

Brickmaking in Leicestershire before 1710

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Brickmaking was introduced into this country by the Roman army during the first century AD and the earliest bricks to be found in Leicestershire are likely to have been made by the Roman army. This paper traces the development of brickmaking in the country, but because of the absence of brickmaking sites the evolution of the craft is charted by examining dated buildings. Reference is made to the building accounts of Kirby Muxloe castle which were studied and published in an earlier volume of these Transactions. The production of brick is traced through to 1710, by which time brickmaking had become established in nearly every rural community as it was in urban centres around the county. There are few documentary sources for brickmaking in Leicestershire before 1710, but those which have been discovered are included in appendices.

Introduction

The extent to which brick was used as a building material prior to industrialisation and before the coming of the railway depended to a very great extent on the availability of other building materials and therefore the local geology. This is particularly true in Leicestershire where in the eastern part of the county the so-called Lincolnshire limestone from the Inferior Oolite strata and marlstone from the Middle Lias can be found, both of which were used as a building material. It is not surprising, therefore, to find that in this part of the county the need for an artificially produced building material was not great and so brick buildings never became a common feature on the landscape before the mass production of brick. The geology of the county changes dramatically to the west of the Soar where one finds a little sandstone, and in Charnwood, granite and Swithland slate. Granite and Swithland slate have been used for building purposes for at least two thousand years, but the hardness of the granite makes it difficult to quarry and to use as a building material. It is, therefore, not surprising to find that brick took a greater hold in the western part of the county than it did to the east.

This paper traces the production and use of brick in the county from its beginnings in the Roman period to the early decades of the eighteenth century when it had been well and truly adopted as a material for all levels of buildings. By this time many local brickworks had been established in villages around the county and were responsible for producing brick for mainly local use. It was a seasonal activity and many brickmakers had other occupations to tide them over the non-brickmaking parts of the year.

Roman Brick

Brick was not used in this country before the Roman conquest when the craft was introduced by the Roman army who had, before they came to this country, a tradition of using brick. The earliest bricks so far noted in Leicestershire were found in excavations in Bath Lane in levels dated to between A.D. 40 and A.D. 55 (Clay & Mellor, 1985, 75), and it is possible that they were introduced into this area by the army who seemed to have established a small fort on the banks of the Soar at about this time.

Once the craft of brickmaking had been introduced into the country by the army it soon spread and became a part of the civilian building trade. A large number of the Roman sites in the county have produced evidence for the use of brick in buildings and yet very few brickmaking sites have so far been located. The quantity of brick used in a Roman building was clearly demonstrated when the villa in the Norfolk Street area of Leicester was excavated between 1979 and 1981 (Mellor & Lucas, 1978-9). Here, the excavators kept all the brick and tile, and even though a great deal of the superstructure of the villa had disappeared since the collapse of the building, it was estimated that over 2 tons was recovered (Lucas, forthcoming). If brick and tile was used to the same extent on other villas in the county as well as in the buildings of Roman towns, large and small, then enormous quantities would have been required necessitating many brickmaking sites. The analytical work being undertaken on the Norfolk Street tile as well as on material from other sites, may help to identify the location of these production sites. The only possible tile/brick kiln so far located in the county which might have produced Roman brick is at Ravenstone where a rectangular kiln excavated in 1981 (Lucas, 1980-1, 104) could have been used for firing brick. The use of rectangular kilns was not restricted to firing brick and tile, pottery was also occasionally fired in rectangular kilns (McWhirr, 1979a, 98). The rectangular shape alone is not sufficient to show that a kiln was used for producing bricks. Another possible Roman brickmaking site has been suggested at Newbold Verdon (Harding, 1979-80, 84). In recent years intensive field walking has produced a number of sites which may have been brickmaking sites and these have been noted in earlier volumes of these *Transactions*. It is also possible that brick was made alongside pottery at the Mancetter/Hartshill works on the county borders with Warwickshire, and transported to sites in the county. How far such heavy building material was traded is open to debate and the analytical work now underway may provide answers. When heavy building materials were required by Roman builders they were transported some distance as can be clearly demonstrated by the distribution of Swithland slate in the East Midlands during the Roman period when it was used on buildings 50 miles or more from the slate quarries (McWhirr, 1988, 6). It could be argued that such slate was used for specific purposes, roofs, and that in the absence of suitable alternatives one had to pay the price. Likewise the use of ceramic tiles for roofing was a specialised use and if such roofs were desired then the cost of transporting heavy tegulae and imbrices from distant brick yards might have been acceptable. On the other hand, as suitable clay is available over much of the county then it would be possible to site Roman brick works close to both the clay source and the building in which it was to be used. The distribution of village brick yards in the eighteenth and nineteenth century demonstrates that clay for brickmaking was available in most parishes.

Brick and tile was used in a variety of ways as can be seen in the upstanding Roman masonry at the Jewry Wall, Leicester. Here brick was used as levelling/staging courses

in the body of the wall, as arches over entrances and in the construction of hypocausts. Roofing tiles have been found on many sites in the county and from one, the Hamilton villa, has come part of a ceramic roof finial (McWhirr, 1975-6, 59). Roman ceramic building materials are generally hard and probably fired to a temperature of around 900-1000°C in a kiln or clamp, but unfired clay bricks were also occasionally used in Roman Britain. They were first noted in Britain in 1958 during Professor J.S. Wachter's excavations in Blue Boar Lane, Leicester (Wacher, 1959, 78). Subsequently other excavators have found evidence for the use of unfired clay blocks e.g. at Colchester (Crummy, 1984, 20), London (Perring & Roskams, 1991, 77) and again in Leicester during the excavation of the Norfolk Street villa in 1979 (Mellor and Lucas, 1978-9, 70).

Saxon Brick

Although it is now generally accepted that bricks were made during the Saxon period they were not produced in any quantity and have not been found on many sites. Most of the brick used in Saxon churches was reused Roman, although in some cases there is even doubt about this. At St Nicholas Church, Leicester, two double-splayed round-headed windows are identified as late-Saxon workmanship and these contain tiles around the head of the window. Whether they are Roman or not cannot be determined at the moment, but there must be a strong possibility that they are and were quarried from the Roman public baths beneath the church. The later Norman tower also contains tile or brick set herring bone fashion at the base of the tower and again the date of these is uncertain although they look Roman.

