

# THE EXCAVATION OF THE MANOR OF THE MORE, RICKMANSWORTH, HERTFORDSHIRE

By MARTIN BIDDLE, LAWRENCE BARFIELD  
AND ALAN MILLARD

At the beginning of 1952 the writers began to excavate the site of the medieval manor house known as the More, on behalf of the Merchant Taylors' School Archaeological Society. The work was completed in the winter of 1955.

Permission for excavation was willingly granted by the owner of the land, the late Mr. H. W. Lloyd, and by his tenant Mr. S. A. Brazier<sup>1</sup>.

## THE SITE

The site of the manor house (O.S. Grid Ref. TQ/082940) lies in the valley of the Colne, on the south side of the river, a mile and a half up-stream from Rickmansworth. To the south the ground rises steeply; on the north side it slopes gently to the river. The site to-day is rough pasturage and known locally as Wolsey's Palace. It lay on the north side of the medieval track from Rickmansworth to Watford (Pl. XVIII A).

The subsoil is gravel with small pockets of clay; present ground surface is some 10-15 ft. above river level.

The moat of the house, open until 1937, was partially filled in with clay from road widening before 1939 and entirely in 1957. Attempts made to stop this at the time were unavailing.

To the immediate south of the house lay the forecourt, which was not excavated, although extensive buildings of Period IV or later must lie here<sup>2</sup>.

<sup>1</sup> We wish to record here our debt of gratitude to the late Mr. B. H. St. J. O'Neil for his interest and encouragement, without which the work would never have been undertaken, and to Mr. H. Elder, Headmaster, and the Rev. P. K. Walker formerly of Merchant Taylors' for help and encouragement. We are grateful to the following for reports: Dr. D. B. Harden, F.S.A., on the glass, Mr. E. M. Jope, B.Sc., F.S.A. on some of the pottery and Mr. G. C. Dunning, F.S.A., on the ridge tiles and chimney, Mr. Bernard Rackham on the window glass and some pottery, Dr. Norman Davey who examined the mortars and gave freely his time and advice, Mr. R. H. Pearson on the Lombardic 'S', Mrs. J. E. Morey on stone samples, Dr. G. Taylor for examining the botanical remains, Dr. F. C. Fraser, Mr. A. C. Wheeler and Miss P. A. Lawford on the bones, Miss Elizabeth Crowfoot on cloth remains, and to Mr. L. Biek for visiting the site and helping with the preservation of finds and other scientific problems. The Ancient Monuments Department of the Ministry of Works have helped in many ways. Miss Gudrun Collis, Miss Janice Horner, Miss E. Meikle and Dr. Edward Johnson drew the small finds, and we also thank Mr. M. B. Cookson for photographing some of them. Mr. J. R. W. Whitfield and Miss Totten of the Hertfordshire County Record Office and Mr. David Ransome helped in the historical research. Mr. A. J. Pearce gave willing and constant help in the work of excavation, and lastly we wish to record our debt of gratitude to Mr. J. G. Hurst, M.A., F.S.A., for visiting the site on several occasions, for examining the pottery and for help and advice.

<sup>2</sup> The whole area south of the house and its adjoining moats was bulldozed in the winter of 1959-60, and then partially levelled up with dumped clay. Several walls and rooms of what must have been the forecourt buildings were seen and at one point the machine broke into a hole, 5ft. in diameter

and at least 3ft. 6ins. deep, which had a domed top 1ft. below ground-level. There were traces of a wattle lining. Unfortunately the writers were not informed of the work until it was too late to make any plans and records.

West of the main house-moat lie two other moats (fig. 1). These were only excavated sufficiently to prove that there were no buildings on them and they are to be considered as fish ponds enclosing gardens. Another moat lies to the north of the house-moat. This is obviously in a different category to the others. It was not examined and its purpose must remain obscure. No traces of occupation were observed in the numerous rabbit scrapes and mole-hills in the moated area.

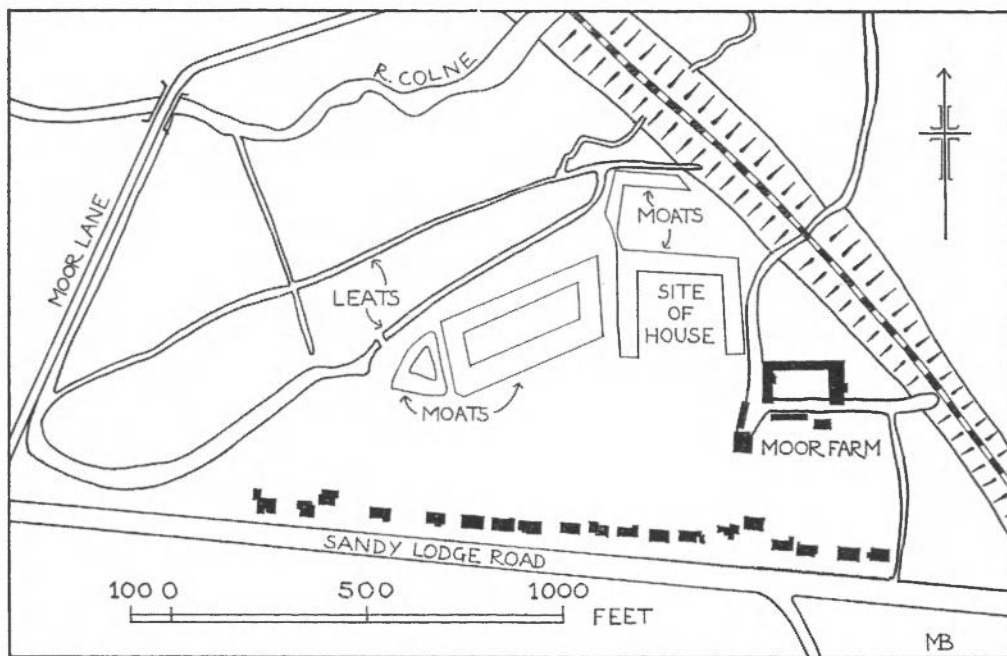


Fig. 1. The site of the manor

### SUMMARY OF EXCAVATION RESULTS

Occupation of the site can be divided into two separate phases; before and after 1426, in which year a royal licence was granted for the construction of a large and elaborate building. Three periods of occupation before this date have been traced: a double moated enclosure with little trace of building (Period I, *c.* 1250-1300) was followed by a kitchen building containing three ovens (Period II, *c.* 1300-1350). After the collapse of this building a typical 14th century manor house of good construction was built (Period III, *c.* 1350-1426). This was destroyed to make way for the large brick-faced house of Period IV (1426 onwards). This house was altered and enlarged (Period V) by Archbishop Neville, by Cardinal Wolsey (Period VI) and by Henry VIII (Period VII). After about 1555 squatters occupied the deserted house (Period VIII) until it was demolished *c.* 1650.

Stratified pottery and other finds recovered from each period show a sequence well linked with documentary evidence covering about 400 years. Among the important finds are the 14th century pottery roof structures and a few very early examples of Netherlands Maiolica tiles, *c.* 1525.

## HISTORY OF THE MANOR

South and west Hertfordshire were probably part of the territory of the original Middle Saxons, but later became part of Mercia. At the foundation of St. Albans Abbey in 793 A.D. the greater part of this land was given to the Abbey, though later Ely and Westminster received large grants. In the original gift Offa included thirty-four *mansiones* at Caegesho or Cashio<sup>1</sup>, and the manors of Rickmansworth and Croxley<sup>2</sup>. Egfrith, Offa's son, made a further gift of five manors in Pinchfield<sup>3</sup>, in the neighbourhood of Rickmansworth. St. Albans Abbey thus came to own the whole area around the site of the later manor of the More. Settlement of this district was probably late and may have continued into the 12th and 13th centuries. There is no record of the More in the Domesday Book; the first mention occurs about 1182<sup>4</sup>, when it was given to Adam Agnū (Aignel) by the Abbot of St. Albans in exchange for two and a half hides of land in Horwood. It had formerly been held by a Master Ambrose<sup>5</sup> and was now to be held of the Abbot for a rent of ten shillings and foreign service due from it to the King. It descended in the Aignel family to Adam's great grandson John, who died in 1364. John's son, another John, was only three years old, when in the inquisition held on the elder John's death it was found that the manor was held of the King by petty serjeanty of rendering one axe, and that the manor comprised a principal messuage, forty acres of land, eighteen acres of meadow and three acres of pasture. The King therefore claimed the custody of the young John. The Abbot disputed this finding and judgement was given in his favour in 1366. The Abbot was again involved in a law suit over the More when Andrew de Bures, who had married the elder John Aignel's widow, Katherine, sued the Abbot for her dower in the manor.

