WATERGATE STREET: AN INTERIM REPORT OF THE CHESTER ROWS RESEARCH PROJECT

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INTRODUCTION

The Rows of Chester are a unique system of continuous covered galleries at first floor level. These galleries run above shops at street level and are contained within buildings of various dates and architectural styles. Fig. 1 shows a section through a typical Rows building. The street level or undercroft is usually a few feet below the street. The Row walkway is normally back from the street behind the Row stall, a raised sloping area which provides the headroom necessary for the steps down into the undercroft. Many of the Rows buildings are the result of construction and alteration from different centuries, but it is clear from the remaining medieval elements that the system dates back to the late 13th century.

In 1958, P. H. Lawson and J. T. Smith published an article on the Rows of Chester, based on their joint study of identifiable medieval undercrofts, and research into lost buildings (Lawson and Smith, 1958). The authors chose to present different conclusions, Lawson arguing for a gradual evolution of the Rows, while Smith saw them as a conscious act of town planning. Their final statement was:

'If every building in the four main streets could be examined . . . the truth about the Rows and about that obscure period between 907 and c. 1300 would become a good deal clearer. The thoroughness of modern reconstructions destroys the evidence of the past so completely that if the work is not begun soon, it will be too late'.

Following a day conference on the Rows organised by the Chester Archaeological Society in July 1984, the Council of the City of Chester, Cheshire County Council and Chester Civic Trust provided funds to carry out a pilot survey of one group of buildings in Watergate Street. Eleven tenements were investigated and sufficient information was obtained to reconstruct the layout of three major medieval houses.

This pilot study stimulated interest in the history and development of the Rows and sufficient funds were raised to begin a comprehensive study. The examination and recording of all the Rows buildings in Watergate Street has recently been completed and this is an appropriate point to set down some preliminary conclusions. Work is continuing in other streets and this should be completed by mid-1989.

WATERGATE STREET

Watergate Street runs west from the High Cross in Chester. As early as the 1620s, William Webb described it as being 'well-furnished with buildings, both ancient and new' (King, 1656, II, 21). It is the narrowest and most picturesque of the four streets with Rows buildings.

Watergate Street runs across the slope of the sandstone bedrock which falls from north to south towards the river. It broadly follows the line of part of the Roman via principalis, but the present street is narrower and lies to the south. Unfortunately, little of the Roman building pattern along Watergate Street is known. The principia, or headquarters building, extended along the north side at least as far as No. 12, where some of its walling was found standing seven courses high, behind the wall of the medieval undercroft (Ward, 1985). At the rear of No. 35, a Roman column base survives *in situ*, in a sunken yard behind the undercroft, showing that here the Roman ground level was c. 1 m. higher than the floor of the undercroft. To the rear of Nos. 51-67, lay the main granaries of the fortress, whose massive structures must have inhibited later building in this area.

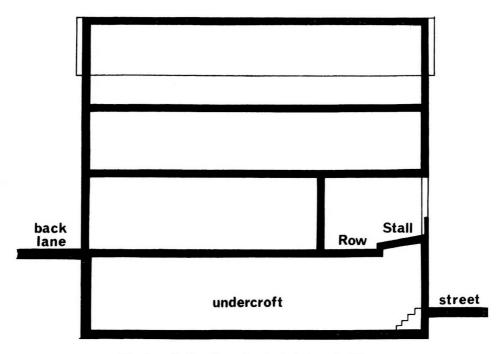


Fig. 1 — Section through a typical Rows building

The minor streets running off Watergate Street (Goss Street, Crook Street, Trinity Street and Weaver Street) all follow Roman alignments, the latter two overlying the *intervallum* road. All these streets rise away from Watergate Street as the ground level at the rear of the buildings is almost a storey higher than street level (Fig. 1). This seems to reflect the accumulation of Roman building debris and later rubbish into which the Rows buildings have been set. The great volume of Roman, medieval and post-medieval pottery found whilst extending the undercroft in No. 11 is an indication of this (Rutter, 1984).

So the Roman fortress provides a framework into which the medieval and later buildings are set. The system of continuous raised, covered walkways known as the Rows survives on the north side of Watergate Street from St. Peter's Church to Crook Street although it can be shown from documentary and structural evidence that Rows continued as far as Trinity Street until the early 18th century. On the south side, the Rows run around from Bridge Street all the way to Weaver Street. Again, they formerly continued through the Old Custom House Inn where permission was given to enclose them in 1711 (Kennett, 1984). The Rows in Watergate Street never extended west beyond the line of the Roman fortress wall, although housing extended as far as the Watergate in the medieval period (Laughton, 1987).

Watergate Street led from the Cross to the River Dee and the site of the medieval and later port. It seems always to have attracted merchants. William of Doncaster, the leading merchant in Edward I's reign, is recorded as a major property owner (Cheshire Sheaf, 3rd series, **56**, 62-64). The families of Bavand, Mainwaring, Challenor, Gamul and Aldersey, some of the richest merchants in Elizabethan Chester, were connected with the street (Woodward, 1970) and at various times it also included the town houses of some of Cheshire's gentry families, for example the Grosvenors of Eaton, the Hardwares of Peel, the Cottons of Combermere and the Booths of Dunham Massey. This latter family built the last and most imposing town house in Watergate Street, Booth Mansion, begun in 1700. From then on the area began to fall from fashion, even though the Assembly Rooms were established here by 1745. The silting up of the River Dee had become very serious during the 18th century and the subsequent decline in the port may have reduced the importance of the street (Hodson, 1978).

The later development of Watergate Street can be followed on the series of detailed maps of Chester. These show a steady development of the backland behind the main houses. By 1875, most of the empty space had been filled with tightly packed housing known as courts, whose only access was down long passages to the Rows. The censuses of the mid 19th century show Watergate Street entirely occupied by tradesmen and a few professional people. Within the street there are only isolated examples of the vigorous Victorian restoration or recreation of timber-framed buildings well known elsewhere in Chester: God's Providence House reconstructed in 1862 and Bishop Lloyd's Palace more accurately restored in 1899.

During the 20th century, Watergate Street has remained relatively unchanged. In the 1930s, the courts were swept away as slums, and there has been some redevelopment. Two major new-buildings, Refuge House and Nos. 55-61, replaced dilapidated timber-framed houses and destroyed several medieval undercrofts. As late as 1985, permission was given to demolish No. 12, by then a rickety-looking butcher's shop, before its well-preserved, 13th-century undercroft was recognised (Ward, 1985). Even the most familiar of Chester's buildings have kept their secrets hidden away.

PLAN FORM

Following the completion of the survey of Watergate Street, it is possible to make some generalisations about the plan of the medieval town houses. The most significant feature of the street, and of the Rows generally, is that all the buildings consist of an undercroft or street-level space with the house above (Fig. 1). This is an arrangement typical of the 13th and 14th centuries (Faulkner, 1966), but the existence of, and the desire to maintain, the Rows appears to have frozen Chester's buildings in this form, despite numerous alterations and rebuildings.

The Rows must have been treated very much like streets with the Row thought of as ground level. In a significant number of examples the building has been totally rebuilt from Row level upwards leaving the undercroft virtually untouched, as may be seen at No. 11. This may be an indication that the complex pattern of ownerships which exists today, with the undercroft regularly being in a different freehold ownership from the space above, dates from an early period. Redevelopment of a whole unit may often not have been possible because of this division of ownership.

The identification of a standard plot width is causing considerable difficulty. The process of subdivision of street frontages in other medieval towns is more easily recognisable with unit widths of 18 m. in Stratford-on-Avon (Platt, 1976), 4.5 m. to 15 m. on different streets in King's Lynn (Parker, 1971) and 9.2 m. in Ludlow (Lloyd, 1979). In Chester internal measurements within narrower undercrofts average between 4.5 m. and 5.5 m. This variation may result from some buildings having their own party walls, each c. 0.5 m. thick, while others use the party walls built by their neighbours. The larger properties in Watergate Street may represent the amalgamation of adjacent plots, three in the case of Nos. 38-42 and one and a half in the case of the eastern house within Booth Mansion. Alternatively, the smaller properties may represent the subdivision of large early plots. It may be that the most fruitful analytical approach would be to identify a very small unit, tentatively c. 2.25 m., which might represent a fraction of a standard medieval plot width, and assess its recurrence within the street. It has not proved possible to identify such a unit mechanically, but it is hoped that a computer analysis might help to resolve this problem.

