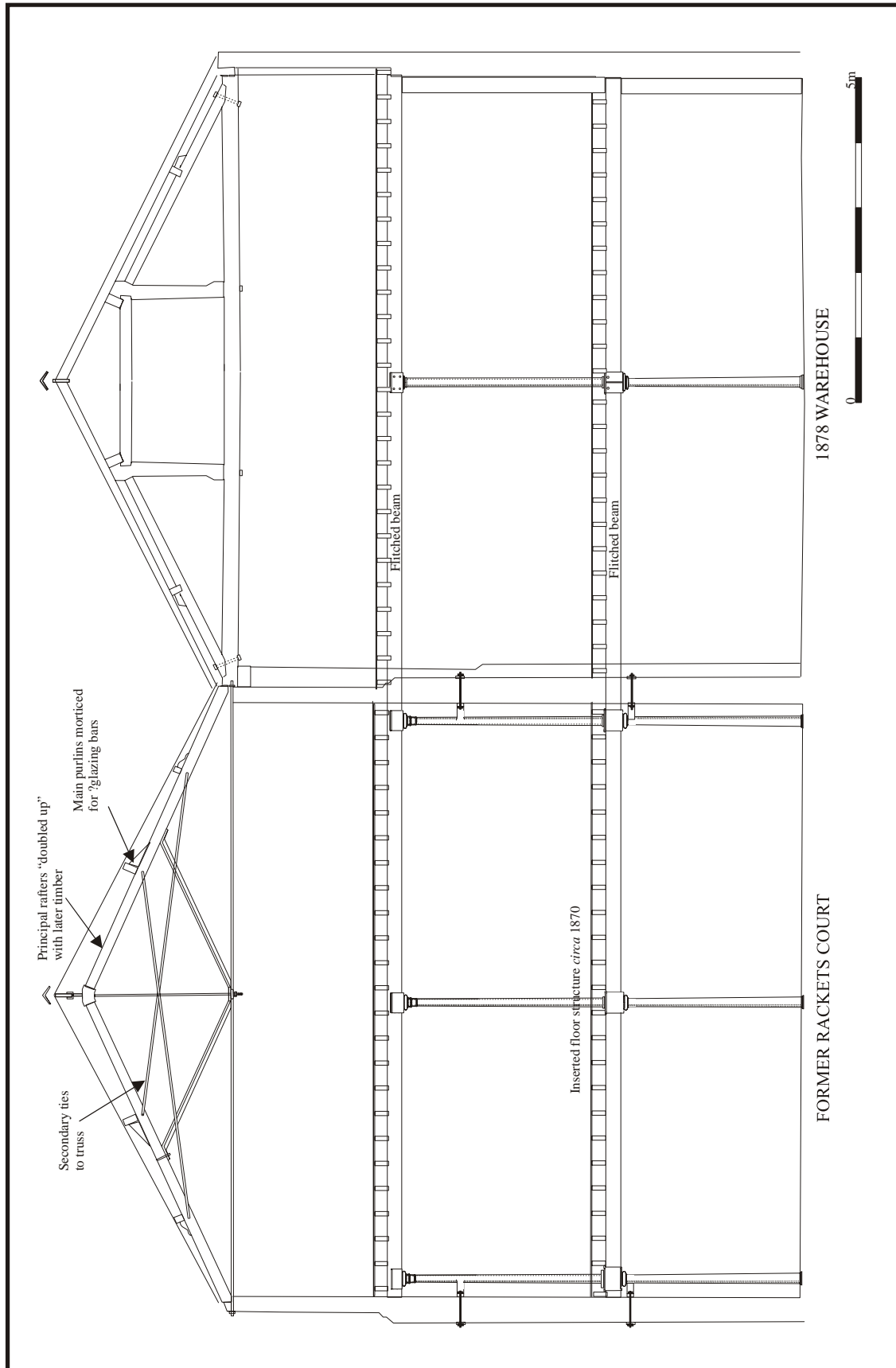


Figure 12: Lambs Furniture Repository, Sansome Walk, cross section G-G