Medieval Brick

It is during the medieval period that we see a 'rediscovery' of brick as a building material in its own right, not as a cheap substitute for stone, but because 'it was a fashionable and prestige material' (Smith, 1985, 6). Drury claims that the earliest medieval brick building in England is Coggeshall Abbey where bricks were certainly used in the church dedicated in 1167 and may have been introduced into the Abbey as early as 1148 (1981, 126). Identical bricks have been noted by Dr W. Rodwell in sixteen churches around the Abbey all of which can be dated to about A.D. 1150-1225. More recently, Rodwell has examined Holy Trinity, Bradwell-iuxta-Coggeshall in some detail and believes the brick dressings are to be dated to the first half of the twelfth century (per. comm.). Other centres of medieval brick production are discussed by Drury (1981, 127-9) and one, Hull, has been studied in depth by T.P. Smith (1985) alongside a broader debate on medieval brick. Although brick was used before the fifteenth century, Smith considers the years 1400-1450 as the 'formative years of early English brick building' (1985, 2) and he details the evidence for this assertion. There are no examples from Leicestershire which can be positively dated to these 'formative' years, unless Groby Manor House is earlier than presently accepted, but there is a group of important late fifteenth century brick buildings in the county. These include part of Ashby-de-la-Zouch Castle (c.1470s), Kirby Muxloe Castle (1480-1484), Bradgate House (c. 1490), Groby Manor House (?1450-1500) and the boundary wall to Leicester Abbey, Abbot Penny's Wall (c.1500). It looks, therefore, as though it took slightly longer for the fashion to reach Leicestershire.

As there are no identified brickmaking sites dated to the medieval period it is necessary to examine dated buildings in which brick was used in order to trace the development of brick production at this time

The two south towers of **Ashby-de-la-Zouch** Castle are the only brick structures at the castle and are dated to *c.* 1474. The keep or solar tower was one of Lord Hastings' additions and there is the possibility that the brickwork of the walls of the garden known as the Wilderness is also the work of Hastings, though it may be sixteenth century.

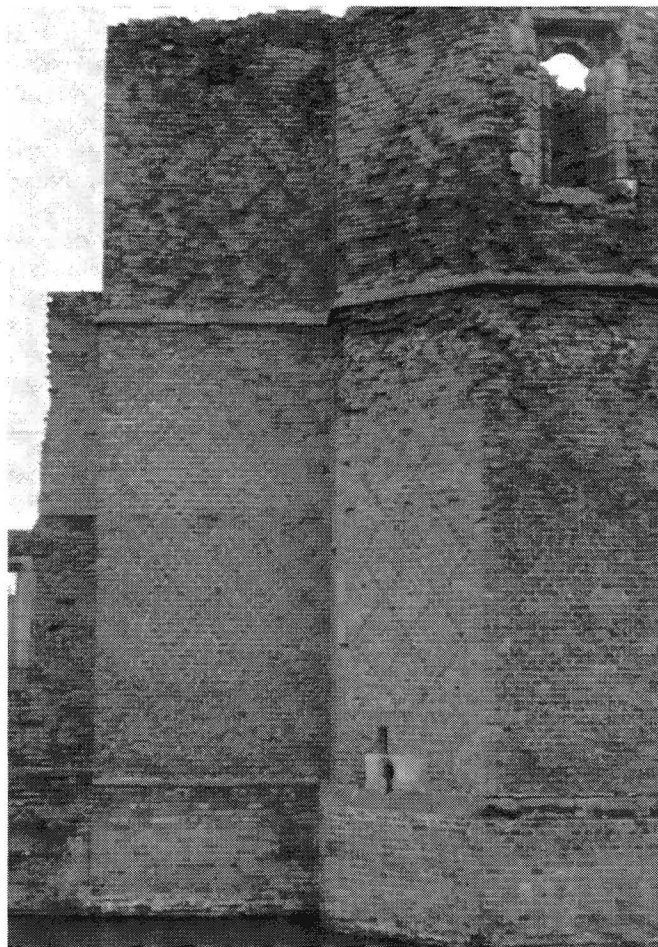
Kirby Muxloe Castle, a fortified manor house, was built between 1480 and 1484. The Hastings family had held land in Kirby since the fourteenth century and in 1474 William Lord Hastings gained licences to crenellate Ashby, Bagworth and Kirby. Rebuilding at Kirby began in October 1480 and continued until November 1484, but during that time, in June 1482, Hastings was executed for treason by a suspicious King Richard. After his death his widow Katherine continued the work, but the money spent was much less than had been spent by William and presumably Kirby was never completed as he would have wished. Details of the building programme come from the surviving accounts, first studied by A. Hamilton Thompson (1913-15), which start with the week beginning Monday 23rd October 1480 and end on 29th November 1484.

During that first week, beginning Monday 23 October 1480, various items were paid for relating to brickmaking. There are payments for the carriage of wood to 'le Breke hous', for straw for 'le breke' and in between these two items, payments for digging and carriage of sand. Whether this sand was used in brickmaking is not stated, but its juxtaposition with the other two items makes it a possibility. The remaining entries for 1480 and early 1481 show a general tidying up of the gardens, digging the moat and the carriage of stone to Kirby, with many loads being paid for in the middle of March 1481 ready for the building season. The second entry which refers to brick occurs in the week beginning 19th March 1481 under the general heading of 'Carriage of John Eles' brick'. There then follows a list of those who were paid for carrying brick including Thomas Raulyns, Richard Colles, Thomas Colles, John ffawxe, Roger Boolot, John Alen and John Parnell; they were paid at either *5d* or *6d* per thousand. Under the same entry a payment is made to John ffawxe for 'delivering le Bryke from John Eles, 39,000 at *1d* per thousand' which seems to indicate that John ffawxe (ffawxe) was supervising the movement of the brick.

Building work seems to have started in earnest at the beginning of May 1481, for the accounts for that month contain their first references to masons and bricklayers. In the week beginning 7th May 1481 three 'bryke layers' are mentioned by name; John Hornne, Robert Smyth and Robert Tyler. Hornne was paid twice as much as the others listed and was probably the master bricklayer. Many of the entries which appear in the accounts mentioning brick would seem to give some indication of the number of bricks laid during the week by the named individual. For example, in the week of 18th June John Hornne has 21,400 beside his name, and Robert Burrell, 30,000. John Couper (Cowper), master mason, first appears by name on 25th June where he is described as surveyor and in other entries as surveyor of the work, and overseer of the masons. It must be Cowper who is listed in the first entry for the week beginning 7th May 1481, 'Mastermason, surveyor over the stone-masons there'. In the entry for 15th October 1481 it clearly records that Cowper was based at Tattershall for it reads 'Cowper, as his reward for going and returning by my lord's command, from

Tattersalle to Kerby'. There are several references to 'his reward for going and returning' suggesting that Cowper was based at Tattershall and was brought to Kirby for crucial periods of the building work between 1480 and 1483 when his expertise was required. In 1445/6 a John Cowper is listed as a creditor in the Tattershall Castle building accounts, 1434-1472 (Simpson, 1960, 76) and in 1482 John Cowper was the 'stone cutter' at Tattershall Castle.