In a seminal article in Medieval Archaeology, W. A. Pantin proposed a two-part classification of the plan forms of medieval town houses: those with the hall at right angles to the street and those wih the hall parallel to the street (Pantin, 1963). In Watergate Street, examples of both types have been identified. The right-angle

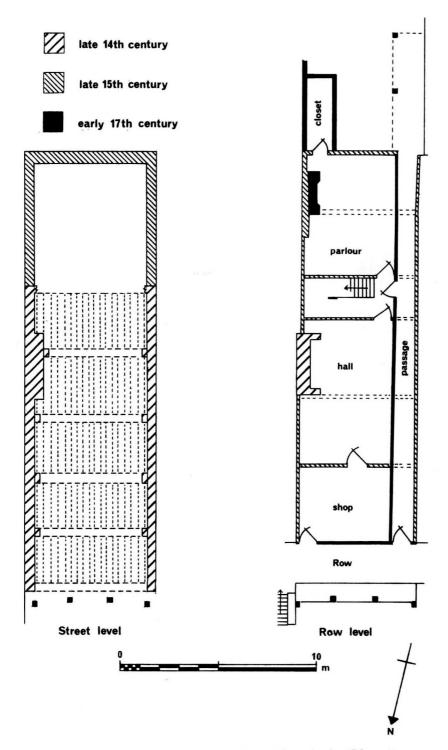
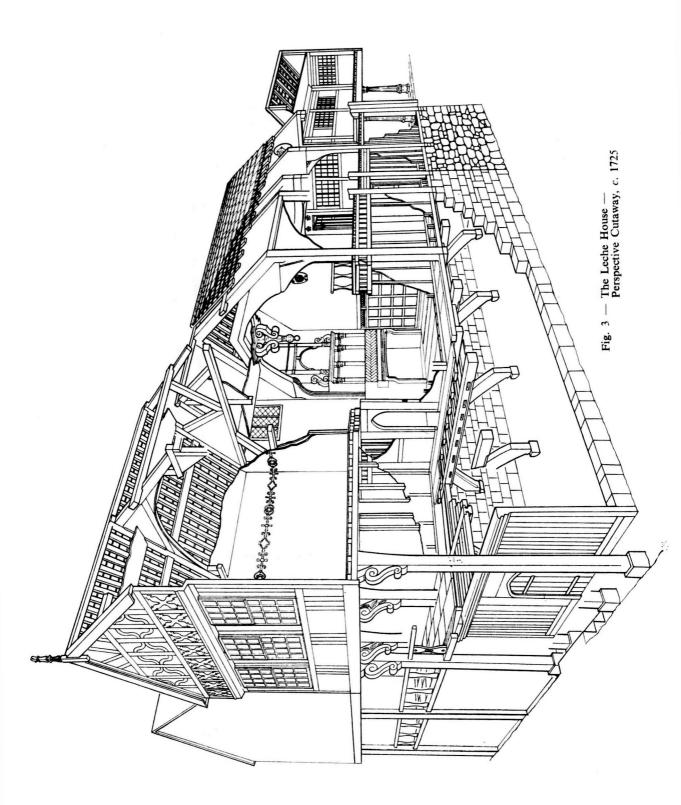
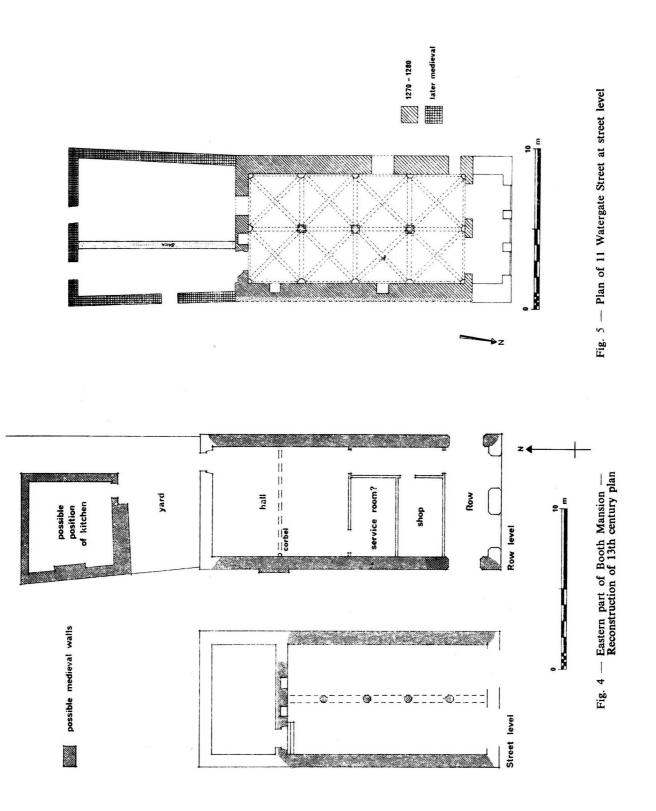


Fig. 2 - Reconstructed plan of the Leche House in the 17th century





form appears to be far more common than the parallel, presumably because only the most powerful and wealthy could afford to acquire a long frontage to a principal street.

The best example of a right-angled hall plan survives at the Leche House (Figs. 2 and 3). Here a two-bay hall, open to roof and top-lit, lies behind a singlebay shop which opens from the Row. Beyond the hall is a narrow bay which could have acted as a screens passage or stair space, and then a rear parlour with chamber above. A passage now runs right through the property along its western boundary, giving independent access to the hall, rear courtyard and service rooms, but this may be a later insertion. A substantial solar occupies the space above the shop and Row, with access from the staircase and rear chamber via a gallery overlooking the hall and running above the passage. A separate kitchen may have occupied the position of the 18th-century Lion House. The present form and decoration of the Leche House dates from the 17th century, but the structure of the building appears to date from the 14th and 15th centuries, implying that the basic plan originated in an earlier period.

A similar right-angled hall plan dating from the second half of the 13th century can be reconstructed for the eastern house within Booth Mansion (Fig. 4). Here the space between the Row and the timber-framed door, which is all that remains of the front wall of the hall, is too deep to have accommodated only the shop. This suggests that the space may have also included the staircase or small service rooms. The hall was probably of two bays, with a window in the rear gable. Plans of the building before the recent reconstruction suggest that a detached kitchen may have existed beyond a small courtyard.

On plan evidence alone, halls at right angles to the street are suggested at Nos. 15, 21, 61, 63 and 69. The interiors of Nos. 61 and 63 are now destroyed and in No. 69 it is not possible to tell whether the first floor is original or an insertion.

Only one example of the wide-frontage type has been clearly identified in Watergate Street, at Nos. 38-42 (Brown *et al.*, 1985). Here three almost identical undercrofts ran back from the street, while at Row level there was a hall parallel to the street, with a screens passage and service wing at the west end. The hall lies behind a range of three or four shops which front the Row, at least one of which was almost certainly operated by the householder with access from the hall. The other shops were probably entered only from the Row and consisted of a small space (only 2.7 m. wide) at Row level, but with a larger chamber above, extending over the Row walkway. The general layout is virtually identical to P. A. Faulkner's reconstruction of Tackley's Inn, Oxford (Faulkner, 1966). The idea here is one of *rus in urbe*. The plan form of a typical manor house in the countryside, of which Chorley Hall, Alderley Edge, Cheshire is a contemporary local example (Cordingley & Wood-Jones, 1959), has been adapted to the urban context by the addition of a commercial element.

The function of the undercrofts remains a matter for speculation. In several

cases the owners went to the expense of stone vaulting or used decorative timber work, which implies that the undercrofts were intended to be seen and to impress. The existence of a stone vault in only part of the undercroft of No. 37 is puzzling. These spaces must have been very dark. They could have been used as workshops and storerooms, and there is evidence from London (Keene, pers. comm.) and Oxford (Pantin, 1942) that some were taverns. The main access to the undercrofts seems to have been direct from the street, although commercial pressures have meant that only fragments of the original frontages remain. Equally, there is little evidence to resolve the question of whether there was internal access between the undercroft and the house above. At Nos. 11 and 37 stone doorways in the rear walls are rebated to take a door opening outwards. These now open into later structures and it is not clear whether they originally gave access into further undercrofts or to staircases up to Row level. Where rear staircases do exist, as at Nos. 10 and 37, they seem to be later insertions. It is equally unclear whether the stone staircase found in No. 13 belongs to the medieval structure.

The later development of the plan form is either a process of sub-division, with floors, fireplaces, staircases and partitions being inserted into open halls, or of rebuilding to provide similar arrangements of small rooms. At Nos. 38-42, there was a major remodelling during the early 17th century, a massive central chimney and an upper floor being inserted into the open hall to provide four heated rooms. No. 10 provides a good example of a 17th-century rebuilding above an earlier undercroft. At Row level and above, the building is divided on each floor into two long narrow rooms, front and back, with fireplaces at one end.