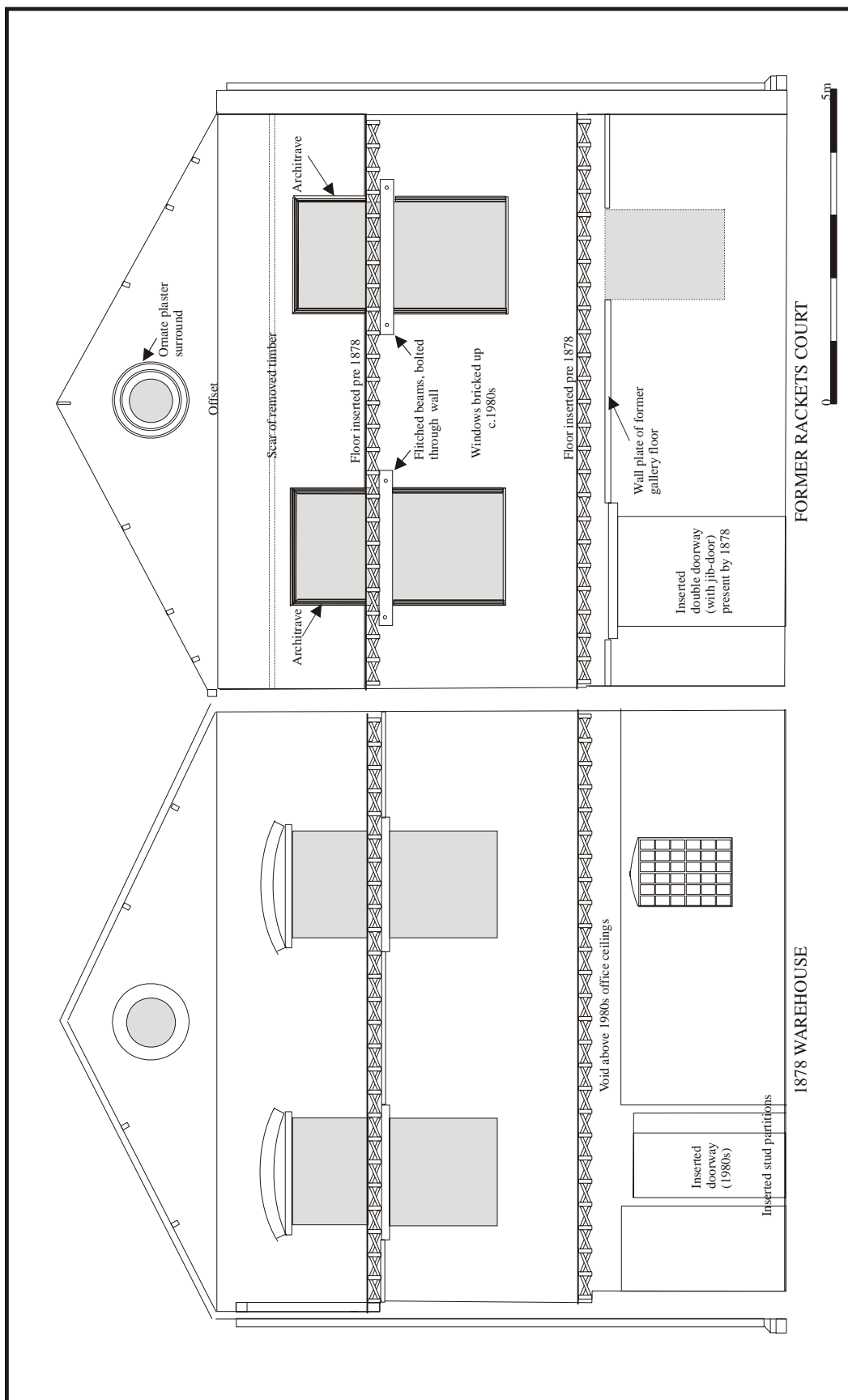


Figure 13: Lambs Furniture Repository, Sansome Walk, internal western elevation H-H