Bricklayers are listed regularly in the weekly payments usually with the total number of bricks laid. However, from 16th July 1481 two entries begin to appear, one for 'Brekeleyers in gross' and the other 'Brekelers (sic) per diem' and although a total appears under the first it is not clear how many bricks were laid by those paid by the day (assuming that the number of bricks laid by these bricklayers is not included in the gross total), nevertheless the totals under the second entry at least give a minimum number of bricks that were laid. In 1481, 434,400 bricks are recorded as having been laid.



1. Diaper work on tower, Kirby Muxloe castle.

In the week beginning 30th July 1481 a labourer named Haukyn was paid for 'receiving le Bryke of John ffaxe, 6 days at 4*d*'. Similar entries appear in weeks dated 13th and 20th August, 10th, 17th and 24th September, 1st and 8th October 1481 and it seems as though labourers were fairly busy 'receiving' bricks during these months. John ffaxe was mentioned in the accounts for March 1481 and it has already been suggested that he was in charge of brick deliveries at that time and the same would appear to be true in July 1481. The earlier reference to John ffaxe appears under a heading which states that they were transporting John Eles' (Ellis) brick, but in these later entries it is not clear whose brick they were 'receiving'.

The last reference to bricklaying in 1481 occurs on 29th October when work stopped for the winter. They reappear again on 25th March 1482 when the entry is 'Breke leyers in gross. John Corbell, 36,000 breke at 18*d*, leying and hewyng'. During the same week, 25th March, there is an entry for the purchase of '2 Boketes for drawing water for leyers le Breke ..'. In the following week a larger number of bricklayers than usual was paid and in addition five labourers were paid for 'serving the said Brekeleyers' who were, it is stated, engaged on 'leying anew le Basse Tours ..'. John Corbell was a master bricklayer and appears in the accounts for the first time in 1482. Corbell's name, argues Thompson, is of French origin, and a number of the bricklayers whom he supervised also had foreign sounding names, e.g. Mark(c) Maligoo, Staner Matlot, Charlot or Charles Ruddicount and Turkyn Horwynd (Thompson, 1916, 205). The lack of experienced local bricklayers may have necessitated the recruitment of these craftsmen from overseas, where brickmaking was firmly established.

Throughout the rest of the year (1481) bricklayers or brickhewers were paid every week until 6th January. For example, on 19th August and 14th October they were paid for 'telling le Breke' (i.e. counting) and on 14th October 'cleaning the clay' which may refer to brickmaking. On the 21st October they were 'carrying le Crapes and Breke for Couering the towers'.

On December 2nd 1482 and for several weeks following, labourer Hudson was paid 'at telling le breke from the carts of John Faxe' who still seems to have been in charge of delivering the bricks. Whether bricks were still being made in the middle of winter is not clear, it would certainly be unusual. Perhaps they had been made earlier in the year and stockpiled at the brickworks until required. The number of bricks recorded as having been laid in 1482 is 733,000. After 23rd December the entries are changed to 'brekeleyers and Hewers' and from 30th December 'Breekehewers' which is retained until 3rd February 1483 when the word 'Brekeleyer' reappears. Hudson in February continues to be paid 'at working at telling and lyueryng (delivering) Breke' and on 24th March the phrase '13,000 hewn bricks' is included. It seems clear from these entries that bricklaying continued throughout the winter months.

One of the most useful entries in the accounts is that for the 31st March 1483 under the heading 'Expenses incurred upon John Eles Kylne'. As expenses were paid it would seem that the brickyard was set up specifically for producing bricks for Kirby Muxloe Castle under the supervision of John Eles. In these expenses Eles was paid for boarding four men for eight weeks and for hiring three men 'ffor setting of Breke in to a Newe kylne'. The fourth item in the list is for burning the 'same kylne by the space of a wyke vn to the noumbre of Breke, 100,000'. This seems to indicate that a single kiln firing could produce 100,000 bricks in a week. Then there is a reference to felling and carriage of wood for which payment was made for 78 loads and in addition two loads of 'spyldyng' or refuse wood to 'brene among the Grene wood in the kyln'.

Immediately following the details of expenses of John Eles kiln there are two entries under the heading 'Payments for carriage of the Breke of John Elees' where the total of brick for which payment was made totalled 28,500. Bricklayers are paid throughout the year until the last week in October, and there are occasional references to labourers 'serving the Brekemen' or 'telling le breke'. Brickmen or bricklayers do not feature in the accounts after 27th October 1483 although one of the masons was paid for laying brick on 10th May 1484 and on 9th August (and again on 8th October) two labourers were paid for 'serving le Brekeleyers' and yet no bricklayers feature in the accounts for those weeks so presumably the masons were doing their work. The minimum number of bricks recorded as having been laid in 1483 is 183,000.

It is interesting to note that there are only two payments for transporting bricks. One on 19th March 1481 involving 42,500 bricks and another on 31st March 1483 for 28,500 bricks and yet in the accounts there are at least 1,350,000 bricks recorded as having been laid. This could mean that the bricks were made close by and only needed carrying by the labourers on site as indicated for example in the entry for Monday 9th August where the labourers are described as 'serving le Brekeleyers'. Alternatively, one could argue that the accounts are incomplete and inaccurate, but this is not the impression they give, they look comprehensive and extremely detailed. It seems more likely that the bricks did not need transporting from John Eles brickyard because it was adjacent to the building operations taking place at the Castle. However, one has to bear in mind all the references to labourers 'telling' and/or 'receiving' brick from John Fauxe who, as we have seen in March 1481 and December 1482, was in charge of the deliveries of John Eles' brick. A possible site for a clay pit is suggested by a large hollow at the top of Bloods Hill on the extension to the golf course at SK 532047 (per. comm. Ed Tura).

The accounts do not always list the number of bricks laid, but when they are stated it is possible to get some idea of the pattern of activity on the site and to produce a minimum number of bricks that were laid and which were therefore produced. In 1481, 434,000 bricks were laid, in 1482, 733,000 and 1483, 183,000 giving a minimum total of 1,350,000 bricks used in the building operations between 1480 and 1484.