A pattern may be discerned in the development of staircases. Early 17th-century staircases *in situ* suggest that a position next to the fireplace within the body of the room was common. This arrangement may be seen in No. 10 and formerly obtained in Nos. 38-42, although it seems not to have been echoed at Bishop Lloyd's Palace, where a separate stair hall reflects the high status of the building. Two early 18th-century interiors, at Nos. 44-46 and 48-50, have dog-leg staircases against a side wall and contained within a separate stairwell between the front and back rooms of each storey. The idea of the central stairwell persisted into the later 18th century but the position of the stair often changes at first-floor levels from one side wall to that opposite, an arrangement seen at No. 47 and formerly at No. 13.

Encroachment

There seems to be a strong desire to encroach onto the street throughout the Rows. However, the history of encroachment on each side of Watergate Street seems to be different. On the north side the building line has moved forward less than 1 m. in seven hundred years. This results from the building of new facades immediately in front of the earlier one, as can be seen at No. 22, or the placing of posts just into the street to carry upper storeys, as at No. 40, or a combination

of the two as found archaeologically at No. 12 (Ward, 1985). The main exception is Booth Mansion which was deliberately set out up to 1.5 m. into the street and angled so that its impressive facade is visible to those looking down from the Cross.

On the south side, there was a more considerable movement forward. At No. 11, the medieval building front is 2.4 m. behind the present street line, reducing to 1.25 m. at No. 37. Encroachment seems to have gathered momentum from the late medieval period onwards. There is surviving evidence from the early 17th century, for example at the Leche House, and much documentary evidence awaits discovery. A typical petition to the City Assembly in 1729 reads:

'The petition of Martha Chadwick, widow, stating that she was seised of a house in Watergate Street with a shop under the same . . . adjoining on the east to a shop belonging to Coleclough, carpenter . . . which projects into the street about $2\frac{1}{2}$ feet further than the petitioner's shop obscuring it to her great prejudice praying liberty to build her shop even in front at the east end with the latter shop, sloping to the west end which will contribute to the uniformity of the street.' (Chester City Record Office, AB 4/27).

A common mechanism for encroachment involved the extension of the chamber over the Row, by placing posts in the street. The gap was filled by the stallboard, and a small shop was then created in the space underneath. Once one property had developed in this way, the City Assembly seemed powerless to stop the neighbours doing likewise. In 1743, for example, Alderman Peter Ellames was permitted to build over the pavement and small shop in front of No. 11, providing he left a convenient passage and stall under his new building to pass and repass along the Row (Lawson and Smith, 1958).

Enclosure of the Rows

In parallel with the wish to encroach upon the street, came pressure to enclose the Row and so provide a substantial additional room. The City Assembly resisted this more strongly, but at the west end of Watergate Street it occurred on both sides. In each case the undercroft is still a distinct element and the rooms at former Row level are approached via substantial flights of steps, comparable to those by which the Rows proper are reached, and apparently once serving that purpose.

The documents recording the enclosure of the Old Custom House Inn in 1711 have previously been identified (Kennett, 1984). Recently the process by which Nos. 44-46 and 48-50 were enclosed has been unravelled by a combination of documentary study and observations during fieldwork. In June 1715 Robert Bavand, the owner of a building in Watergate Street adjoining Crook Lane, was granted permission to enclose the Row. In July of the same year, he sold the tenement to the owner of the next door property, Dame Philadelphia Cotton. The building was in a very run-down condition, but had the benefit of the 'planning

permission' to enclose (see Cotton papers, Chester City Record Office, CR45/24 and 25).

The facade of Nos. 44-46 and the decorative scheme of the chamber above former Row level are of the early 18th century, suggesting that Dame Philadelphia refurbished the house and enclosed the Row shortly after the purchase. Next door at Nos. 48-50, enclosure seems to have been delayed until the middle of the century judging by the panelling and fireplace in the room spanning the former Row. Striking evidence for the existence of the Row in this building in the early 18th century is present in the form of a Tuscan column built into the front wall and visible inside the shutter box of the window.

STONE STRUCTURES

The stone-vaulted undercrofts of Watergate Street make an immediate impression. They form a group of structures datable to the late 13th and early 14th centuries (Wood, 1965) and are comparable to vaults in other English towns (Faulkner, 1966). However the study of Watergate Street has indicated that stone structures were more widespread and more varied than just these vaulted undercrofts. The most interesting discovery is the stone party wall of the eastern house within Booth Mansion. This wall is exposed in the adjacent property (No. 26) and for a substantial length it still exists to its original height, with the eaves cornice intact.

Within Watergate Street there are only three stone-vaulted undercrofts (Fig. 5), but a further thirty-six undercrofts have or had stone party walls. This represents virtually all the historic properties within the street and may be the physical evidence for some form of bye-law controlling the construction of party walls. There are also a small number of tenements which clearly had stonework above Row level. It is clear that a significant number of the major 13th- and 14th-century town houses of Chester were at least partly of stone. Further work is needed before it will be possible to say whether the external walls of these houses were fully of stone construction, or whether they were partially timber-framed.

The details of the stonework are largely consistent. The masonry is generally of large, well-coursed blocks of local red sandstone and any variations appear to be the result of insertions or later alterations of the original construction. All the vaulting is quadripartite with simple chamfered ribs, but it springs from a variety of columns, attached shafts and moulded corbels. A number of the undercrofts contain rectangular recesses or cupboards of varying sizes, with a rebate on all four front edges implying a timber door.

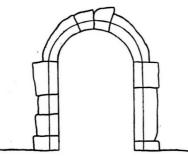
The timber floors above the undercrofts are sometimes carried on lines of simple corbels, usually about 0.3 m. cube with a curved underside and spaced approximately 0.3 m. apart. This arrangement is usually found on the party walls but in Nos. 38-42 it exists above the shallow stone arch which carries the front wall of the parallel hall. In Watergate Street, there are a small number of properties with corbels at a wider spacing, such as at No. 15, and this is probably

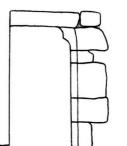
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a later development. The signs of burning between two double corbels at No. 51 may indicate that these are the remains of an early stone smoke hood, and this may also be true of the similar arrangement in God's Providence House.

The main variation in stone detailing is in the design of the doorways and arches, where there are four main types (Fig. 6).

- a. A chamfered semi-circular headed doorway, with door rebate of which there is only one example, in No. 37. This probably dates from the 12th century.
- b. A simple lintel supported by a double cusped corbel on one side of a door rebate, again with only one example, in the undercroft of Nos. 38-42.
- c. A chamfered, two-centred arch constructed of a number of voussoirs. This type occurs as the undercroft arcade in the eastern half of Booth Mansion





c) 11 Watergate Street

d) 40 Watergate Street

Fig. 6 - Stone Doorways

and for the doorway in the rear wall of the undercroft of No. 11. It is likely that the arches over the Row at Booth Mansion are also of this type, but these are now rendered. This is generally the most common form of 13th- and 14th-century doorways. A local example is the pedestrian entrance of the Abbey Gateway, Northgate Street of c.1300.

d. A chamfered, two-centered arch doorway with only one stone forming each side of the arch. The rebate of these doorways has a flatter twocentred arch, again formed with only one stone on each side. This type is found at Nos. 38-42, and there is a particularly large example in the eastern house within Booth Mansion. No comparable example of this type is known from elsewhere.

Apart from the semi-circular headed doorway in No. 37, all the details of the stonework are consistent with dates in the second half of the 13th and the beginning of the 14th centuries. The evidence from No. 37 suggests that the vaulting was inserted into an earlier, stonewalled undercroft, providing the first clear indication of stone structures earlier than the 13th century.

TIMBER STRUCTURES

Watergate Street contains many examples of Chester's traditional black and white buildings, the larger and more conspicuous facades being 19th-century in date, the more modest but still highly decorated being of the 16th and 17th centuries. However the study has revealed a number of timber structures dating from the late 13th and early 14th centuries.

These earlier timbers were contained within stone-walled buildings and the remaining examples generally carry the floors above the undercrofts. The only other timber element from this period is the doorway from an internal partition in Booth Mansion (Fig. 7). No roof structures of the 13th or 14th century remain.