In 1416 another Katherine, widow of the young John Aignel, and now wife of William Curtys, conveyed the manor to William Flete and others, and at the same time John Impey and Joan his wife, kinswoman and heir of John Aignel, conveyed their interest in the manor to the same feoffees.

In 1426 Henry Beaufort, Bishop of Winchester, and Thomas, Bishop of Durham, together with William Flete and others, obtained a charter licensing them 'to enclose, crenellate, enturret and embattle with stones, lime and brik, their manor of More in Rykmersworth, and also to empark six hundred acres of land in wood in Rykmersworth and Watford, grant also of free warren there, unless the land be within the metes of the King's forest'<sup>6</sup>. Flete caused trouble over the services due for the More by quoting the inquisition on the death of John Aignel, which had been proved a wrong finding. The Abbot again won the case in 1431 and Flete had to pay the arrears of rent, and do the services, which included finding a horse for the Abbot every time he rode to his cell at Tynemouth.

By 1456 Sir Ralph Boteler had obtained the More. The Abbot wished to settle the overlordship of the More and, in exchange for certain tenements in London on the Thames, he

<sup>1</sup> *V.C.H. Herts.*, iv, 367.

<sup>2</sup> *Brit. Mus., Cott. MS. Nero D*, vii, fol. 3b.

<sup>3</sup> *Matt. Paris. Chron. Maj.*, Rolls Ser., vi, 8.

<sup>4</sup> From here until the time of Wolsey the history is mainly derived from the *V.C.H. Herts.*, ii, 375 *et seq.* References will only be given to facts not given in the *V.C.H.*

<sup>5</sup> *Quae quidem hidata terrae in tempore antiquo fuit parcella de praedicto mesuagio vocato 'Le More'; et postea*

*quidam Magister Ambrosius eam de Abbate de Sancto Albano tenuit; sed quomodo ignorant, quia extra memoriam; et valet per annum quinque solidos. Gesta Abbatum III, 10.* This would seem to suggest that a *mesuagium*, probably a building of some sort, had existed for some few years before the beginning of Adam Aignel's ownership in 1182.

<sup>6</sup> *Cal. Pat. Rolls 1422-29*, 351.

confirmed the manors of More, Ashleys, Britwell, Batchworth and Eastbury to Sir Ralph, free of all services and rents, except a rent of one penny for each manor in recognition of the fact that it was held of the abbey. When Sir Ralph's only son died, he decided to sell the reversion of the manor after his death and that of his wife Elizabeth, and devote the money to pious uses. The Abbot, to save future trouble, with the aid of his kinswoman, Lady Sudeley, purchased the manor for 3,000 marks, and the prayers of the convent for Sir Ralph, his wife and son.

In 1460 the manor was conveyed to trustees, John Eure, Thomas Clopton and others, who conveyed it in the same year to the Abbot and convent. Afterwards it was apparently sold to George Neville, Archbishop of York. Lord Lytton wrote in the *Last Days of the Barons* of Neville's life at the More, and though his description of the building is fanciful, his picture of magnificence may well be correct. Warkworth speaks of the 'seid manere of Moore, whiche the saide Archebisshophe hade purchasshed and bylledde it ryghte comodiusly and plesauntly'<sup>1</sup>. Neville lived at the More during 1470, when Warwick and the Duke of Clarence had been driven out of the country. He entertained John Paston there in Christmas 1471<sup>2</sup>. In 1472 Edward invited Neville to Windsor—inviting himself to the More in return. Neville made great preparations and brought out all the plate which he had hidden after the battles of Barnet and Tewkesbury. But he was summoned to Windsor and arrested, 'and forthewithe othere many dyverse gentilmene and yomen, were sent to the seide manere of Moore; and there by the Kynges comawndement seysede the seid manere into the Kynges handes, and alle the good that was therin, whiche was worthe XX M li. or more'<sup>3</sup>.

The custody of the park was granted in 1475 to John Hawdeles and the manor, about this time, to the Dean and Canons of St. George's, Windsor; they, at the King's wish, granted it to him again in 1483. In 1484 the custody of the park was granted to Edward Gower and the manor in 1486 to John de Vere, Earl of Oxford, and Margaret his wife and the heirs of their bodies. The manor reverted to the crown when John died, without issue, in 1513. It was at once granted for seventy years to Thomas Ruthall, Bishop of Durham, and in 1515 the King granted the manor, subject to the above lease, to feoffees, Bartholomew Westby and others, in trust for Thomas, Abbot of St. Albans, who in return gave the King 3,000 marks and certain lands at the Steel Yard and Baynards Castle in London; in the following November they conveyed their interest to the Abbot and convent. Up to the middle of 1518 the Bishop of Durham held the manor under the lease referred to above and resided there periodically, but before April, 1520, Thomas Ramridge, Abbot of St. Albans, must have compounded with him for the remainder of the lease, as the Abbot was at that time in possession.

Wolsey held the monastery of St. Albans, as if granted *in commendam*, from May, 1522<sup>4</sup>, and by the 8th November, 1522 he was confirmed in the abbey<sup>5</sup>. It must have been in this capacity that he came into possession of the More. Modern authorities assert that he enlarged the house: Pollard states that Wolsey built a palace at the More,<sup>6</sup> but it is more probable that he merely enlarged it; and it seems that du Bellay thought the house more splendid than Hampton Court. In 1529 the Papal Legate Campeggio was at the More and he wrote to Salviati on the 7th October that he had been requested by the Cardinal of York to repair to a town of his called the More, where he had a very fine palace<sup>7</sup>. He maintained the gardens at great cost and perhaps enlarged the park by expelling one of his tenants from a messuage called Tollpotts, and one hundred and seventy acres of land, enclosing part of it within the park and making another part into a new highway leading from Rickmansworth to Watford (the modern Tolpits Lane) which ran to the north of the site instead of directly in front of it to the south. During the years 1524-29 Wolsey was often writing from the More and in 1525, on the 30th August, an important peace treaty was concluded there between England and France, known as the Treaty of the Moor. On the 6th September following, the proclamation of peace

<sup>1</sup> John Warkworth, *A Chronicle of the First Thirteen Years of the Reign of King Edward IV.* (Camden Soc.), 25.

<sup>2</sup> *Paston Letters* (ed. Gairdner, 1896), iii, 33.

<sup>3</sup> Warkworth, *op. cit.*, 25.

<sup>4</sup> *Letters and Papers Hen. VIII*, iii, 2260.

<sup>5</sup> Rymer, *Foedera* (Orig. ed.) xiii, 775.

<sup>6</sup> A. F. Pollard, *Wolsey*, 325, quoting Ellis, *Original Letters* III, ii, 65.

<sup>7</sup> *L.P. Hen. VIII*, iv, 5995.



was issued from there. Henry VIII was at the More in 1525<sup>1</sup>. In August, 1529 Wolsey offered to entertain the King and to defray his expenses at his palace at the More, but Henry declined<sup>2</sup>.