It is generally accepted that the builder of the impressive brick-built country house in Bradgate Park was Thomas Grey, 1st Marquis of Dorset, who started work on **Bradgate House** during the 1490s and seems to have completed most of the building work by the time of his death in 1501. The surviving brick structure includes later, probably seventeenth century work as well as some of the original fifteenth century house. Some years ago the late Mr P Blakesley (per. comm.) cast doubt on the fifteenth century date for Bradgate House and others have commented on the fact that it was unusual for a house of this date not to be fortified, again hinting at a later date.

For a number of years soil marks and a scatter of bricks to the south of Cropston reservoir in a field known as the Duples, some 900m from the house, have been interpreted as the brick yard for Bradgate House. Three distinct areas of burning could be seen when the field was freshly ploughed and brick was found in each. In the south-east corner of the field a small copse hides the bumps and depressions of what could be the remnants of clay digging and the farmer, Mr Dick Burrows remembered that sizeable hollows once existed in the centre of the field, but had since been filled. In the autumn of 1986 David Ramsey noticed a considerable

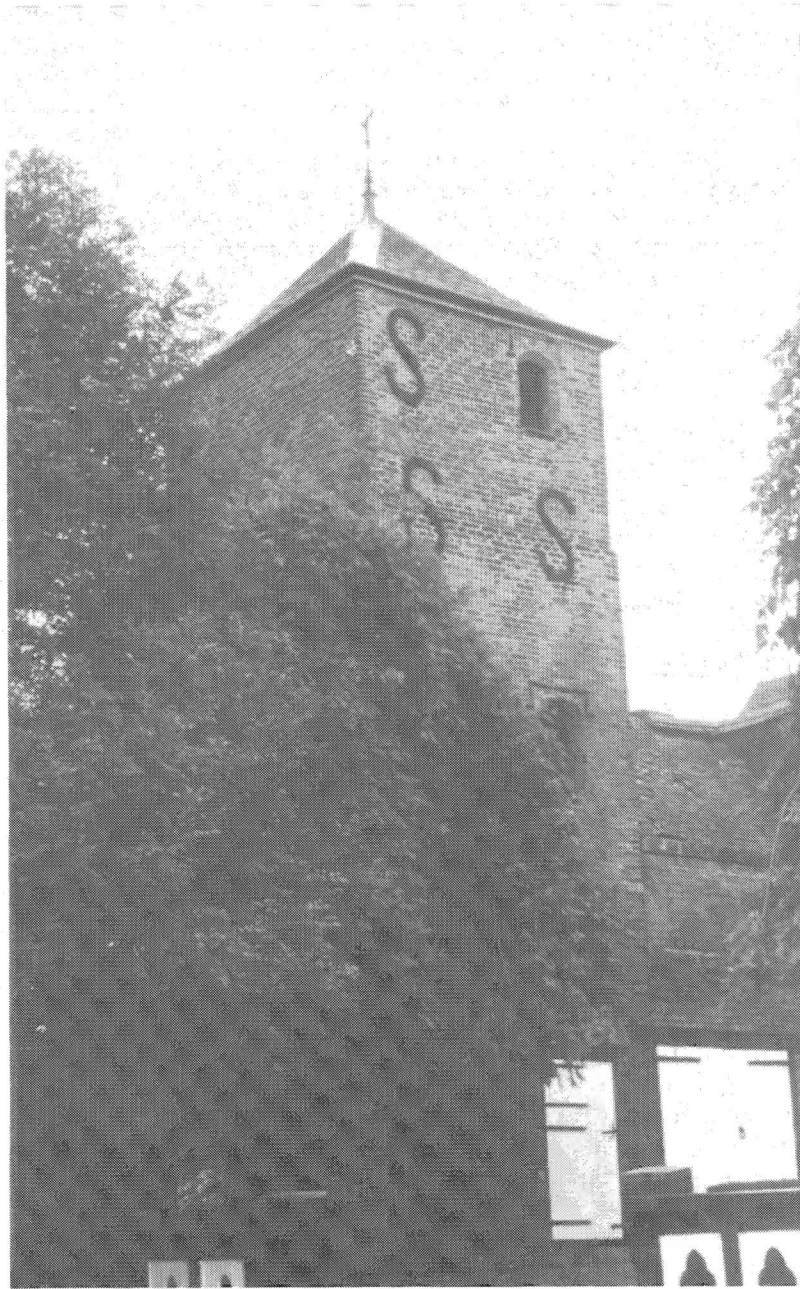


2. Diaper work on Bradgate House, Bradgate Park.

amount of brick, burnt clay and ash during ditching and it was decided to dig a small trial trench to see if any structures could be detected within the patches of burning (TLAHS, 61, (1987) 92-3). None were found, but their presence is not excluded and a geophysical survey might locate the sites of kilns or clamps. The scatter of burning and the presence of bricks must indicate that bricks were being made at this site.

Groby Manor House to the east of the church is a complex structure with many different building periods. Parts include early brick with diaper work. The pattern formed by the diaper work at the base of the tower is thought by Mrs B. Richardson to represent the arms of the Ferrers in which case, she argues, a mid fifteenth century date would be more likely. This would make Groby the earliest surviving medieval brick building in the county.

When speaking of **Leicester Abbey** during his visit to the city in about 1540, Leland refers to brick in connection with the first abbot of Leicester, John Penny. He says that 'This Penny made the new bricke worke in Leicester Abbay, and muche of the bricke waulles' (Lucy Toulmin Smith, 1964, vol I, 17). There is said to be an earlier reference of the second half of the fourteenth century which refers to the Abbey Gates having been newly built in brick under Abbot Clown, but at the time of writing this reference cannot be located. Parts of the western boundary wall of the abbey, now facing onto St Margarets Way, is built of early brick and is almost certainly part of the 'bricke waulles' referred to by Leland and built by Abbot Penny. It is known as Abbot Penny's wall because the letters JP can be seen picked out in blue brick. Penny was a native of Leicester and became Abbot in 1496. In 1505 'he was appointed bishop of Bangor, but he was allowed to hold his abbey *in commendam* until 1507/8 when he was translated to the see of Carlisle' (Thompson, 1949, 73).



3. Tower, Groby House.

He died in 1520 and his tomb is in St Margaret's church, Leicester.