Three distinct types of early timber structures have been identified:

1. Samson-post arcades

In this technique, a line of massive posts support a longitudinal beam known as a bridging joist, on which the true floor joists are placed. A 'bolster' or pad may be placed on the head of the post, and the post may be braced to the bridging joist. Three examples survive in Watergate Street and two others have been recorded during recent demolition. The most ornate example survives in the western undercroft of Booth Mansion, where each post is neatly chamfered and stopped and carries a long and shaped bolster supporting the bridging joist (Fig. 8a).

The party wall between the undercrofts of Nos. 20 and 22 has a similar arcade, and the heads of the chamfered posts thicken and splay out to support the

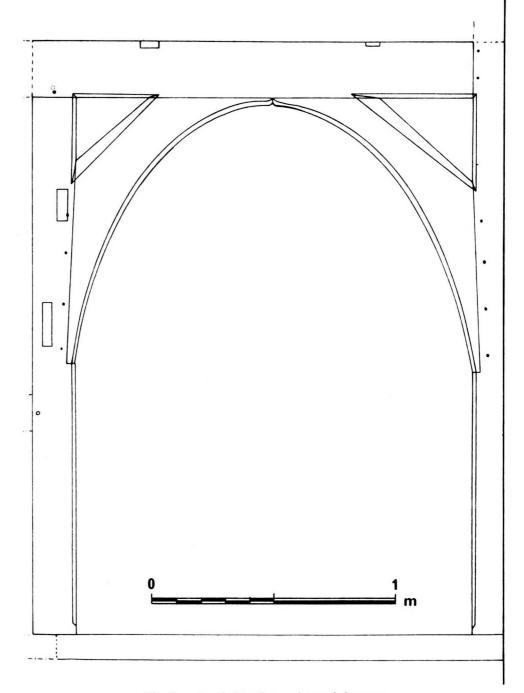


Fig. 7 -- Booth Mansion -- internal doorway

bridging joist (Fig. 8c). In No. 10, there is an arcade of four bays probably of a later date. Here substantial posts stand on padstones, thicken to form jowls at the head and, unlike the earlier examples, are jointed to the bridging joist, (Fig. 8b). Above is a cross beam tenoned to the post and there is four-way bracing between the main members.

In 1985 remains of a simple two-bay arcade were found in No. 12 (Ward 1985); and in Nos. 63-65, demolished c.1957, posts with four-way bracing like the arrangement in No. 10 recorded (Lawson and Smith, 1958).

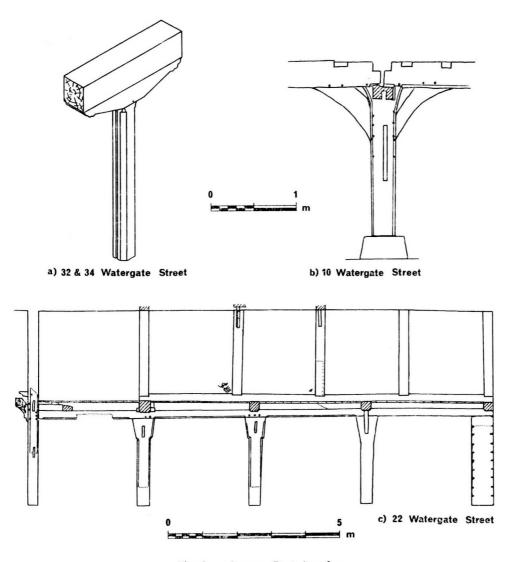


Fig. 8 -- Samson Post Arcades

Similar structures survive in the undercroft of St. Etheldreda's, Ely Place, London (Hewett, 1980) and in the solar undercroft at Stokesay Castle (Pevsner, 1958), both of the late 13th century. The more evolved form represented at No. 10 can be found in the undercroft of the Merchant Adventurers' Hall, York, built in 1367 (R.C.H.M., 1981). However, the technique may be much older, as it can be inferred from the padstones and settings in the ruinous Scolland's Hall of Richmond Castle, built c.1080 (for a fuller discussion see Turner, 1988).

2. Corbel tabling

This technique combines stone and timberwork. Regularly placed, closely set stone corbels project to carry a wooden beam placed along them. On this beam rest massive joists, up to 0.3 m. square which support the floor. The best example in Watergate Street occurs in the eastern undercroft of Booth Mansion (Fig. 9). In Nos. 38-42 the same technique occurs above a stone arch in the undercroft and also at Row level to carry the timber-framed structure of the medieval shops. A local parallel can be found in the base of Adam's Tower, Chirk Castle built in 1295 (Dean, 1983).

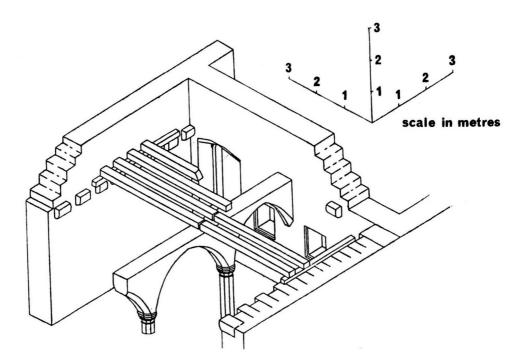


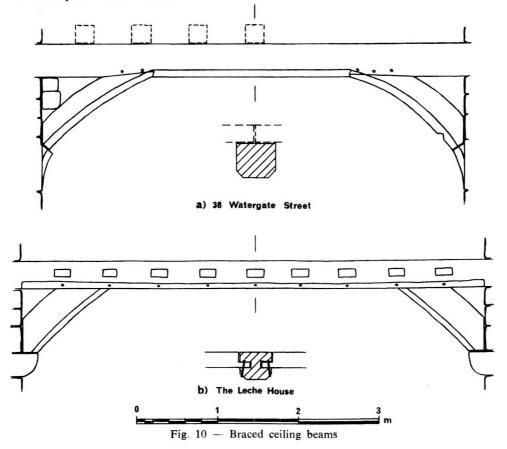
Fig. 9 -- Eastern part of Booth Mansion: Schematic outline of undercroft rear showing corbel tabling.

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3. Braced ceiling beams

Another method of spanning an undercroft is with braced ceiling beams. In Nos. 38-42 there are examples dividing the spaces either side of a depressed central stone arch. The beams are 0.4 m. square and just set into the stone walls. Short arched braces rise from a stone springer to support the beam (Fig. 10a). As with the other techniques the joists are simply placed on the beam. The undercroft of the Leche House has a line of similar trusses, equally spaced to form a series of five regular bays. The dimensions of the ceiling beams are similar to those in Nos. 38-42 but the arch braces are slighter and rise from true corbels. The joists are jointed into the ceiling beams (Fig. 10b). These differences suggest that this is a later form of the technique.

The identification of these examples has been important in recognising and dating more medieval fabric than was previously known. These timber structures carry massive floors, which can consist of boarding, rubble and stone flags, a total of 0.6 m. thick at No. 12 and Booth Mansion, and this may have been designed as a fire-proof construction.



It has proved much harder to find evidence of late medieval timber work. The main exception is the Leche House, where the false hammerbeam truss over the hall and the king-post trusses behind are the only certain medieval roof to have survived in Watergate Street. The buildings are so narrow that there was a strong urge to add extra storeys to increase accommodation and in doing so the early roofs were removed. This process is easy to achieve in timber framing, as is well demonstrated in No. 24. Here two successive raisings of the roof can be unravelled from the timber framing visible in the stairwell.

Alongside the urge to increase the size of the houses was a desire for their exteriors to be in fashion. In the late 16th and early 17th centuries this meant an ornately decorated timber facade, like those which survive at the Leche House and Bishop Lloyd's Palace. However in the late 17th and 18th centuries the fashion moved to plain brick or rendered facades with regularly placed cross or sash windows. This could be most easily achieved by plastering over the timber framing and inserting windows of different sizes. More drastic measures were taken at No. 20, where the whole of the timber-framed facade was cut away, jetties and all, leaving just a half-sawn, carved bracket behind the newly-built brick facade.

Dendrochronology by Dr. M. K. Hughes and Dr. P. Leggett

The survival of the early timber structures allows a method of dating independent of stylistic comparisons. Dendrochronology or tree-ring dating relies on the differential growth of the annual rings in trees resulting from variations in climate and environment. By matching mature living trees with older samples of wood from buildings, archaeological sites, or waterlogged situations, local and national sequences can be established, against which cores from undated timbers may be compared. (Eckstein *et al*, 1984). The results from Nos. 38-42 Watergate Street have already been presented in detail (Brown *et al*, 1985, 149-151) but extensive sampling has since taken place at Booth Mansion and the Leche House. The table opposite summarises the data from Booth Mansion.