By the time Wolsey was falling into disfavour Henry seems to have gained possession of the manor, for in 1530 the King granted the custody of the manor, with four pence a day, to Sir John Russell for life. But since Wolsey did not resign the Abbey to the King until the 17th February, 1530<sup>3</sup>, and since the More is mentioned as a house belonging to the Abbey of St. Albans in 1531, Henry's possession at this time was probably only permissive. Robert Calton, Prior of Norwich, became Abbot of St. Albans in March, 1531, and it seems to have been a condition of his appointment to the Abbey that the manor of the More should be ceded to the Crown<sup>4</sup>. The agreement was made in September; in November the Abbot ceded the manor, and in December received in exchange the properties of the Priors of Prê and Wallingford, which had been suppressed by Wolsey.

In 1530 an inventory was made of all Wolsey's Household Stuff<sup>5</sup>, and by April Henry seems to have been installed and even playing tennis at the More<sup>6</sup>.

Henry now made the More one of his residences. He had first been there in August, 1509<sup>7</sup> and later in July, 1518<sup>8</sup>. In May, 1530 it is stated that no payment had been made to Lawrence Stubbs for buildings at the More<sup>9</sup>, and from this it appears that Henry started on improvements at once. In February, 1531 Thomas Herytage 'one of the Kings chaplains', was paid £100 for buildings to be made at the More<sup>10</sup> and sometime between 1st January, 1531 and Easter 1532 his nephew paid £3 11s. 6d. to George Castellman to pay workmen at the More<sup>11</sup>.

Henry sent Catherine of Aragon to the More during the divorce proceedings against her in August, 1531; in the same year Sir John Russell was created Earl of Bedford and surrendered the custody of the manor to the King, whereupon it was again granted to himself and his son Francis for their lives. In 1530 Allan Hawte was paid for the safe conducting of £1,100 from London to the More, presumably for the payment of builders' wages<sup>12</sup>, and in 1532 Sir John Russell was given £40 for paling the park<sup>13</sup>.

In April, 1530 £60 was paid to Mr. Heritage for the King's building at the More and in June of the same year a further £50<sup>14</sup>. In 1533 Sir John Russell addressed numerous complaints to Cromwell as to the dilapidated state of the park palings, for the repair of which he was allowed no supplies. He wrote showing 'how foul the ways were, so that those who went there with carriages broke down the pales and made highway through the park. The King promised it should be paled and many oaks were given him for the purpose. Mr. Herytage, as I desired, has been in hand with the King for that and the garden, which is very ruinous. Of 400 or 500 deer only 100 remain, as the deer broke forth in every place, and are killed daily. The King will only give the gardener 6d. a day. No one will take it at that price<sup>15</sup>. A few days later he wrote again that he had felled 200 oaks. 'The garden is in great ruin. In my Lord Cardinal's days it cost him £40 or £50 or 100 marks a year. Since it has been in the King's hands, it has cost 40 or 50 marks a year. It is utterly destroyed. All the knots are marred<sup>16</sup>. A fortnight later Sir John's wife brought him £40 for the garden with a promise of more to come, but there was still no gardener at 6d.<sup>17</sup>

During 1531 Henry frequently visited the More<sup>18</sup> and during his visits must have decided that considerable repairs were needed, for, from April, 1534 until September, 1543, workmen

<sup>1</sup> *Camden Miscellany*, III, Pt. iv, xvi.

<sup>2</sup> Pollard, *op. cit.*, 237.

<sup>3</sup> *L.P. Hen. VIII*, iv, 6220

<sup>4</sup> *V.C.H. Herts.*, iv, 410.

<sup>5</sup> *Brit. Mus., Harl. M.S.*, 599.

<sup>6</sup> *L.P. Hen. VIII*, v, p. 749, f.20.

<sup>7</sup> *L.P. Hen. VIII*, i, (1st ed.), 480.

<sup>8</sup> *Ibid.*, ii, p. 1478.

<sup>9</sup> *Ibid.*, iv, 6390.

<sup>10</sup> P.R.O. E. 101/420/11.

<sup>11</sup> Westminster Abbey Mun., 12257\* f.11.

<sup>12</sup> *L.P. Hen. VIII*, v, p. 318.

<sup>13</sup> *Ibid.*, v, 1285.

<sup>14</sup> *Brit. Mus. Add. MS.* 20,030 f.20, 26.

<sup>15</sup> *Ibid.*, vi, 347.

<sup>16</sup> *Ibid.*, vi, 426.

<sup>17</sup> *Ibid.*, vi, 483.

<sup>18</sup> Law, *History of Hampton Court*, 142.

were constantly at the More<sup>1</sup>. Princess Mary was there in October, 1534<sup>2</sup>, and work was put in hand against her coming<sup>3</sup>.

In October, 1534 John Clement was appointed to be keeper of the garden, orchards, ponds and sluices of the manor of More with fees of 6d. a day<sup>4</sup>, and in April, 1536 an agreement was made with John Wylkynson and others to clean out the kitchen sinks in the King's houses including the More<sup>5</sup>. In June 1538 James Nedeham drew £225 for work at Otford, Knowle and Petworth and for two new chambers and a watching chamber at the More<sup>6</sup>; he drew a further £200 in July. The share of the More in this was probably not large.

The Count Palatine paid a visit to Henry at the More in 1539 and in the following year Henry gave the manor to Anne of Cleves for life. In his wedding tour during 1540, with Catherine Howard, Henry visited the More amongst other places<sup>7</sup>. During 1542 frequent meetings of the Privy Council took place there. Henry does not seem to have used the house again during his reign, but in the *Inventory of the Wardrobe of Henry VIII* 'the garderober at the Manor of the More in the Countie of Hertford in the handes of Richard Hubbes' occupies twenty-nine pages. A great deal of this is bed linen and household linen, but it includes vestments and altar cloths, and also twenty-eight items of hangings consisting of one hundred and thirty one pieces, each of which is described<sup>8</sup>.

Between 1547 and 1552, in the reign of Edward VI, work was carried on under Lawrence Bradshaw amounting in all to £114 1s. 4½d.<sup>9</sup> With this, ends, as far as is known, all work done on the More.

The Earl of Bedford apparently surrendered the More to the Crown in 1551<sup>10</sup> and was succeeded as keeper by his son Francis. Meanwhile in 1556 the estate was annexed to the Duchy of Lancaster, and in a survey of the More and the park taken in that year<sup>11</sup> it is stated that the manor place was 'very much decayed, as well in tiling as in glass, lead and waterwork' and the repairing was referred to the surveyors of the King's and Queen's works. At this time the Countess of Bedford was living in Batchworth Heath Lodge, and had been doing so since the death of her husband, who had lived there since the death of Wolsey. The surveyors expressed their fear that the rest of the 'statlie house will not long continue without great reparations'<sup>12</sup>.

In 1576 the manor was granted to Francis, the second Earl of Bedford, and his heirs male, with reversion to the Queen, for £120 per annum. The manor house is not mentioned again until Norden, who, in 1598, saw 'the auncient ruynes of Morhouse, Rickmansworth'<sup>13</sup>. During this period Edward, the third Earl, and the Countess of Bedford presumably continued to live in Batchworth Heath Lodge. They both died in 1626 and before that date, probably about 1617, they built a new house<sup>14</sup> on the hill, the forerunner of the house which stands there to-day. The old manor house of the More is mentioned in a deed of 1641<sup>15</sup>, and in a deed of sale between Sir Charles Harbord and Richard Francklyn in November, 1655<sup>16</sup>. After this date the house is not mentioned again, but in 1661 there is a reference to a farm 'called the old manor house'<sup>17</sup>. This same deed mentions the grounds called the Pondyards as occupied by the New House, which is not the same as the new house on the hill. In 1663 the

<sup>1</sup> *v. inf.*, Appendix A.

<sup>2</sup> *L.P. Hen. VIII*, vii, 1297.

<sup>3</sup> *Bodleian MS. Rawlinson*, D.776, f. 229r.

<sup>4</sup> *L.P. Hen. VIII*, vii, 1498(29).

<sup>5</sup> *Ibid.*, x, 674.

<sup>6</sup> *Ibid.*, xiii, 1280, f. 22, 28.

<sup>7</sup> *Law, op. cit.*, 221.