The surviving stretch of brick wall along St Margarets Way, although repaired in places, contains some of the most elaborate diaper patterned brickwork to be found

in Britain. This decorative work occurs mainly on the outside face of the wall, but there is some on the inside. Amongst the various motifs depicted are stylised crosses, a chalice, chevron pattern and possibly a number of heraldic devices. A detailed analysis of the symbolism of these patterns is long overdue as is an accurate drawing of them. This may be remedied if Leicester City Council is awarded a Millennium grant towards the Abbey Park Restoration and Development Project as a detailed survey of this wall is included in the specification of this project.

A possible site for the abbey brickworks comes from a survey carried out by William Senior for William Cavendish and dated 1613. His map labels a field a quarter to half a mile due west of the abbey grounds, on the corner of what is now Anstey Lane and Blackbird Road, as Brick Close. There is no indication on the map of any pits or buildings and so it would appear that at the time the map was produced in 1613 no sign of any brickmaking activity survived, but the memory of it lingered on in the field name.

There were presumably other examples of brick building in the medieval period, but they have not survived, or else they are masked by later work and await discovery. Those discussed above are buildings from the upper levels of medieval society and it is unlikely that brick was used extensively at the vernacular level at this time. In the villages and towns of Leicestershire where stone was not available earth and timber were the main building materials as indicated by the comments of Leland, William Cobbett and Celia Fiennes.

With the possible exception of Bradgate House, no brickmaking sites have been identified dating to the medieval period. The building accounts for Kirby indicate that kilns were used for firing brick, but as yet no medieval brick or tile kilns have been found in the county. No debris from kilns was found at the Dumps near Bradgate House and this may indicate that the brick was fired in a clamp rather than in a purpose-built kiln, but further work may change this interpretation. The kilns or clamps which fired bricks for the buildings discussed above are likely to have been erected especially for that project and situated within close proximity to the building. They are unlikely to have continued producing bricks once the project was completed. Permanent brick yards could only survive if there was a bigger market and consequently a regular demand, and this does not seem to have been the case in fifteenth century Leicestershire.

Post Medieval Brick

The burst of activity in brick building which occurred in the last quarter of the fifteenth century does not appear to have continued into the sixteenth century. No brick buildings, now surviving, can be dated to that century and so far no documentary evidence has been found to challenge that view. There is a sixteenth century reference to brick in the 1586-7 Chamberlains' Accounts for the City of Leicester, where the following entry occurs '...lyme, ston and brycke for the cundytt headd in Saynt Margaretts fylde..' (Bateson, 1905, 241). Bateson adds a footnote to this entry stating that 'this is the first mention of brick in these rolls'. The absence of any other reference to brick in the Borough Records for the sixteenth or the first half of the seventeenth centuries would seem to indicate that it was not a common item in the City of Leicester at that time.

It was not until the second decade of the seventeenth century that we see another spate of brick building and again it seems to have been restricted to houses of the

gentry, as for example, Sutton Cheney Hall (1612/3?), Quenby Hall (c. 1618-1636), Cosby House (c. 1620s), Shenton Hall (1629), Manor Farm, Desford (c. 1640), and possibly part of Keyham Hall. However, this survival of buildings of high status may be pure chance and humbler early seventeenth century brick buildings may not have survived.

Quenby Hall, c. 1618 -1636, is described by Pevsner as the most important early seventeenth century house in the county. It is brick with stone dressings and on the west front diaper work is visible. It is not known where the brick for Quenby was made, but there are pits close by the hall and these may be clay pits suggesting that the brick was made on site as was often the case with such prestigious buildings.

There is some doubt as to the exact date for the construction of **Cosby House**. A panelled dado includes what might be a date of 1608 in the form '16 Tudor Rose 8'. This could date the house, but the possibility that this panelling came from another building must not be discounted. There is documentary evidence in the form of court proceedings which indicates that the house was standing in 1629 (per. comm. David Smith quoting a document ID 41/4 Box 7 item 154) and so an early seventeenth century date seems certain.

Sutton Cheney Hall is a red brick building with stone dressings probably the surviving wing of an asymmetrical H-plan house. A garden wall is dated 1601 and on the house is the date 1612 (or 1613) W.R.K.R.

Shenton Hall was built in 1629, but there has been a certain amount of later remodelling and only the north-west elevation and the gatehouse retain their original 1629 work. The walls are brick with stone detailing. The gatehouse is of dark red brick with a 1629 date on a nineteenth century datestone. The square, brick dovecote is dated 1769.

Desford Old Hall (sometimes known as Manor Farm) is a brick building with sandstone quoins dated by Peter Eden to c. 1640 and as he puts it 'at the upper limit of vernacular' (Eden, 1972, 588).

Most of **Keyham Hall** is eighteenth century brick, but there is an indication of early seventeenth century brick in the gable on the south elevation and in the north-west corner. There is also a bay on the north side of brick with limestone mullioned windows and quoins stylistically similar to Cosby, Desford and Sutton Cheney referred to above (D. Smith per. comm.).

It is from the seventeenth century that the earliest documentary evidence for brickmaking survives consisting of 'Articles between my lord and John Chapman for the making of 100,000 bricks dated 29th day of November 1642' (Appendix 1). This agreement is between the 'Right honourable Henry Earle of Huntingdon Lord Hastings Hungerford Hoinet Batreux Mulis Molins and Peverel' and 'John Chapman of Thringston in the County of Leicester Brickmaker'. It specifies that John Chapman shall 'digge and make readie in Donington Parke a sufficient quantity of Earth W^{ch} shall make make one hundred thousand bricks, and shall seasonably order and turne the same Earth in this winter time before the end of February next' Various prices are then specified in the agreement and reference made to the fuel for firing the bricks, namely coal and wood. There is also mention of straw, sand and moulds, but no indication of whether the bricks were fired in a kiln or clamp or any other details of the brickyard.

In addition to the accounts for the building of Kirby Muxloe Castle there also exists the building accounts of 1693-7 for **Sir John Moore's School at Appleby**

(Wren Society XI). Sir John Moore, a local man, became an alderman of the City of London and decided to pay for a school to be built at Appleby Magna. The architects were Sir Christopher Wren and Sir William Watson. The accounts date from September 1693 to June 1697 and were finally sent to Sir John Moore on completion of the work on 23 August 1697. In the accounts there is a reference at the beginning to 'Articles and Bond betweene ye Brickmaker and us for Makeing bricks at 8s 6d per M - 5s 0d' (Wren Society, 98). The only references to brick occur in the entry dated June 1697, 'Danll Ward for makeing 520,000 Bricks at 8s 6d per M - £221-0-0', and 'Thos Taylor for carrying Bricks to ye Schoole at 15d per M - £22-7-1' (Wren Society, 99). There is an interesting entry dated June 1694 which refers to 'making a Hovill and Kiln for Brickmakers £2-15-0'. Exactly what is meant by 'hovill' is not clear, but it is more than likely that it refers to some form of primitive building used by the brickmaker to protect him from the elements whilst making bricks. Later in June 1697 there is an entry for 'Thatching ye hovill' (Wren Society, 100). In the correspondence of May 30 1695 between Sir John Moore and his nephew Thomas Moore who acted as agent on site, he chastises Thomas for not having sufficient brick and goes on to say that they must be made in good weather (Wren Society, 93).