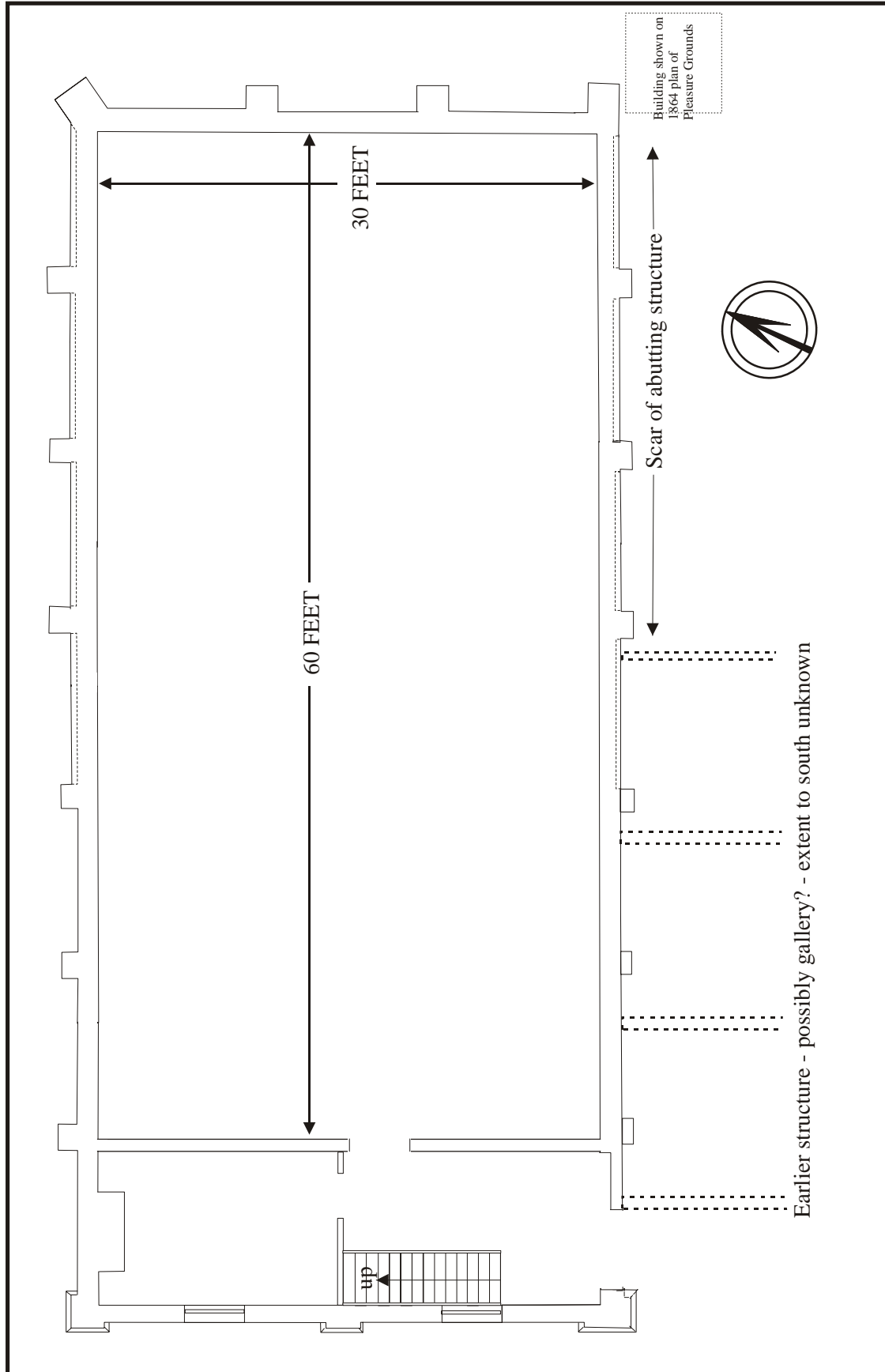


Figure 14: Lambs Furniture Repository, Sansome Walk, reconstruction of ground plan of rackets court in 1861-1864 Scale 1:200