<sup>8</sup> *Brit. Mus. Harleian MS.* 1419B, ff. 328 *et seq.*

<sup>9</sup> P.R.O. E351/3326. In 1 Edw. VI expenditure was £41 5s. od.; in 2 Edw. VI £14 os. 9d.; in 5 Edw. VI £57 12s. 3½d. and in 6 Edw. VI (half year) £1 3s. 4d.

<sup>10</sup> Cussans, *Hist. of Herts.*, iii (Cashio), 125.

<sup>11</sup> P.R.O. E315/391, f. 8v.

<sup>12</sup> *Ibid.*

<sup>13</sup> J. Norden, *Description of Herts.*, 1598, 8.

<sup>14</sup> *Herts., Co. Record Office*, MS. 45062. This is a deed of 1641.

<sup>15</sup> *Ibid.*

<sup>16</sup> *Herts., Co. Record Office*, MS. 44990.

<sup>17</sup> *Herts., Co. Record Office*. This deed and many others, including the descent mentioned below from Francklyn to Earle, were found in the Goldsmiths Company's possession and full details of the documents were made available to us through the kindness of Mr. J. R. W. Whitfield of the Herts. Record Office.

Earl of Anglesey writing to the Marquis of Ormonde states that 'Sir Richard Franklin likes the place so well that though he hath sold your grace the best, he is building for himself upon some other ground in sight of your pale'<sup>1</sup>. This is the building shown on Drury and Andrews' map of 1777<sup>2</sup> to the east of the moat of the old manor house and is nothing to do with the 1617 house on the hill, three-quarters of a mile away. It was occupied in 1777 by Timothy Earle, and its descent from Richard Francklyn to Timothy Earle can be traced and proves that the New House of 1661 is the one marked on the map of 1777. Since there is no mention of the old manor house after 1655, and since the New House was built next to it about 1661, it is most likely that the old manor house was demolished about that time and that some of its material was used in the construction of the New House, which to-day lies partly under the orchard of Moor Farm, and partly under the railway line. The farm 'called the old manor house' is probably to be located in the group of buildings to the south-west of Moor House (the New House of 1661) on the map of 1777. The farm lay partly in the forecourt of the old manor house. There was as late as 1957 a large barn at Moor Farm dating from the 17th century, in a sad condition and half collapsed; it is now demolished.

From 1631 onwards, when the Earl of Pembroke owned both the manor and the park with the great house, and sold them to different owners, the two properties were separate, except for a short time when Sir Richard Francklyn owned both. They were not united until Lord Ebury obtained the manor in 1866. With the later history of the great house on the hill, Moor Park as it came to be called, we are not here concerned. Of the subsequent condition of the site of the old manor house nothing is known, except that about 1830-1845<sup>3</sup> it was planted as an orchard, and that between 1937 and 1939 the moats of the house were to a great extent filled with clay dumped from building and road widening operations in the district, a process completed in 1957.

## THE EXCAVATION OF THE SITE

### PERIOD I

The first occupation on the site consisted of a rectangular moated enclosure apparently palisaded (fig. 2, 1). Another area to the south formed by the continuation of the west and east moats was probably bounded on the south by a moat destroyed by the later south moat of Period IV (1426). The west moat, the largest, may have been a natural watercourse; it had a wide, open section and a complete lack of artifacts in the lowest level which was a thick layer of clean blue sandy clay (fig. 4, section E-F), laid down before any occupation in the immediate area. The next layers of dark silt contained pottery, an iron arrowhead and a horse shoe dated to the second half of the 13th century.

The moat on the north side of the enclosure was smaller (fig. 5, section G-H), and, unlike the west moat, was an artificial construction flat-bottomed and clearly cut. It contained much primary silt of gritty grey sand and gravel, above which was a thick layer of black waterlogged organic accumulation.

The east moat (fig. 5, section J-K) although badly destroyed by a later garderobe, had a smaller and more rounded profile than the north moat. The thin primary rainwash was followed by a thick layer of grey-black silt. On the lip was a low double mound of light yellow-brown streaky clay, similar to the natural soil in this area. In the dark layer between the two mounds, both badly disturbed by the wall and floor of the later cellar, was a rough flint foundation. The mounds were probably upcast from the moat; the flint foundation and several large timbers found here in the later silting possibly represent a palisade, but no trace of this was found in any other part of the site.

The south moat was much smaller (fig. 3, section C-D). It silted up entirely in Period I, as it was sealed by the gravel fill of Period II, and contained four major layers: a primary

<sup>1</sup> *Hist. MSS. Comm. Ormonde MSS. n.s. III, 83.*

<sup>2</sup> Drury and Andrews, *Map of Hertfordshire 1777*. We are grateful to Mr. G. W. Cornwall of Rick-

mansworth for photographs of this.

<sup>3</sup> Photostat of the *Metropolitan Railway Co's. map of Rickmansworth in the Herts. Co. Record Office.*



A. The site looking north  
The house lies under the rough ground in front of the tent



B. Period II: Oven 3  
looking north

C. Period II: Oven 2  
underlying Oven 3,  
looking east





grey rainwash with some plant remains; a thick layer of black waterlogged silt, full of organic material, leaves and twigs from hazel, ash and oak trees, into which had slipped a thick layer of clay from the inner lip; a third silt blackish-grey in colour and finally a thick dark-brown layer. The waterlogged condition of this moat preserved leather and wooden bowls extremely well. The pottery, which included a fragment of a glazed jug with lines of raised cable decoration, was generally datable to the second half of the 13th century. The silt of the moats was characterised by a bluish mottle (p. 193).