The inventory of John Law, bricklayer, of Market Harborough dated 16th October 1699, lists a brickyard and hovell, bricks in the yard, and one kiln full of bricks (See Appendix 2), and it is interesting to see that the value of the kiln full of bricks greatly exceeds any other item in the inventory. The inventory also mentions that the fuel he used was straw and 'ffurs'. Interestingly the term hovell used in the Market Harborough inventory is also used in the building accounts of Appleby Magna School and the 1710 agreement with William Twigg (Appendix 3).

An agreement of 1710 for the making of brick between William Herrick of Beaumanor and William Twigg of Loughborough survives (LCRO DG 9/130). Twigg was permitted 'to dig and get clay in that part of the forest of Charnwood near to Loughborough Lane and in the Liberty of Beaumanor in the parish of Barrow upon Soar aforesaid and to make bricks and set up hovells and kilns' (See Appendix 3). William Twigg was still making bricks in 1723 for attached to the lease is a receipt for bricks sold to Herrick in August of that year.

The surviving examples of dated brick buildings from the first half of the seventeenth century and possibility slightly later, indicate that brick was a material used mainly in the larger house, and although one must be aware of the possibility that smaller houses were built in brick at the same time, the fact that none survive or are referred to in documents does seem to suggest that brick was not a common material at the vernacular level. The situation changed in the closing decades of the seventeenth century when the first securely dated examples of small rural brick houses can be found at, for example, Syston (1686), Anstey (1690) and Barsby (1691). All three are rectangular units built with their long axis parallel to the street, have diaper patterned brickwork, string courses which include moulded bricks and are conveniently referred to as Wreake Valley style (Smith, 1984, 63). From other dated brick buildings it seems clear that during the last decade of the seventeenth century the use of brick as a building material spread throughout the county. In addition to the three examples quoted above, there are examples at Swinford (1690), Wigston (1691), Willoughby Waterleys (1693), Kegworth (1698), to name but a few.

The so-called Wreake Valley style, which appears in Leicestershire by the 1670s, is described by David Smith as 'Leicestershire's Artisan Mannerist style' (1984, 63).

The Artisan Mannerist Style (a term coined by Sir John Summerson) reflects a style which succeeded Jacobean, but which never had a named architectural style. It was used by Summerson to describe a style of architecture which originated in London in about the second quarter of the seventeenth century where building craftsmen were seeking to raise the status of their craft (Summerson, 1970, 155). In Leicestershire the style consists of 'moulded bricks in raised courses at eaves and first-floor levels, swept into semicircular arches over windows and doors' (Smith, 1984, 63). Chequer board patterning of diaper work is often associated with this style which seems to be centred around the Wreake and Soar valleys and to flourish from *c.* 1670 to *c.* 1700. David Smith suggest that if one is looking for a brick house which comes close to the point of difference between 'Mannerist' and 'a local derived form', then Cross Farm, Diseworth (*c.* 1700) is a good example. Other local variations are apparent at this time and similar styled buildings can be found at Hathern, Long Whatton, Mountsorrel and Belton (D. Smith per. comm.).

The earliest dated example of the Wreake Valley tradition is **Queniborough Hall** with its moulded brick string course which forms semi-circular hoods over the windows. The north-west gable is dated 1670 and the north-east, 1675.

The earliest surviving dated example of a brick frontage to a small house is at **3 Brook Street, Syston**, which carries a date stone of 1686. The presence of timber framing and stone plinth indicates that the house is much older, but was given a 'fashionable' faiaade in 1686 (assuming the date stone is contemporary with the brick walling) indicating that brick was being introduced at the vernacular level at least by



4. 3 Brook Street, Syston.



5. Main Street, Barsby.

the 1680s. The style includes elements which have been described as Wreake Valley. The string course contains moulded bricks and some are set to create a cogged effect. Other houses in Syston have elements of the Wreake Valley style including 7 and 16 Lower Church Street where the arched courses can be seen.

A former farmhouse standing on the west side of **Cropston Road, Anstey**, contains a datestone of 1690 and has moulded brick string courses which are swept over the windows into segmental pediments. Diaper work is present in a number of walls.

On **Stoneleigh, Main Street, Barsby**, is a datestone which contains the initials P.A.W. and the date 1691. This brick built house, with main axis parallel to the main street of the village, is a two storied house with three units at ground floor level. There is a full use of decorative brick work on the street frontage with chequer-pattern on the ground floor and diaper at first floor level. This is separated with a cornice of moulded bricks.

The **Old Manor House, Ratcliffe Road, Thrussington**, is a large brick farmhouse which contains several Wreake Valley style features. There are moulded bricks forming string courses which are swept in semi-circular fashion over the windows. There is a brick dovecote in the farmyard dated 1716, but this is almost certainly later than the house which, by comparison with the above examples, should be dated to the last quarter of the seventeenth century.

Other undated examples of the Wreake Valley style can be found in Seagrave, Great Stretton, Hathern and Long Whatton. A photograph of a building no longer extant shows the Wreake Valley style on a building in Shepshed (Shepshed Local History Council, 1986, 20). At Sileby a building of this style at 38 King Street was demolished



6. Old Manor House, Ratcliffe Road, Thrussington.

in 1960-1, and another was noted opposite bearing a date of 1699 (*TLAHS*, 37, 1961-2, 69-70 & plate opposite p 70).

It is in the second half of the seventeenth century that brick buildings begin to feature in Leicestershire Glebe Terriers, the earliest so far noted by David Smith being at Kegworth where the Terrier (ID 41/2/345), dated 1674 states 'The parsonage

house the south side being the Hall, staircase, and parlour brick building'. At Barrow on Soar the Terrier (ID 41/2/49) dated 13 Nov 1690 refers to '.... one new Bricke Barn of Three Bayes' and a later one of 1697 to '.... one brickbarn consisting of three bayes....'.