Eight of the timbers from this building, five from the eastern house and three from the western house, showed sufficient correspondence to permit the formation of a mean site chronology. This was then dated against independent chronologies, allowing absolute dating of the last ring present in each sample. As might be expected, the degree of matching between this mean site chronology and the independent chronologies is much greater than the series from Nos. 38-42, which were based either on a single timber or the mean series from two timbers. One of the dated timbers possessed bark, but it was not possible to take a sample of the sapwood suitable for measurement. Even so, it would be reasonable to assume that the last ring dated predates felling by little more than three or four decades. It is not possible to have such an estimate for the other eight timbers, but it is unlikely that the trees from which they came were felled less than 30 years after

Number	Location	Description	No. of Rings	Sapwood	Date of Last Ring
Eastern hou	se:				
LP1329	Undercroft	Joist	148		1213
LP1332	Undercroft	Joist	180		
LP1336	Undercroft	Joist	189		
LP1337	Undercroft	Joist	87		
LP1340	Undercroft	Joist	168		1243
LP1341	Undercroft	Joist	213		
LP1342	Undercroft	Joist	110		
LP1343	Undercroft	Joist	70		
LP1346	Undercroft	Joist	166		1235
LP1347	Undercroft	Joist	122		1239
LP1348	Undercroft	Joist	125		
LP1351	Undercroft	Joist	67		1248
LP1353	Undercroft	Joist	146		
LP1354	Undercroft	Joist	77	_	
Western house:					
LP1324	Arcade in undercroft	Bolster	73	_	
LP1325	Arcade in undercroft	Samson post	77	-	1231
LP1326	Arcade in undercroft	Bridging joist	125		
LP1327	Arcade in undercroft	Bolster	124	_	1201
LP1328	Arcade in undercroft	Samson post	68	—	1213

TABLE - Oak Timbers from Booth Mansion, Chester

Dating of site mean chronology from Booth Mansion

Dated Chronology	Last Year of Site Mean	't' value	Years of overlap
British Isles Nantwich Jaybank (unpub.) Farington Hall	1248 1248 1248 1248 1248	13.15 11.03 8.09 4.48	183 183 174 155

the known dates of the final rings on the samples. In six cases this suggests that the trees were still alive up to the period 1260-1280.

Nineteen cores were taken from the Leche House in the hope of dating the two medieval phases of construction. Five samples from the braced ceiling beams in the undercroft had sufficient numbers of rings for tree-ring analyses to be undertaken. Results were disappointing as there was no correspondence between timbers, or any significant matching with twenty-five independent chronologies, including the two established for buildings elsewhere in Chester. This implies that the timber used in the Leche House was drawn from quickly grown and different stands of trees.

Dendrochronology dates have been obtained from each of the early timber floor structures described. The dates are estimates of the years of felling of the timbers used, not dates of construction. However there is no evidence for the re-use of any of these timbers and oak was often used green, so the dates may be taken to represent the period of construction.

The samson-post arcade in the eastern house of Booth Mansion dates from the late 13th century and the corbel tabling in the western house is of the same date. At Nos. 38-42 the corbel tabling in the undercroft is of the early 14th century. This is also the date which can be applied to the braced ceiling beams in the same building, but no dates could be obtained from the similar structures in the Leche House.

PRELIMINARY CONCLUSIONS

The Chester Rows are unique. Other English and European cities have covered arcades or raised pavements, but none have a continuous system of galleries incorporated within building frontages. The question is obviously 'Why?' What special factors in Chester's history and development led to the formation and survival of such a system? The evidence from Watergate Street, and indeed from elsewhere in the Rows, suggests that the late 13th to early 14th century is the key period in the evolution of the Rows. The historical background and special topographical features of Chester in this period need to be outlined.

Following the Conquest, Chester suffered serious damage under William the Conqueror during 1069-70, as part of his harrying of the north (Sawyer and Thacker, 1987). The building of the castle in the south-west corner of the city seems to have prompted a reorganisation of the plan of the city centre. Domesday records a substantial reduction in the number of houses between 1066 and 1086, and archaeological evidence suggests that the surviving pattern of property boundaries originated at this time (Ward, 1984). However it has not proved possible to find a standard plot width along Watergate Street, as one might have expected from other medieval towns. The impression is of a narrow frontage, which by the late 13th century had been the subject of partial redivision and combination, to create the widths of properties surviving today. Nevertheless, the plan of the new properties is firmly based on the Roman street pattern and they were largely confined to the fortress and the area towards the river. It is also recorded that many of the main Roman masonry buildings survived in a ruinous state, well into the 13th century (Strickland, 1984).

The principal medieval streets were, and still are, largely at their Roman level. Behind the frontages, there is a significant build-up of debris which gives the characteristic cross-section of Chester's main streets, where the ground level at the rear of the buildings is approximately a storey higher than at street level (Fig. 1). Also bedrock is generally just below ground level and the medieval masons chose to build their undercrofts on its surface rather than to excavate, which seems more typical elsewhere. This means that the floor level of the house above the undercroft was well above the street. The superimposition of the Roman plan on the present street map suggests that the position of early medieval buildings was dictated by the existence of the Roman ruins. As there were more substantial Roman buildings along the north side of Watergate Street, particularly the *principia*, and those on the south were set further back, like the granaries, this may have led to the present alignment of Watergate Street being to the south of and less straight than its Roman predecessor.

If there was a spate of building in Chester at the end of the 11th century following a reorganisation of property boundaries, then after two hundred years, those buildings would be deteriorating and old fashioned. Some early stone houses are recorded; an example is mentioned from before 1208 (Lawson & Smith, 1958), and the *vicecomites* of Chester are reported as living in such buildings from an early date (Laughton, 1987). A number of famous Norman stone town houses do survive in Lincoln and Norwich (Wood, 1965) but the survey work in Watergate Street has produced only fragmentary evidence of one building which may predate the 13th century: the undercroft walls of No. 37.

Chester was the base for Edward I's campaigns in North Wales in 1277 and 1282. The great Welsh castles and their associated walled towns which resulted, continued to be built and improved throughout the remainder of the 13th century and into the early 14th century (Colvin, 1963). The city acted as the mustering point for the scores of craftsmen, masons, carpenters and labourers from all over the country who were required to carry out this work. In the early part of the period their work was limited to the campaigning season from March to October, leaving the winter free for other employment. Chester was thriving economically as a result of supplying the needs of the army and the craftsmen were available to turn fortunes into permanent structures of stone and timber. It must be expected that the city was, at this time, in the forefront of architectural development, nationally and possibly internationally.

This may have been made all the easier following the disastrous fire of 1278, in which 'almost the whole of Chester within the walls of the city was burned down on May 15th' (Morris, 1894). J. T. Smith and others have put great emphasis on this incident as the key to understanding the appearance of the Rows system. However, no archaeological evidence of a comprehensive fire at this date has been uncovered (Ward 1984). Parts of six buildings, dating from this period survive on Watergate Street, Nos. 11, 21, 37, 22 and the two houses within Booth Mansion, and one, No. 12, which has recently been demolished. However, even where dendrochronological dates have been obtained, their date of construction is not known sufficiently accurately to prove that they post-date the fire. All the undercrofts of these buildings extend far enough forward to have carried the Row walkway, which is spanned by original archways at Booth Mansion, and in all cases the stallboard covers later encroachments into the street. Also all the under-

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crofts have evidence for fire-proofing, a measure perhaps introduced following 1278.

The Rows system may not have been continuous by the end of the 13th century. The charter granted in 1300, refers to vacant places in the city (Kennett, 1984). The existence of a moulded eaves course along the party wall of the eastern house within Booth Mansion may be an indication that the house was free-standing when built or stood well above an insubstantial neighbour. The survey has identified one substantial house in Watergate Street, Nos. 38-42, dating from the early 14th century and two, Nos. 10 and 17, which on stylistic grounds are of the later 14th century. This evidence would seem to confirm the reference in the charter. Alongside those buildings with datable features are the large numbers of undercrofts where only masonry walls survive or are visible, which may date from any time during the medieval period.

Above the undercrofts it is much rarer to find fabric as early as the 13th century. Two houses with stone walls above Row level are known: the eastern house within Booth Mansion and Nos. 38-42, although these also incorporated timber-framing. The use of corbel tabling in an undercroft would imply the weight of a masonry wall above to make structural sense, yet in No. 12 this proved not to be the case (Ward, 1985). Above the two undercrofts with quadripartite stone vaults, it would be reasonable to expect stone houses of which all trace has now been removed, but timber-framed structures would be equally feasible. All the early Rows buildings in Chester seem to contain a mixture of stone and carpentry structures, as did 58, French Street, Southampton (Faulkner, 1966). M. Wood discusses a now demolished house in Newgate, York of c. 1340 with timber upper storeys above a stone ground floor, and she includes extracts of contemporary building contracts from London describing a similar construction (Wood, 1965, 220). Aberconwy House, Conway, is a surviving house of this character.