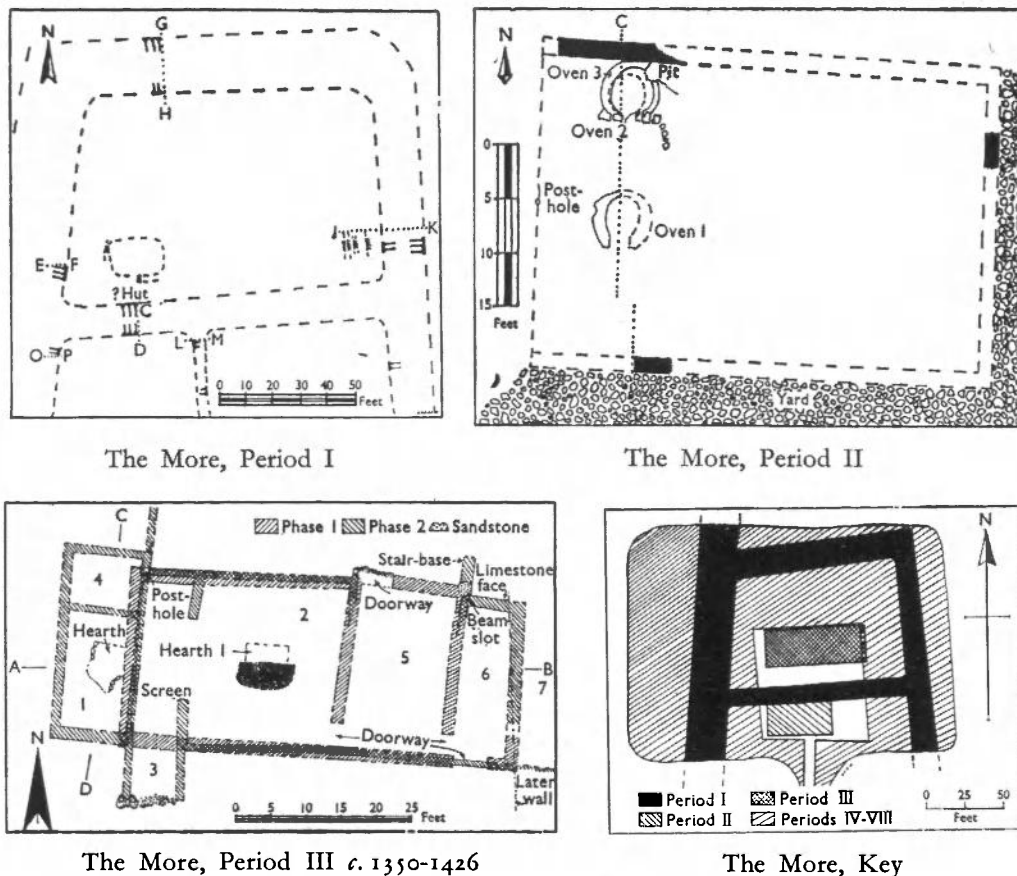


Fig. 2. Plans of Periods I, II and III

Only the south-west corner of this enclosure was occupied. Here there was an area 15 ft. square of very dark occupation earth, bounded on the west and south sides by an irregular and interrupted foundation of flint, set slightly into the natural clay and roughly bound together with puddled chalk (fig. 3, section C-D). The construction seems to have consisted of a series of separate roughly rectangular masses of foundation, on which a wooden superstructure may have rested. Lying in a gap on the south side was a large block of chalk, squared and measuring 15 × 9 × 8 ins. It was possibly a door jamb indicating the presence nearby of an entrance; such a block would however be out of keeping with the frail construction of the rest of the building. No roof tiles were found and the building had probably been thatched, though a wooden roof shingle was found in the west moat (fig. 18, 26). There was no trace of window glazing.

Inside was a thin occupation layer on natural soil; this was covered by a very uneven chalk and mortar floor (fig. 3, section A-B). On this was a burnt black layer running up to and among the flint foundation on the west and south sides; on the north and east it petered out. This contained mainly coarse grey ware of a 'metallic', almost bluish tinge, and in general may be dated to the last half of the 13th century. The burning shows that this small building was almost certainly burnt down probably around the turn of the century.

Outside the building to the south, on the far side of the moat, a layer of occupation soil continued for 36 ft., until cut by the moat of Period IV. There was however no trace of a building, but running into the south moat was a small drainage ditch (fig. 5, section L-M) which was filled with the same occupation layer. To the east of this ditch traces of occupation continued to the edge of the east moat. In this southern moated enclosure the only feature discovered was this ditch.

It remains to consider the purpose of these moats. A fair amount of pottery came from the levels and in addition wooden bowls and leather shoes from the moats: there was certainly occupation which was too scattered to have all come from the small hut described above, and it may be suspected that the house proper, from which the drainage ditch probably ran, was destroyed when the 50 ft. wide moat of Period IV was dug. The layers of dumped soil from that operation contain upwards of 200 sherds of late 13th-century pottery. Thus the northern moated enclosure may have been a cattle compound with a hut, and the southern, a house moat. This occupation can be dated to the half century, 1250-1300. The historical evidence shows that there may have been an occupation on the site in the late 12th century. No trace of this was discovered except for a very few sherds which had the appearance of possibly being datable to the first half of the 13th century (fig. 8; 3, 8, 11).

It should be noted that Roman tiles, building, imbrex and tegula, occurred in the moats and levels of Period I, and that these, taken in conjunction with a scrap of Samian ware and other 2nd-century sherds from the gravel tips of the Period IV moat, may indicate a site of Roman date in the immediate vicinity. It is certain however that the Roman building on Moor Park Golf Course was robbed in medieval times and the More tiles may have come partly from there<sup>1</sup>.

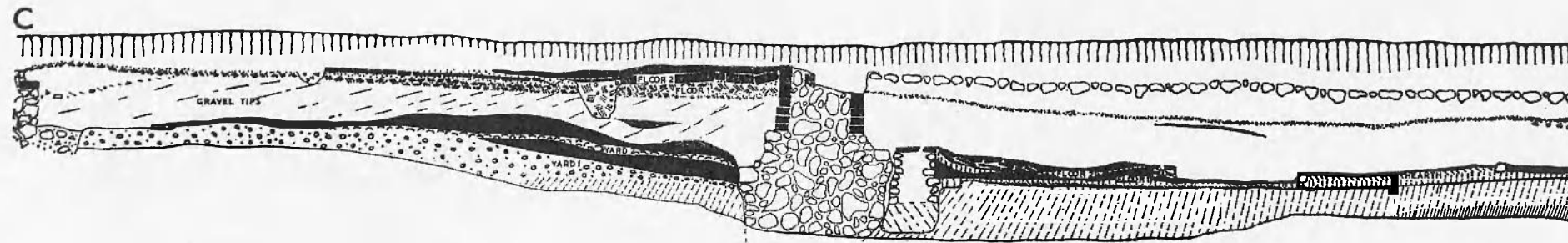
## PERIOD II

The south moat of Period I was now filled in (fig. 3, section C-D) and sealed with a layer of gravel. Set into this gravel was the north wall of a building of unmortared flint construction (fig. 2, II). The north, east and south sides were built in this manner; on the west there was no wall, but only, as far as could be judged in the area excavated, a line of wooden posts, 4 ins. in diameter, along which a wattle screen had been woven; the curved line of this was visible in the surrounding soil. This must have been a timbered building on flint foundations, open on one side except for the wattling. The roof, which had been tiled, was probably supported by interior posts, but these were not found. There was no trace of glazing for windows. Owing to the difficulty of excavating deep below the very hard layers of the Period IV courtyard it was impossible to do more than recover the outline of this building and to section it on both axes. It may have extended further to the east, though there were no floor levels on the east side of the east wall; on the other three sides its limits were found.

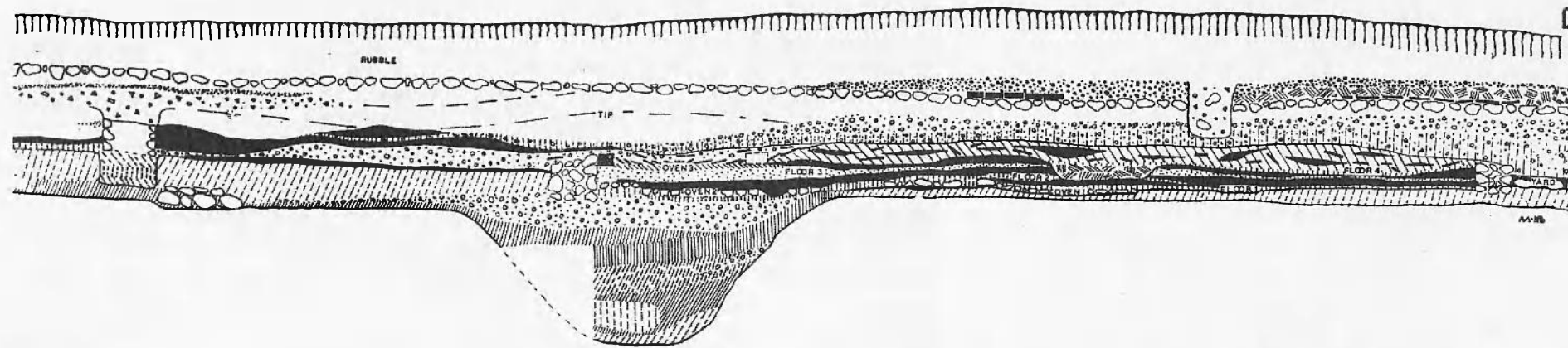
The space enclosed by this building had been floored four times (fig. 3, section C-D). The first floor was clay, and in it was set a horseshoe-shaped oven (oven 1) built on, and backed by, a heavy foundation of flints, and floored and constructed of clay, burnt bright red. The walls were 10 ins. thick but only existed to a height of 6 ins. In its construction Roman tile and chalk were used, and the west side of the entrance passage was made from a re-used block of this stone. Only half the oven was excavated, but internally it was 3 ft. 6 ins. long, and about 3 ft. wide. The occupation level on this floor was burnt black, but it had been destroyed near the north wall by the construction of oven 2.

<sup>1</sup> Excavated 1956-57 by A. R. Millard. Report forthcoming.