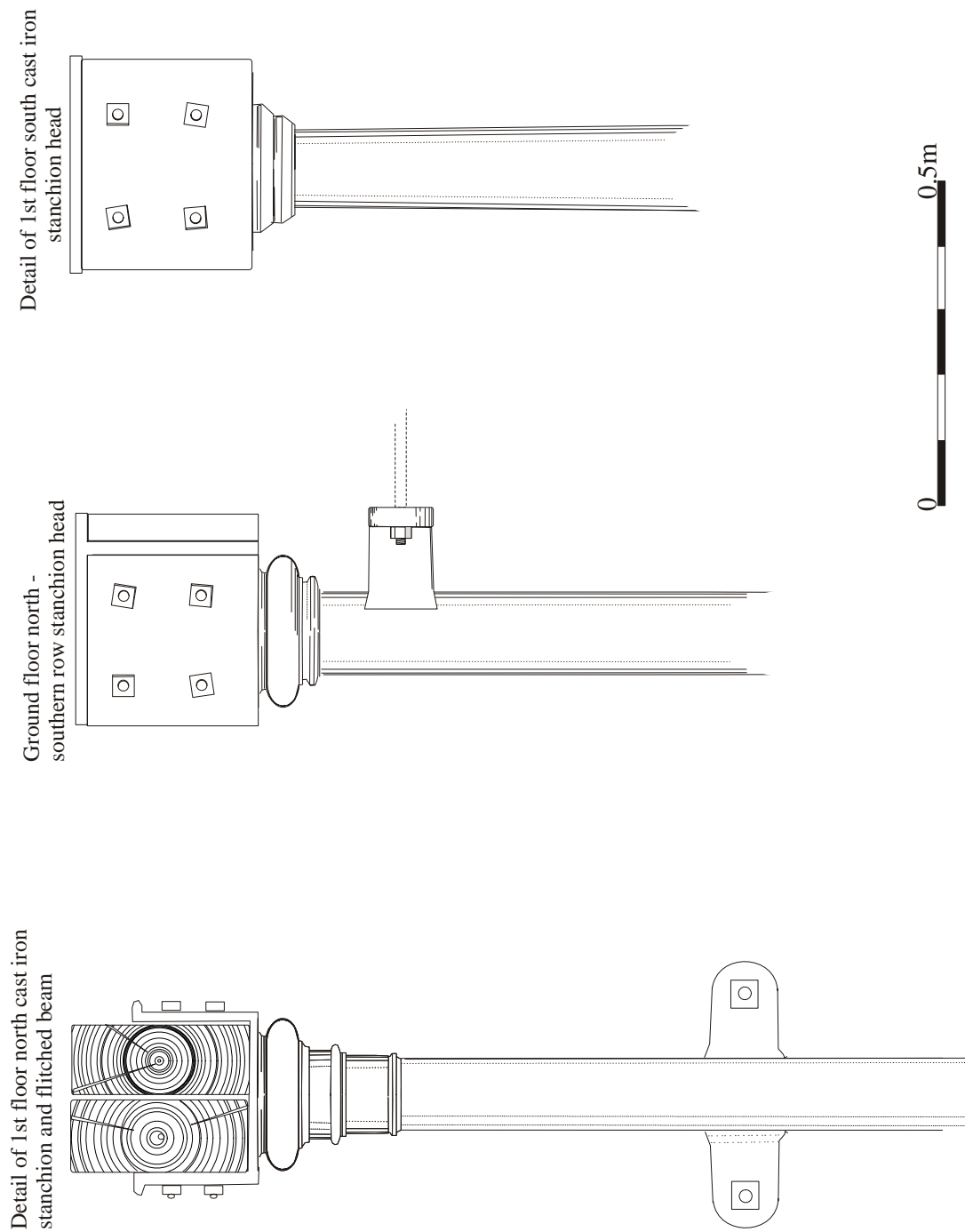


Figure 15: Lambs Furniture Repository, Sansome Walk - representative examples of stanchion heads from 1870s floors