The evidence of dated buildings and Glebe Terriers points to the last quarter of the seventeenth century as being the period during which brick became a readily available commodity for building. It is difficult to date the use of brick as an infill in timber-framed buildings, but at Orpudds Farms, Ashby Parva, a date of 1695 seems certain (per. comm. D. Smith). More and more buildings appear after 1700 with dates incorporated into the brick patterning, such as Willoughby Waterleys 1702, Normanton on Soar 1703, Queniborough 1703, Kibworth 1704 and several others.

The first reference to brick in **Leicester**, as has already been referred to, occurs in the Borough Records for 1586/7 and mentions a conduit in St Margarets Field. There are entries in the minutes of Common Hall for 1585 which refer to kilns (Bateson, 1905, 216, 246 for example), but which do not specify the products of those kilns. In one case it talks about 'putting downe of kilnes and alehouses' (Bateson, 1905, 304) and later to malt kilns (Bateson, 1905, 364), which might suggest that the earlier entries are to malt kilns.

The instructions for the repair of the Great Hall of the Castle in 1609-10 state that the floor should be paved 'with freestone or brick' (Simmons, 1974, 99). Towards the end of the century around 1695 the eastern aisle of the Great Hall was taken down and replaced with the present facade which rests on a chamfered sandstone plinth and is almost certainly the wall Celia Fiennes must have seen (see below).

Two Probate Inventories record a bricklayer and brickman in Leicester in the 1680s. Francis Clay of Leicester was a bricklayer and his inventory is dated 1681 (PR/I/83/250) and Joshua Kirke, a brickmaker of Braunston, 1682 (PR/I/84/272). The Kirk(e) name is to be found frequently in the Register of Freeman and in the Borough Records, for example, John Kirk was admitted a Freeman in 1695, he was a son of Joshua Kirk, brickmaker (Hartopp, 1927, 178). In the returns for the Marriages Tax of 1695 a Joseph Kirck (=Kirk(e)?) is recorded in St Martins Parish and Aurther Ogdall and Edward Broughten both in St Mary's Parish, all listed as brickmakers (per. comm. Christine Vialls). In the Chamberlains' Accounts the earliest entry which mentions brick occurs for 1688 which mentions brick used in work on the 'Towne Gaole' (Chinnery, 1967, 52) and by the last decade of the seventeenth century brickmakers are appearing more frequently in the Register of Freeman (Hartopp, 1927). This would seem to suggest that the introduction of brick as a regular building material into the town was taking place in the last couple of decades of the seventeenth century at about the same time that it was being used for small village houses. This is supported by the observations of Celia Fiennes who visited Leicester in 1698 as part of her 'Great Journey to Newcastle and to Cornwall'. She wrote 'the town is old timber building except one or two of brick' (Morris, 1947, 163). She also describes 'a new pile of building all of brick which is the Guild Hall where the Assizes are kept...'. clearly referring to the Great Hall of the castle. If Celia Fiennes found the town to be mostly of timber, it is not surprising that a couple of centuries earlier Leland had also described the town as 'buildid of tymbre' (Toulmin-Smith, 1964)).



7. Great Meeting, Bond Street, Leicester.

The earliest securely dated brick building in the city is the Great Meeting in Bond Street which was built in 1708 and recently the cleaning of a building in Highcross Street has revealed at first floor level a date of 1712 depicted in blue brick. A recently refurbished building in Churchgate revealed a date of 1717 in blue brick. It is said that the brick buildings in New Street were laid out in 1710, and it is likely that a thorough search of deeds and other documents will reveal that many more brick buildings also date from this period. For example, we know from a Glebe Terrier of 1712 for St Margarets Church (ID 41/2/398) that the church had a brick-built vicarage. The mention of bricklayers and brickmakers in Leicester in the 1680s, as noted above, clearly indicates that there must have been brickworks around the city supplying brick as early as 1680. The earliest cartographic evidence for such brickworks is to be found on William Stukeley's map of 1722 which appeared in his *Itinerarium Curiosum*. The same brickworks are marked on Thomas Roberts' plan of Leicester, dated 1741, at the end of Hangmans Lane, now Newark Street, close to the present day Welford Place. However, this plan may have been the result of survey work undertaken much earlier, for as Mr G.A. Chinnery has pointed out (per. comm.) in the Chamberlains Accounts for 15th January 1711/2 there is an entry which states '...pay to Thomas Roberts £12 for his paines in making a Survey of the Corporation..' If then the plan reproduced in 1741 reflects the town in 1711 we have some idea of where the brickworks were which were supplying the demand which existed at the beginning of the eighteenth century.

It is also recorded in the Hall Books and Papers that land was being leased for brickmaking, the earliest entry so far noted is for 5th April 1710:-

'All that Flatt or parcell of Lands lying upp to the Swanns Windmills abuting to the Sick & next to the Causway leading from the Pinfold towards Wigston along by the hedg side now in Mr William Southwells Possession and all those Five Lands lying together by the hedg against Mr Carters Windmill in Henry Colsons Possession To digg the same for making bricks...'

(Chinnery, 1965, 61)

There are then frequent references in the Borough Records to brick and to leases of land for brickmaking throughout the rest of the eighteenth century. For example, a lease was sealed in 1731 to dig clay in St Mary's Field (Chinnery, 1965, 116) and another in 1752 for the lease of South Fields for brickmaking (Chinnery, 1965, 175).

The number of dated brick buildings that survive in the county increases during the eighteenth century and a long list of such buildings could be cited. Some are dated by the use of blue bricks to outline the date. Documentary sources relating to the use of brick also increase in number. By the middle of the eighteenth century brick was being made in many villages for local use and extensive brick fields were also developing around Leicester, particularly in the South Field, but this another story which must be taken up on another occasion.

Acknowledgements

David Smith has given invaluable help during the early stages of this work and has subsequently provided details of buildings and transcribed a number of the documentary sources relating to brick buildings. He also read through a draft of this paper and made a number of significant suggestions, most of which I hope have been incorporated.

The work done by John Rawlins in the 1970s has proved to be of immense value and I am extremely grateful to him for letting me borrow his files. Many individuals also gave me details of brick making activities in their area and I am indebted to them.

The Leicestershire County Record Office, and the Museums Service have, over the years, been most helpful and I would like to acknowledge their support.