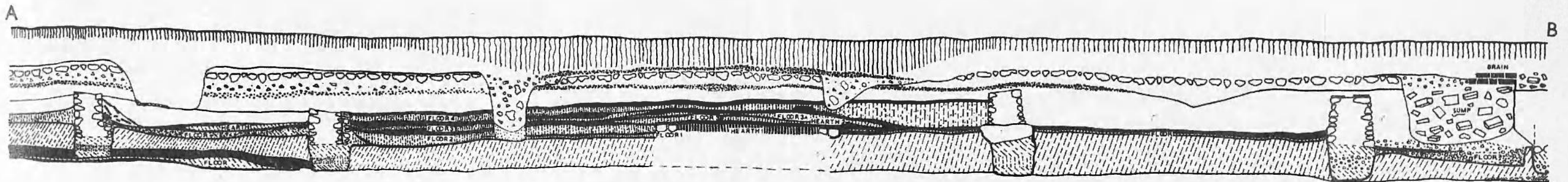
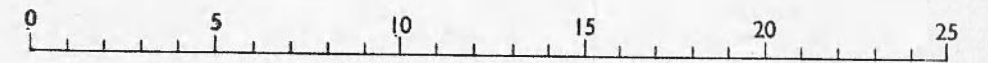




- |  |                            |  |                           |
|--|----------------------------|--|---------------------------|
|  | BRICKWORK                  |  | HUMUS                     |
|  | FLINT WALL<br>LOOSE FLINTS |  | GRAVEL                    |
|  | MORTAR                     |  | CHALK<br>LOOSE/YARD       |
|  | RUBBLE                     |  | LOAM                      |
|  | COBBLES                    |  | CLAY<br>YELLOW/BRO-<br>WN |
|  | PEBBLES                    |  | CLAY<br>GREY/BLUEISH      |
|  | TILES                      |  | CLAY<br>DARK/BLACK        |
|  | OYSTER SHELLS              |  | OCCUPATION<br>LAYER       |



The More. Section North-South across Period III house



The More. Section West-East across Period III house

Fig. 3. Sections A-B and C-D





This oven (Pl. XVIIIc) was set in a scoop in the gravel fill of the Period I moat; its walls, which remained to a height of 4 ins. and were 1 ft. or more thick, were built of flint and yellow mortar, with roof tiles laid flat on the interior, to form a proper face. The floor was of roof tiles, broken in half lengthways and set on edge in clay, and burnt to a grey, bricklike consistency; some of the pieces were very small. The entrance to the oven was of chalk, and was very badly destroyed by heat. A pit had been caused by crumbling of the tiles due to the same reason. The oven was 3 ft. 6 ins. long internally, 1 ft. 9 ins. wide at the mouth, and 3 ft. 9 ins. at the widest point.

Floor 2, associated with this oven, was of burnt clay on which was a thick burnt occupation layer. In the oven itself was 2 ins. of wood ash. Oven 2 was abandoned presumably because of the hole in its floor and a third floor and oven were laid above it. Oven 3 (Pl. XVIIIb) which was constructed directly on to a chalk base laid on floor 3, was built of roof tiles laid flat in yellow mortar backed with flint, on a foundation course of Roman tiles. The floor was of chalk. The entrance was formed of re-used chamfered blocks of chalk, one of them part of a door jamb (fig. 22, no. 13). Outside the oven, to the east, was a small ash pit full of burnt wood with a flint and chalk surround. The oven had been beehive or dome shaped, since the oven walls were still standing high enough in places to show that the roof

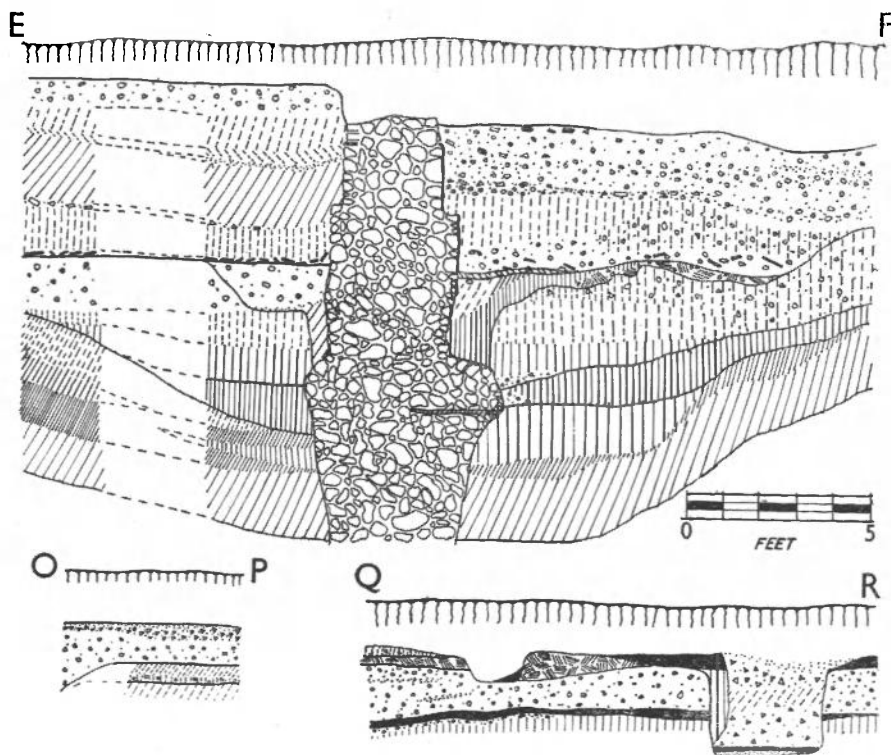


Fig. 4 Sections E—F, O—P and Q—R

had been formed by corbelling the tiles. The walls, set in a narrow trench about 2 ins. deep, were 10 ins. thick and still remained to a height of over 6 ins. The oven was 4 ft. long internally, 1 ft. 9 ins. wide at the mouth and 4 ft. 4 ins. at the widest point. In the entrance to the oven and on floor 3 was a black burnt layer. Over this layer was laid the fourth floor, of yellow clay and gravel; the oven still continued in use and a thick layer accumulated on

this floor. When the oven was disused its walls fell in and the roof of the building collapsed on to the layer of occupation.

Only in the neighbourhood of the ovens were the floors so complicated: at the east end of the room there was only one floor. To the west of the wattle screen there were two floors: one, of burnt clay, was the same as floor 1 inside the building; the other of chalk was contemporary with floor 3.

Outside the building, to the south and east, lay a courtyard cobbled with large unknapped flints laid directly on the Period I occupation. This stretched for 15 ft. to the south, until destroyed by the moat of Period IV. A layer of dark occupation earth overlay it.

On the north side of the building and running up against the north wall was a thick layer of heavy, dark grey clay. This was found to cover the whole area of the Period I northern moated enclosure and may represent a cleaning out of the moat of Period I immediately after the building of the Period II house. The layers of gravel immediately above the Period I silting in the west, north, and east moat sections probably mark the deepest level of this cleaning (fig. 4, section E-F; fig. 5, G-H, J-K) and are slip from the sides of the moats which then continued to silt in much the same way as before.

This was clearly a kitchen building and, as in Period I, it appears that the main house was to the south of the courtyard, and was destroyed by the digging of the moat of Period IV. The pottery from the floors of this building points to the years 1300-1350, or a little later, for the period of occupation (fig. 10). The occupation on floor 4 contained the first examples of Surrey ware to occur on the site. Buildings of this sort with one open end, normally towards the south or south-west, occur on the sites of deserted medieval villages<sup>1</sup>.

### PERIOD III

The house of this period (fig. 2, III) was a good example of the developed medieval manor house. It is closely similar in plan to the Herefordshire timber house, Amberley Court, Marden, which dates from the 14th century<sup>2</sup>. The house at the More was also of timber construction, as can be seen from the beam slots and post-hole (*v. inf.*). Its plan was centred on the hall, with the kitchen at the lower or west end, and the solar wing at the upper, east end.