Sansome Walk frontage viewed from west, former rackets court to LHS



Rear elevations viewed from south-east



Eastern elevation of former rackets court



North facing elevation

Plate 1: external elevations



Ground floor facing north-east



Ground floor facing south



Stanchion detail
(southern row)

Central row stanchion

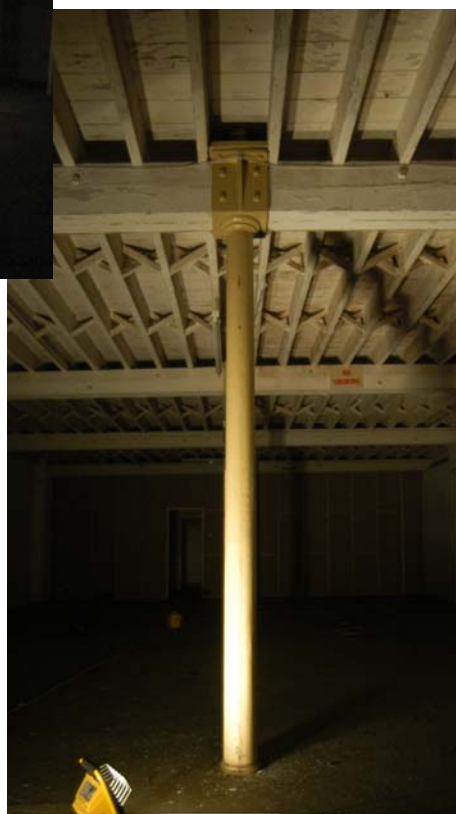


Plate 2: Former rackets court ground floor



View of north-east corner of first floor



Detail of cast iron stanchion (southern row) - note inserted beam to LHS



General view facing south-east



Former 1st floor fireplace exposed by removal of chimney breast



20 pane hopper opening window (northern elevation)

Plate 3: Former rackets court - 1st floor south



Stepped gable at eastern end of northern elevation



Stepped gables visible from southern warehouse



Plaster archway to oculus

Principal rafters reinforced, additional bracing to trusses



Scarf of gallery wall and blocked original entrance (lighter coloured brick)



Scarf of "bulk" (originally 2'2" high)



Mortices (probably for glazing bars) in face of uppermost partition

Room beneath gallery has a blocked window, chimney breast and panelling to RHS



Heads of sash windows above gallery

Plate 4: surviving features of rackets court



Ground floor central stanchion



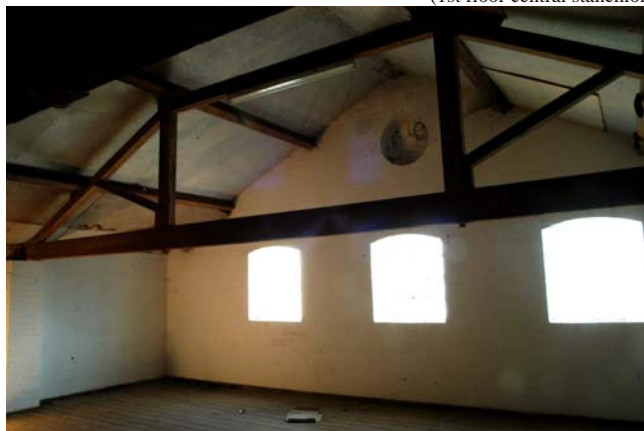
First floor facing north-east



"Hardy and Padmore, Worcester"
(1st floor central stanchion)



36 pane window in ground-floor
western elevation



Roof truss, facing east



16 pane opening hopper window
1st floor, eastern elevation

Plate 5: 1878 hop-warehouse