The plans of the later medieval buildings seem to conform to examples from other English towns, in which the hall lies behind a shop or shops on the street frontage and both are above an undercroft (Pantin, 1963). Those in which the hall and other rooms run at right angles to the street have a narrow frontage, but in Watergate Street there was no clear evidence of original side passages to provide access. Side passages appear to have been a later insertion, designed to give access to the rear of the main buildings, presumably once these areas had been developed for separate uses. The one building with a wide frontage, Nos. 38-42, has its hall parallel to the street. Nowhere in Watergate Street was there a sufficiently large property holding to allow the development of the third common plan form, a courtyard house. Parallels to Rows buildings of the late 13th and early 14th centuries are rare. It is difficult to reconstruct definitive plans of this date in Watergate Street. In the eastern house within Booth Mansion it seems likely that a service room or rooms lay between the shop and hall, and that originally there were no rooms beyond the hall (Fig. 4). The same may be true in the earliest phase of the Leche House of which very little survives above the undercroft. This variation helps solve the problem of lighting the hall, so apparent in later Rows buildings, and may have some bearing on the possibility of access from the rear of the undercroft to the hall above.

All this still does not explain the unique existence of Rows in Chester. However, amongst the comparable buildings from elsewhere, there are two, Tackley's Inn, Oxford and a house on the south side of St. Michael's Passage, Southampton, which Faulkner has interpreted as having had a gallery above the undercroft, giving access to small shops in front of the hall (Faulkner, 1966). Thus individual Rows-type buildings did exist elsewhere; they are not peculiar to Chester. Given the special historical and topographic factors described for Chester, it appears that the construction of many buildings of this type, over a short period, closely packed, and with their main entrances raised significantly above street level, may have encouraged the linking together of the individual galleries to form a continuous system, whether as a planned intention or as gradual development.

The economic boom of the late 13th and early 14th centuries in Chester was followed by a long period of decline. In 1484, the citizens claimed that much of their city was in ruins (Morris 1894, 163). This is reflected in the almost total absence of any building remains from the 15th and the first half of the 16th centuries in Watergate Street. The only exception would seem to be the reconstruction of the Leche House. However, many of the buildings went under substantial alterations and improvements from the late 16th century onwards, so paralleling the 'Great Rebuilding' in the countryside. New facades were erected, the internal arrangements replanned, and staircases and fireplaces were inserted. The constricted nature of the individual plots, divided ownership, and the requirement to maintain access along the Rows seems to have been a powerful factor for the retention of much of the medieval fabric.

What has survived is a remarkable set of buildings whose history goes back seven hundred years. They include a group of early timber structures, which are of national importance. Nevertheless, in the late 20th century, which will be seen as another of Chester's periods of economic prosperity, the Rows buildings are increasingly being adapted and redeveloped into modern commercial premises. The need to record and interpret this precious resource becomes ever more pressing.

GAZETTEER

The aim of this gazetteer is to give a brief description of each building in Watergate Street, together with descriptions of some demolished structures. All the buildings are refrred to by the street-level numbers only.

South Side

Nos. 5 and 7

A symmetrical brick building with stone dressings, dated 1803. The undercroft of No. 5 has rubble sandstone walling, typical of 15th-century or later undercrofts elsewhere in Chester, into which is inserted a brick barrel vault. The stone steps to the rear formerly rose to Row level. The structure of the undercroft of No. 7 is hidden. The Row level and above has a symmetrical plan of 1803 or later.

God's Providence House, No. 9 A four-storey timber framed building reconstructed in 1862 by James Harrison and loosely based on an earlier building of 1652. The facade is enriched with mechanical plaster detailing. The west wall of the undercroft is shared with the late 13th century undercroft of No. 11, but extended forward to enclose the steps and encroach on the street. The east wall in rubble stone, has two corbels, 1.3 m. apart, but the timber ceiling beams are 17th-century or later. The Row level and above is all 1862 or later, but retains a passage overlooked by a blocked window. Draw-ings of the earlier building show a squat, small-framed, understated facade, slightly sagging and carried on plain timber posts.

No. 11

A good symmetrical four-storey three-bay brick building with stone dressings, dated 1744 in deeds. The undercroft has the best stone vault in Chester, with four bays of quadripartite vaulting divided by an arcade of three octagonal piers (Fig. 8). It measures 13.5 m. by 6.2 m. with walls 1.2 m. thick. The east and south walls contain rebated cupboards. Parts of the original front wall survive, showing remains of blind arcading on the inside, behind an encroachment of 2.4 m. on to the street. An original door in the rear wall leads into an extension of the undercroft with rubble stone walls and brick barrel vault (Fig. 9c). The upper levels of the building were rebuilt in the mid 18th century. At first-floor level there is some good panelling and plaster detail-ing but these features are either reset or imported.

No. 13

A single tenement occupied by a house dated 1771 with a four-storey two-bay brick facade, with some stone dressings. The undercroft seems to utilise the stone walls of Nos. 11 and 15, and has an inserted brick barrel vault. Alterations in 1986 found a blocked stone staircase against the western wall, leading up to Row level.

No. 15

A recent brick facade, replacing a similar three-storey facade of the early 19th century, conceals an earlier structure. The undercroft has coursed sandstone rubble walls and on the eastern side, towards the rear, the wall steps in and has four stone corbels at 1 m. centres. This suggests a medieval date but the ceiling is now spanned by massive, chamfered 17th-century beams. At Row level the building is one continuous shop. At first floor level there is a line of post-medieval collar and tiebeam trusses. These suggest a hall range behind the shop fronting the Row. The chamber over the Row was raised in height in the 17th century to give a room of similar dimensions to that in the Leche House.

Leche House, No. 17

This is a very important timber-framed building with a complex history. The original undercroft is of good quality ashlar sandstone and measures 14.6 m. by 5.8 m. internally. It is divided into five equal bays by braced ceiling beams carried on stone corbels (see Fig. 13b), the two to the rear being partly hidden by a later brick barrel vault over a rear extension. The east wall steps in towards the rear to carry the fireplace above. A moulded timber bressumer from the original street frontage survives, with mortice holes that indicate close-studding and a central door-way. The encroachment of 1.4 m. into the street includes posts carrying the early 17thcentury chamber above the Row. The upper storeys consist of a late 15th-century timber-framed box of posts carrying the roof trusses, tied by beams at their feet and resting on a sill beam placed on the undercroft walls. The bay spacing is different from the undercroft beneath. The plan at Row level (Figs. 3 and 4) retains a two-bay open hall at its centre with a false hammer-beam central truss and king-

post trusses at either end. The hall is toplit through dormer windows and contains a gallery over a passage along the western side. The stone jambs of the fireplace are contemporary with the undercroft, but a stupendous overmantel of the early 17th century has been added. A squint window overlooks the hall from an upper rear room. In front of the hall was a small shop and to the rear was a screens passage with staircase, entered from the side passage. Beyond the screens passage was a parlour with chamber above. In the early 17th century the chamber above the Row was raised in height and carried forward on posts. At the same time two closets and the 'Lady's Bower', a gallery carried on wooden Renaissance columns, were added around a small courtyard at the rear. The early 18th-century Lion House to the south may occupy the site of the former kitchen and dining room. Later alterations include encroachment on to the street, adding of sash windows to the facade, (graffiti on glass dated 1736) and the insertion of a floor in the Row chamber. Extensive dendrochronological sampling failed to provide any dates, but on stylistic grounds the development of the building can be summarised as: the original undercroft and stone jambs of the fireplace above, late 14th-century; the extension of the undercroft and the framework of the timber framed house, late 15th-century; the new street facade, the rebuilding of the Row chamber, the additions to the rear and the internal decoration, early 17th-century. The probate inventory of Alderman John Leche of Mollington (died 1639) can be fitted to present plan of the house.