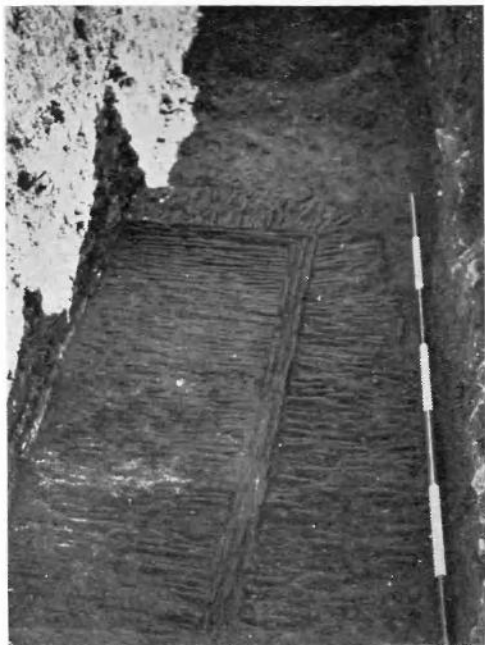
The Period II building had fallen into ruin when the new house, compact in plan and well and expensively built, was constructed. The pottery from the floor levels of Period III is the finer buff or cream ware which became common from 1350 onwards, but the change in the wares from Period II to Period III is abrupt, so it appears that the Period III house came into use about 1350 or some few years later. It is tempting to associate the desertion of the Period II building with the domestic troubles consequent upon the death of the elder John Aignel in 1364 (*v. sup.*, p. 138), and to suggest that the building of the new house took place when the elder John Aignel's widow, Katherine, married Andrew de Bures, who was of sufficient consequence to be able to sue the abbot for Katherine's dower in the manor. This would place the building of the Period III house soon after 1366. It was destroyed by the building of the great brick house (Period IV) about 1426.

The plan of the house had been changed during construction: the first phase consisted of the Hall, Room 2, and Room 5; part of Room 6 was also built at this time. The walls of this phase were well built of coursed dressed flints laid in lemon yellow or orange mortar, on a foundation trench containing chalk and yellow clay in bands (fig. 3, section A-B). Large sandstone boulders occurred in the east and west walls of Room 5 and under the north-east corner of that Room (Pl. XIXB). Since this was the solar area, the boulders may have strengthened the walls to take an upper room. Building had proceeded further in the eastern part of the house when it was decided to change the plan, for the east wall of Room 5 stood nine courses high, the west six courses, while the north-west and south-west corners of Room 2 were only three courses high. As the section by the west wall of Room 2 shows (fig. 3, section A-B) there are no occupation layers or floors associated with Phase 1 and it is clear, from here

<sup>1</sup> Information from Mr. J. G. Hurst.

<sup>2</sup> Plans in F. H. Crossley, *Timber Building in*

*England*, 133 and fig. 158; and R.C.H.M. *Herefordshire*, vol. II, 137-8.



A. Period III house, central hearth (i) of Hall, Room 2, looking east



B. Period III house, north wall of Room 6 and corner of Room 5, from east



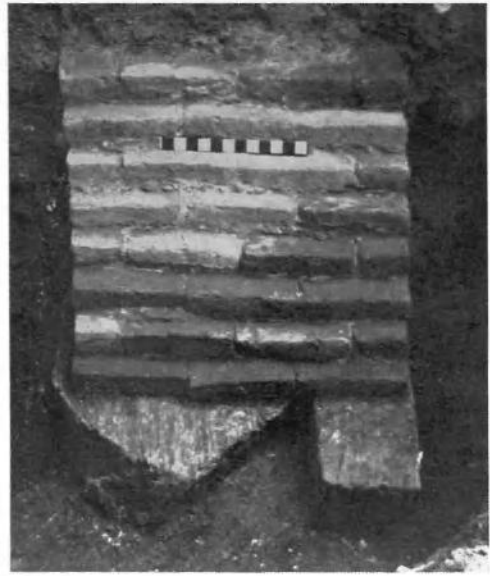
C. Period IV. South wall of courtyard showing sump and a buttress, looking east



D. Period IV. West side of courtyard showing sump and post-holes of 'Destruction' phase, looking north



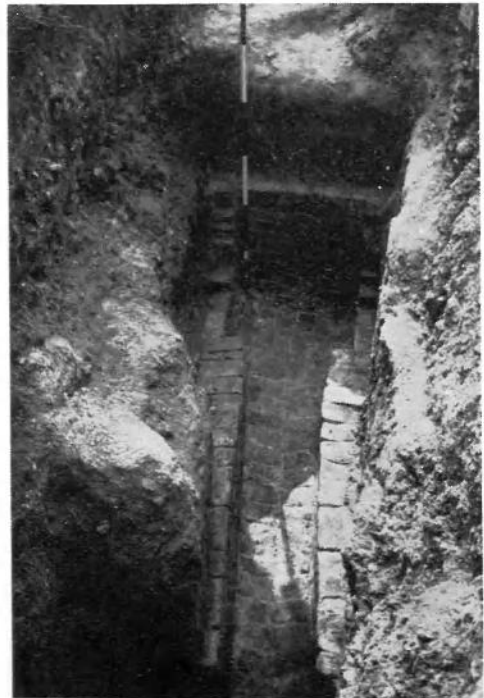
A. Period VI. Garderobe Pit 1, looking west



B. Period VI. Bridge pier on oak baulks. South lip of north moat



C. Period V. The cellar, looking west



D. Period VII. Garderobe Pit 2, looking west



and from other parts of the house, that the change of plan came while the building of the flint walls for the timber superstructure was still unfinished.

In Phase 2 Rooms 1 and 4 were added at the west end, Room 6 completed, a porch (Room 3), built and in Room 2, the Great Hall, screens were constructed at the west end. The doorway in Room 6 was blocked, and a stairway was added outside the north-east corner of Room 5. On the east of the house there was a further small structure, built from the south-east corner of Room 6, but this (together with the north-east corner and most of the east wall of the same room) was almost entirely destroyed by a later wall and cellar. An outhouse on chalk foundations was built north of Room 2.

The walls of the western extension were built in the same way as the Phase 1 walls with a bright orange mortar. Their foundations, of chalk without clay bands, did not always finish flush with the building level, but sometimes 6 ins. below it, and in the remaining space the wall was trench-built to a height of two or three courses. The walls of the western extension stood to a height of five courses and on the top of the flints were roof tiles laid flat (fig. 3, sections A-B, C-D). The southern half of Room 1 was badly robbed, but the northern wall of Room 4 still had two courses of tile; there was no mortar on the top surface and these tiles must represent the base for the timber framework.

In completing the walls already partly built the method was different. A narrow wall was built on the Phase 1 wall along the north side of the house as far as the north door of Room 5; beyond that the Phase 1 wall was already of sufficient height. This narrow wall was built along the west wall of Room 2 and all along the south wall of the house; on the wall between Rooms 2 and 5 it was only necessary to build it at the north end where the Phase 1 wall was not sufficiently high. The Phase 2 wall was of dressed flints with yellow or orange mortar, topped with a bedding of from one to three roof tiles laid flat to take the timber framework. It did not always run directly on the line of the Phase 1 wall but sometimes overhung it to a small extent.

The walls for the Hall screen were strongly and widely founded on bands of chalk and clay. The northern section contained no flints, but was only 2 ins. high and built of roof tiles. This was its original height, for the black occupation went partly over it; the timber screen must have rested on it at this level. The southern screen wall had two courses of flints and the tiles had been robbed away. The strength of the foundation seems to indicate a gallery above this screen.