Appendix 1

Articles between my lord & John Chapman for the making of 100, 000 bricks dated the 29th day of November 1642

Hastings Deeds Doc. No. 392-401 Box 73: Castle Donington

Articles of Bargain & Agreement made and concluded upon the nyne and twentieth day of November Anno Dm 1642 Between the Right honourable Henry Earle of Huntingdon Lord Hastings Hungerford Hoinet Botreaux Mulis Molins and Peverel of the one part And John Chapman of Thringston in the County of Leicester Brickmaker of the other part.

Imprimis it is bargained and agreed upon by the said John Chapman That he the said John Chapman shall in due time presently after the sealinge of thes presents diffe and make readie in Donington Parke in the said County of Leicester a sufficient quantity of Earth wch shall make one hundred thousand bricks, and shall seasonably order and turne the same Earth in this winter time before the end of February next cominge, the said one hundred thousand bricks to be accopted five score to the hundred and tenne hundreds to the thousand.

Item it is bargained and agreed upon by the said John Chapman That he the said John Chapman shall for the use of the said Earle make one hundred thousand of bricks in Donington Parke aforesaid of the full assise accordinge to the Statute and shall well & workmanly worke and burne the same. And the same soe made wrought and burned shall deliver unto the said Earle or his Officers or Servants for his use in manner followinge that is to say Fifty thousands thereof at or before the fower and twentieth day of June next ensuinge after the date hereof And the other fifty thousand at or before the fower & twentieth day of August then next after following.

Item it is bargained and agreed upon the said Earle That he the said Earle or his Officer or Baylie shall pay unto the said John Chapman for the said bricks after the rate of five shillings for each thousand, and to pay the same in this manner followinge, that is to say, fifty shillings when the said John Chapman shall begin to digge the said Earth, and other fifty shillings when the same shal be all-digged and other fifty shillings when the same earth shalbe turned over, And other fifty shillings upon the first day of May next cominge, And other fifty shillings upon the first day of June next cominge, And five pounds at the deliver of the first fifty thousand, And upon the five and twentieth day of July next cominge other fifty shillings, And at the delivry of the last fifty thousand other five pounds in full paymt, And also shall find and provide for the said John Chapman from time to time all such coales or woods for fewell, and all such strawe and sande and all such moulds and other implements as shall be need full to be used & spent in the said worke and are accustomedly used in such worke, In witness whereof the parties first above named interchangeably herunto put their hands and seale the day and yere first above written.

Sealed delivered
in the presence of
Edw. Thorpe

The marke of John Chapman

Appendix 2

JOHN LAW Market Harborough Bricklayer 1699
 (no Will indexed in Hartopp) LCRO No. PR/I/104/96
 File Ref number in contemporary hand 96

An Inventory of ye goods & creditts of John Law *** of Markett Harborough
 in ye County Leicr Bricklayer late deced was taken this 9th day of October
 1699 by us whose names are under written.

In the Hall 9 *** chares dresser & shelves 1 warming pan 3 pewter dishes)	
6 plates 4 poringers A tin dripping pan 3 pewter dishes 6 plates 4)	
poringers A tin dripping pan 1 lanthorne 1 pewter quart 1 pint i fire grate)	2 : 0 : 0
1 pare of tongs 1 frying pan i pare of pott hooks 1 <i>Bee*forke</i> i fire shovell)	
1 Joyned Stoole 1 little bottle 2 Brasse potts 1 Brasse Kettle 1 doz: of trenchers)	
& other Lumber)	
In the parlor 1 fetherbed & A bedstead 1 table		1 : 10 : 0
(In the) Chamber 1 Chest with some linen in it 1 Chare 2 boxes 1 Chamber pott		0 : 15 : 0
(It ^m) in yard 18 hundred of Coles 1 Bucket		0 : 18 : 6
(in) the Lime House lime & Bricks & paving tyle ye hovell & other bricks		4 : 00 : 0
(in) ye Brickyard i hovell & some bricks		0 : 10 : 0
(It ^m) Bricks in ye yard by Estimation 8000		5 : 18 : 0
(*) 1 Kilne full of Bricks ready set to Burne ye fuell straw & ffurs		8 : 0 : 0
(It ^m) other Lumber in ye Brickyard		0 : 10 : 0
It ^m purse & Apparell		5 : 0 : 0
		<hr/>
		25 : 5 : 6

William Randall
 John Ashton

exhibited: 16 October 1699
 probate granted

Appendix 3

Agreement between William Twigg, brickmaker, and William Herrick, Beaumanor

October 1710

LCRO No. DG 9/130

Articles of Agreement Indented, had made & fully agreed unto, the twentieth day of October Anno dom. 1710. Betweene Willm Herrick of Beaumanor in the county of Leicester, in the parish of Barrow upon Sore Esq^r of the one part and Willm Twigg of Loughborrow in the aforesaid county of Leicester Brickmaker of the other part as followeth.

Impri: It is covenanted concluded & Agreed upon by & betweene the said parties, and the said Willm Herrick for himselfe & his heaires, doth get him hereby give give free leave & liberty unto the said Willm Twigg & his Assignes to digg three acres or thereabout & get clay within his lberty (sic) in that part of the forrest of charnwood nere unto Loughborough lane and, in the liberty of Beaumanor in the parish of Barrow aforesaid, and to make brick & to build or set up hovells & kilnes or kilns, or any other conveniences, for his making of brick as aforesaid, for & during the terme or space of seaven yeares, begining at the feast of Saint Michael last past before the date hereof - And the said Willm Herrick doth covenant & promise, that the said Willm Twigg or his Assignes shall have free liberty to digg & get clay, & make brick as Aforesaid upon the said premises, without the disturbance of him the said Willm Herrick, or any claiming under him dureing the said terme, And at the end thereof, the said Willm Twigg shall take remove & carry away all such hovells, kilns fences, & other building of & from the said ground, that hee the said Willm Twigg shall build or set there for his owne use, without any disturbance of him the said Willm Herrick or any person claiming under him In consideration whereof the said Willm Twigg for himself his Extors and Assignes, doth covenant promise & agree, to pay, or cause to be payd, yearly & every yeare, during the said terme, unto the said Willm Herrick or his Assignes, the yearly rent or some of twenty shillings of good & lawfull money of greate Brittane, at the feast of Saint Michael as it shall come or fall. And for the true performance of all the said covenants & agreements either of the said parties standeth bound unto the other, firmly by these presents, In witness whereof the parties above named to these presents Interchangeably have put their hands & seales the day & yeare above written.

Sealed & delivered upon stamp paper
according to the statute in the
presence of us

Willi: Herricke

Thoman Stevison
Peter Sikes

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