No. 21

The four-storey, early 18th-century brick facade conceals an earlier building. The core of the undercroft is late 15th-century, with a quadripatrite stone vault, of three bays, each 4.2 m. square. The ribs are chamfered and have the same profile as those in No. 11, but spring from moulded capitals. The undercroft is well below street level and has walls 0.5 m. wide. It has been extended to the rear in stone with a brick barrel vault, probably contemporary with the 17th-century work above. The front was brutally cut away by the creation of a rock-cut cellar and a shop extending 1.6 m. into the street. The Row-level plan has an enclosed passage running along the eastern side of the building, alongside a continuous shop. A 19th-century door from the passage gives access to the stairwell. The upper floors are of two periods. At the front the building rises to two storeys with an attic and is contemporary with the facade. A lower range at the rear is earlier, probably mid 17th-century and has been truncated at both ends. A tiebeam and collar truss remains on a post extending down to the passage.

No. 25

A mid 19th-century four-storey brick building with stone eaves cornice, occupying a single tenement plot. The undercroft is 4.4 m. wide and extends for 27.1 m. The walls are in poor quality masonry and the rear portion contains an inserted brick barrel vault. The upper storeys are all of the 19th-century. Print evidence shows that the earlier building was timberframed and jettied forward on posts in the street. The undercroft is shown with a stone front wall containing a central pointed arched doorway of late medieval date with a window to either side. Early maps show a passage through the west side of the building.

Refuge House

The erection of this mid 20th-century block led to the total demolition of three Rows buildings known from print evidence, two of whose undercrofts are recorded (Lawson and Smith, 1958).

Nos. 27 and 29

A substantial twin-gabled, timber-framed house of the late 16th century. No details of the undercroft are known but access to the Row was up an L-shaped flight of steps with carved newel post. The firstfloor chambers were carried forward on posts rising from the street and braced to the bressumers.

No. 31

A four-storey two-bay brick facade of the late 18th century. Lawson and Smith record a stone cellar, 4.42 m. wide, with a corbel table on either side to a depth of 7.62 m. from the front of the Row walk-way.

No. 33

A four-storey three-bay brick house. Cross windows, quoins and plain bands suggest a late 17th- or early 18th-century date. The masonry front wall to the undercroft is shown with boarded doors. Lawson and Smith record that the undercroft was 6.25 m. wide and 13.40 m. deep from the front of the Row walkway and had walls of large, well-coursed masonry. There was a later stone extension forward to the street frontage.

No. 35

A four-storey building of 1890 with false timber-framed facade. No evidence of earlier fabric. No. 37

A four-storey building with a 19th-century facade, stone to street level and timberframed above. The undercroft is five and a half bays in length. The two bays to the rear are roofed with quadripartite stone vaults of the late 13th century. This vaulting sits somewhat clumsily in an irregular space and is built across a roundarched doorway in the rear wall. This suggests that it is an insertion into an earlier, stone-walled structure, probably of the 12th-century, which is therefore the earliest known structure in the Rows system. The front bays of the undercroft are spanned by timber beams and the front half-bay represents encroachment into the street. From Row level upwards the building is substantially a rebuild of the 19th century with radical 20th-century alterations, but it retains one section of timber framing, now visible in the west wall and probably of the 16th or 17th centuries.

No. 39

An early 18th-century building with whitewashed ashlar at ground floor level and brick with rusticated quoins above. The walls of the undercroft are of coursed red sandstone rubble to a height of 1.40 m., and carry an 18th-century brick barrel vault. The chamber above the Row is subdivided but contains some fine early 18thcentury bolection-moulded panelling, with dado rail and dentilled cornice, and a bolection-moulded door surround. The door to the landing is late 18th-century with fielded panels and a radial fanlight, restored c.1980. The fine open string staircase with slender column-on-vase balusters is probably contemporary with this doorway. The panelling and doors of the second floor are early 18th-century but the fireplace in the front office is c.1980.

Bishop Lloyd's Palace, No. 41

These two tenements, although clearly of different construction, are now one property and are considered together. The building was extensively restored in the 1890s by T. M. Lockwood and again in the 1970s by Chester City Council. Lockwood's alterations replaced the eastern street entrance with a staircase, and entry is now gained through the western tenement only, where a central entrance is flanked by two display windows. At Row level the eastern stallboard has been replaced by the staircase and the positions of the posts holding the chamber above the Row have been altered. The western unit has a wide stallboard with 19th-century posts and balustrade to the street and 17th-century posts set back c.1 m. with carved brackets depicting bearded giants on the street side and animals and an owl to the Row. At Row level and above both buildings have timberframed frontages, that to the east being a complete 19th-century rebuild, while the other retains many elaborate carved panels depicting biblical and heraldic subjects. One panel gives the date 1615 and another shows the arms of Bishop George Lloyd. The undercrofts have brick barrel vaults on medieval coursed sandstone rubble walls. At first-floor level there are a series of remarkable 17th-century plaster ceilings and fireplaces in two large chambers. The decorative scheme in the eastern unit seems to be inserted and the oversized fireplace and ceiling may have been imported from the Bishop's Palace, partially destroyed in the Civil War. The western unit contains a more restrained ceiling, probably original to the building and a fine fireplace with plaster overmantel depicting Cupid mounted on a lion. The sea-monster frieze in this room is repeated on the large chimney breast at No. 10.

No. 51

This building was rebuilt from Row level upwards in the early 1970s when it was found to be in a dangerous condition. A reconstruction of the 17th-century timber frame was adopted for the facade which had previously been rendered, with three tall early 18th-century sash windows. The only original feature is the carved frieze above the Row which matches the one on Bishop Lloyd's Palace. The street-level frontage consists of a wide 20th-century shop window but fragments of the medieval coursed sandstone rubble wall are visible inside, showing the original width of the undercroft to be 5.3 m. The western section of walling carries two double corbels, 1.15 m. apart with clear signs of burning between the two.

No. 53

A mid 18th-century four-storey brick building with 20th-century shopfront at street level, Tuscan columns to Row and 12-pane sashes to first and second floors. The parapet slopes up to form a gable end but the roof structure has yet to be examined. The interior at street level is completely clad, but its proportions (4.55 m. wide by 9.55 m. long) suggest a typical medieval undercroft with an 18th-century brick barrel vault. There is an ellipticalarched alcove with fluted columns in the shop and a very tight staircase with Chinese Chippendale balustrade. The 1789 map by Hunter, the 1816 map by Stuart and the 1875 Ordnance Survey all show a passageway on the west side of the building but this no longer exists.

Nos. 63-67

This building was entirely rebuilt during

the early 1970s, although the facade was preserved. It is of three stories with an early 18th-century facade, rendered and colourwashed. The corniced parapet partly conceals a pitched roof. The rear elevation, now totally rebuilt, was of brick. A massive external stack to the south-west suggests a 16th-century date. Nothing of the interior plan now remains although one section of rubble stone walling is visible in the undercroft, suggesting a medieval structure. Prealteration plans show two wide, short undercrofts, that to the east containing some form of stone arcade. The plans at Row level appear to show two main rooms at either end of the building at right angles to the Row, with a number of passages and smaller rooms in between.

The Old Custom House Inn, Nos. 69 and 71

This public house occupies two buildings both of which have recently refaced stone at street level. No. 69 has a much restored timber-framed gable, dated 1637 and

North Side

Nos. 2 and 4

A timber-framed building, probably 17thcentury, concealed by an early 19th-century brick facade. The structure of both undercrofts is hidden but a short stretch of rubble wall is visible to the rear of No. 4 and the proportions (4.01 m. x 12.84 m. to No. 2 and 4.28 m. x 12.62 m. to No. 4) suggest a medieval origin. At Row level and above elements of the timber frame are visible in the two stairwells and two 17th-century doors survive. The building was originally divided into two at Row level.

Nos. 6 and 8

This building was substantially rebuilt during the 1970s. It has a 19th-century brick facade, similar to Nos. 2 and 4, but no indication that this ever concealed a timber frame. There is a Row-level passage to the west. None of the internal layout survives but pre-alteration plans show two undercrofts, 3.35 m. and 3.20 m. in width, and two sections of stone rubble wall are visible. The rear facade on to St. Peter's churchyard, although much rebuilt, suggests an early 18th-century date.

No. 10

A major timber-framed building behind an early 19th-century brick facade, with Rowlevel passage to the west. The undercroft with rubble stone walls is c.8.8 m. in width and divided by a massive timber arcade carrying a bridging joist and cross beams with four-way bracing from posts (Fig. 8b). bearing the initials T. & A.W. No. 71 has a brick facade with a tripartite sash to the first floor and a four-pane sash to the second floor. The undercroft of No. 69 has coursed rubble walls and measures c.4.90 m. x 10.80 m. A staircase leading up from the rear appears to be original. The Row was enclosed in 1711 and the plan at that level suggests its position. Also two walls at right angles to the street suggest a passage, now incorporated into the building.

No. 73

An early 19th-century brick building with no evidence of earlier fabric.

No. 75

This is a very poor example of replica 'black and white', apparently belonging to the middle of the 20th century. The building has been extensively repaired and rebuilt and no evidence of earlier fabric could be discovered.

By analogy with the Merchant Adventurers' Hall in York this is late 14thcentury but awaits dendrochronological dating. The timber-framed construction above is probably 17th-century. At Row level is a wide fireplace with moulded mantlepiece and a closed-string staircase with pierced splat balusters, both of early 17th-century date. On the floor above is a massive fireplace with a painted plaster chimneybreast, depicting the Royal Arms and the arms of the Corbett family, and a frieze of sea monsters similar to that at Bishop Lloyd's Palace.

No. 12

During 1985 this site was totally redeveloped, involving the destruction of an early medieval undercroft and timber framing at Row level. The undercroft had stone walls with corbel tabling and a central timber arcade with braced post. Dendrochronology provide a single date of 1207 from a timber without sapwood at Row level (Ward 1985).

Nos. 14-20

This block was redeveloped during the early 1970s and although the facade of Nos. 18-20 was rebuilt in replica a small 18th-century kiosk on the Row stall was lost.

No. 22

Enclosed within this mid 18th-century brick building is an earlier house. The undercroft

has some masonry in the eastern and rear walls. The western wall contains a samsonpost arcade (Fig. 8c) which may have been a partition within a larger building or the only evidence in Watergate Street of a nonmasonry party wall between undercrofts. The front post and beam of a later, jettied, timber-framed facade remains. This was cut away when the brick facade was built, leaving a half-sawn, carved bracket typical of the early 17th century. Above the samson-post arcade at Row level is a similar line of posts of smaller scantling and narrower spacing, probably contemp-orary with the jettied facade. A substantial brick fireplace survives, whose 17th-century plaster overmantel has been moved into No. 24.

No. 24

A timber-framed building behind an early 19th-century brick facade with stone dressings. A large bay window projects above the Row. The undercroft is the same width internally (5.6 m.) as No. 22, with which it must share the samson-post arcade. At Row level there is evidence for a passage to the west with a late medieval open hall, behind a shop fronting the Row. In the 17th century a staircase was inserted into the shop space. The roof was raised at least once in the 16th or 17th centuries and again in the 19th century.

No. 26

A good four-storey building of c.1710, with an added bay window above the Row as at No. 24. The undercroft is wider (7.6 m.) than the usual tenement width, and contains a pair of brick barrel vaults. The plan at Row level is double pile with no through passage and the rooms fronting the Row were domestic, not commercial. At first-floor level the stone wall of the eastern house within Booth Mansion is exposed with its moulded eaves cornice. This cornice implies that the adjacent house was free-standing, or stood above its neighbours when built.

Booth Mansion, Nos. 28-34 The largest house in Watergate Street with a fine brick facade and ornate baroque cornice. It was built in 1700 by George Booth to provide the impressive elevation which is deliberately angled towards the Cross, and the two large panelled reception rooms above the Row. However, he incorporated substantial remains of two medieval houses, which are described separately.

Eastern house

The present level of the undercroft floor is c.1.4 m. below street level. It encloses an area 13.0 m. by 7.0 m. and is walled in

coursed sandstone. It is divided longitudinally by an arcade of pointed arches (originally five) with octagonal piers. A series of closely spaced massive joists, halved above the arcade, are carried on the outer wall, by a corbel table (Fig. 9). In the rear wall are two stone cupboards and a blocked doorway. This doorway gave a coess into the undercroft, either from a staircase down from Row level or from a further undercroft beyond. The Row walkway is spanned by two chamfered, pointed arches, similar in profile to those in the undercroft and set within the side walls of the house which continue up to the original moulded eaves, cornice (see No. 26). Within the building are other early features. A late 13th-century wooden doorway at Row level was originally part of a partition wall dividing the front of the building from the hall (Fig. 7). At the centre of the west wall of the former hall is a corbel carved like a squatting man, which may have carried the central open truss over the hall. Old plans imply further stone-walled rooms beyond the hall, now demolished (Fig. 4). There is evidence of substantial 17th-century alterations to the building. A Jacobean stair was inserted into the hall and the remains of a good plaster frieze was found in the room above the Row. Dendrochronology gives estimated dates of 1260-80 for the undercroft timbers.

Western house

This is much less intact than the eastern house with which it shares a masonry wall. The undercroft was originally 8.0 m. x 10.7 m. and isolated within it is a samsonpost arcade (Fig. 8a) using timbers with felling dates estimated at 1260-80. The undercroft is extended by a pair of parallel, pointed barrel vaults in sandstone masonry of fairly large size. No similar vaulting is known to survive in Chester. Old plans of Row level and first floor show walls of sufficient thickness to be in masonry.

No. 36

A 20th-century brick building in Georgian style, said to be rebuilt following a fire. The only early evidence is the west stone wall of the undercroft shared with, but earlier than, No. 38.

Nos. 38-42

The washed brick and pastiche timberframed facades of this building hide an important and well-preserved stone mediev town house, spanning three tenement plots. The property width (17.5 m. in total) allows the hall to be placed parallel to the street in an arrangement very similar to Tackley's Inn, Oxford, used by Pantin as the type example of this plan form. The braced ceiling beams and massive joists of the undercroft (Fig. 10a) have produced estimated felling dates of the early 14th century. In the late 16th century back-toback fireplaces and a cross-beam floor were inserted into the hall to create four heated rooms. One of these rooms has a good plaster overmantel with Renaissance columns and there are remains of two Jacobean staircases. The Row-level shops and the chambers over were reconstructed in timber-framing, with the western third encased in brick with a stone dressed facade. The screens passage is still shown as an access through the building on maps pre-dating 1875. This building may have been the 'Mansion place' at the corner of Gerrard's Lane, now Crook Street, mention *temp* Edward III.

No. 44 and 46

A four-storey corner property with an 18th-century facade, gable end to Watergate Street. The Row is enclosed on the west side by a flight of steps leading to the former Row level. The undercroft has stone walls and is 6.7 m. in width. It contains a number of cross-beams and joists but these are all re-used. The 17th-century closed-string twisted baluster staircase descends to street level. No early features survive *in situ* at former Row level, except for a deep moulded cornice probably early 18th-century in date and some re-used 17th-century panelling. At first-floor level the main chamber has bolection panelling and a bolection-moulded door architrave of the early 18th-century. The documentation for the enclosure of the Row has been discussed above.

No. 48 and 50

A four-storey building with an early 19th century brick frontage concealing at least three earlier phases. The undercroft has coursed rubble stone walls and measures 5.3 m. x 14.95 m. The medieval building line is only 0.46 m. behind the present street front. The Row is enclosed, but the Tuscan column which formely held the chamber above, is visible within the window frame of the main first-floor room. The decorative scheme of this room is restrained mid 18th-century with fielded panelling and a fireplace flanked by full-height fluted pilasters. This suggests the Row was enclosed in the mid 18th century. The closed-string staircase with bulbous balusters is early 18th-century.

No. 52

This three-storey gabled brick building is entirely 19th-century in date and contains no early features.

Nos. 54 and 56

A late 18th-century brick building with sash windows and a plain parapet. The main entrance is at first-floor level via steps, as at Nos. 44-46 and 48-50, suggesting that this is a refacing of an earlier Row building. The undercroft is short, possibly having been truncated, with wide unchamfered ceiling beams. A passageway existed on the east side of this building up to the early 19th century and is shown on maps of 1789, 1816 and 1833.

Nos. 58-66

A terrace of five brick gabled buildings dated 1852 (Harris 1979). They replaced a 17th-century timber framed mansion belonging to the Mainwaring family, for which there is good evidence from the 1815 print by Batenham. This shows a warehouse on the site of No. 58 and to the left a four-bay gabled house above undercrofts. Access was by a central flight of steps beneath a gabled chamber to a vestigial Row. The first, second and fourth bays of the Row are enclosed. This building was very similar to contemporary Cheshire manor houses, such as Moss Hall, Audlem, dated 1616.

No. 68

An early 18th-century brick house with rusticated stone ground floor. Steps on the east side lead to a fielded six-panel door at former Row level. The first and second floors have elliptical-arched sashes with keystones. The facade to Trinity Street shows evidence for the alteration of windows, including the insertion of a large Venetian window, presumably contemporary with the fine late 18th-century openstring staircase which it lights, and the Adamesque decorative scheme to the saloon. The house was built in the early 18th century by Alderman Henry Bennett and remained in the family of his descendants, the Heskeths, until the second half of the 19th century.

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