The walls of Room 6 were of Phase 2 on the north side, and also on the east side, as far as could be ascertained from the small portion remaining. Since the south wall with the doorway was certainly Phase 1, it seems that this room was never finished in Phase 1, and that its construction was completed in Phase 2. At the north-west corner of Room 6 a slot for the end of a beam 10 ins. wide, extending through the whole remaining height of the wall, was clearly visible in the east face of the high corner of Room 5 (Pl. XIXB). The north wall of Room 6 was built of roughly squared chalk blocks (Pl. XIXB)—and was topped by a double layer of roof tiles as a foundation for the timber beam. The wall running north from this corner was built of flints with orange mortar on a chalk foundation and may at this point have been the foundation for a wooden staircase which would be fixed to the wall of the house; but it was nearly destroyed by a buttress of Period IV. An analysis of mortar (*v. inf.* p. 193 and fig. 24, nos. 20, 27 and 30) samples taken from the walls of Phase 2 shows that these mortars, though of different colours, are the same. The difference in colour between the mortars of Phase 1 and Phase 2 is probably their only difference though no samples were analysed to confirm this and the colours may be secondary.

As a result of the final plan as carried through in Phase 2 there was a manor house of six rooms, including a timber Hall<sup>1</sup> with a tiled roof. There were probably two storeys at the east end; the Hall, rising through two storeys, had a gallery at the west end. The main entrance

<sup>1</sup> Hall measurements: 66 ft. long, and 26/28 ft. wide.

was through a porch on the south side, with another door and a staircase on the north. The kitchen-end was probably only one storey high. No window glass was found in this house and there were no bricks, but fragments of decorative ridge tiles and a decorative chimney indicate an elaborate roof (*v. inf.* pp. 175-8)<sup>1</sup>.

*Room 1.* This room, probably the kitchen, had a gravel floor on which a little black earth had accumulated before a chalk hearth was laid down. The black layer and the gravel floor both went under the north wall of the room which was of very flimsy flint and tile construction (fig. 3, section C-D) with a space down the centre. It had obviously held up a wooden partition. At its west end it had a false bond cut into the Phase 2 west wall. Although of later date than Phase 2, it must have been built before the accumulation of most of the occupation layer on the floor of Room 4. No door was found. The pottery from the occupation level (fig. 11) included Cheam ware and suggested a date in the late 14th or early 15th century.

*Room 2.* The hall had been floored four times (fig. 3, section A-B). Into the thick clay of floor 2 was set a fine hearth (Pl. XIXA), probably square, made of broken roof-tiles set on edge lengthways.

The third floor was made of white mortar and clay; there was no central hearth, but this was quickly remedied and a layer of gravel and clay laid down for a hearth (floor 3A). Occupation accumulated on this floor which was now extended to the west wall (3B). A further floor was laid over the whole area of the hall which levelled up the floor surface, previously uncomfortably mounded up over the successive hearths. There was no evidence for a hearth at this level. This fourth floor sloped down towards the door at the south-east corner, and the occupation, joining with the earlier layers, ran through over the threshold; formerly there must have been a slight step up to the door.

In the north-east corner of the hall that part of the Phase 1 wall not used for the foundation of the Phase 2 wall was covered with a surface of white mortar forming a small ledge, 6 ins. wide, running along the north side of the hall 4 ins. above the latest floor level.

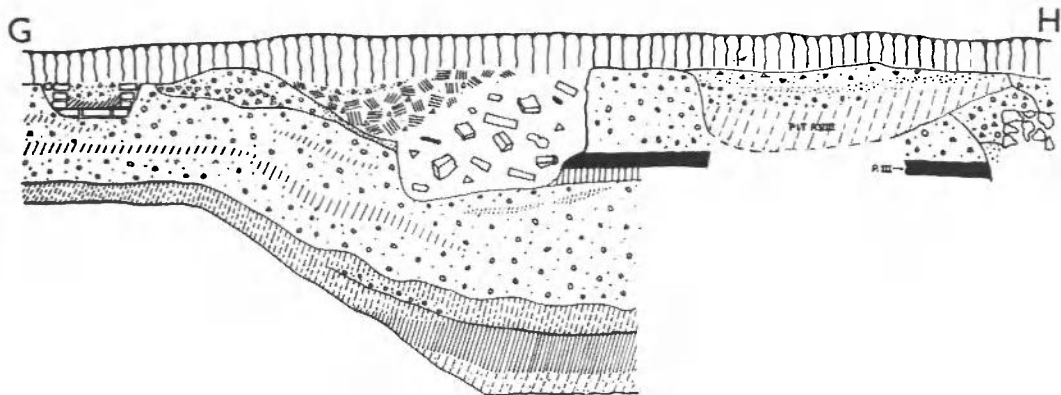
There was a fair amount of pottery on floor 3 dating to the last half of the 14th century, (fig. 11, nos. 3-8).

*Room 3.* This was the porch. The outer threshold was made of large boulders of sandstone, covered with flints roughly set in mortar for the tread. The floor of the porch was chalk. The inner threshold leading into the house had a wooden tread of which only the shape remained, showing that it was 10 ins. wide and fitted into the Phase 2 walls on the west, while abutting against them on the east. On the chalk floor was a thin layer of black earth.

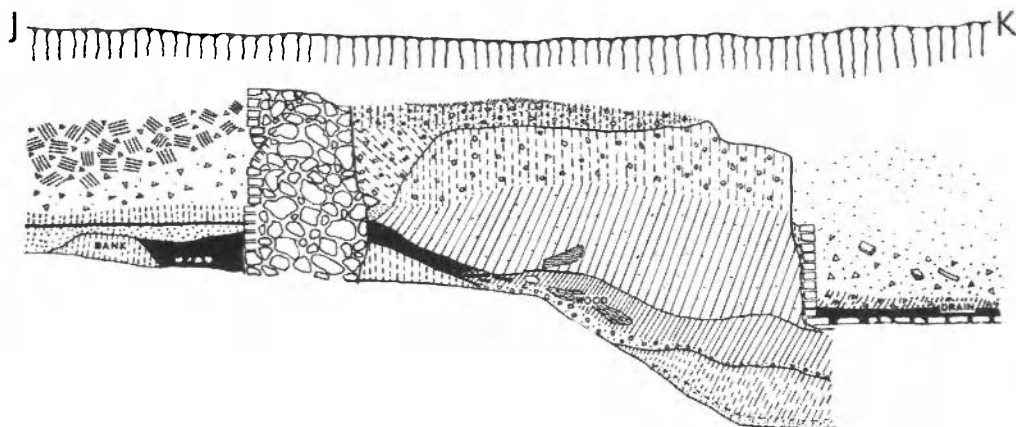
*Room 4.* This was originally part of the kitchen (Room 1) but was later divided from it by a partition wall. In the junction of its east wall with the north wall of the great hall was a rectangular post-hole, 9 × 11 ins., and 6 ins. deep. The first floor of the room was of clay and gravel (fig. 3, section C-D), on which was a dark occupation layer, covering the unused footings of the Phase 1 wall to the east. On this level was laid a floor of yellow clay on which lay dirty black occupation and rubbish, including many bones of ox, sheep and pig and shells of the edible whelk. The tiled roof had collapsed on to this layer and among the ordinary roof tiles were some cone-hip tiles, suggesting a roof with sloping corner angles.

*Room 5.* The northern doorway was well preserved on the west side where a chamfered chalk door jamb still stood, but the east side of the door was almost entirely destroyed. The threshold was made of large masses of sandstone set in orange mortar. This room had a thin clay floor and a single layer of black occupation soil (fig. 3, section A-B). The floor ran over the threshold of the door into Room 6.

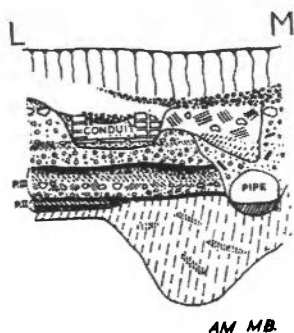
<sup>1</sup> Fragments of these decorative roof structures were found in the occupation level on Floor 3B of Room 2, as well as in the make-up of the Period IV courtyard. The latter must have come from the demolition of the roof c. 1426, but the other pieces, sealed by Floor 4, may derive from tiles broken at the time of the erection of the decorative roofing. If so they point to a repair or re-roofing of the Period III house considerably after its initial construction (to allow for the occurrence of the tile fragments relatively late in the history of the accumulated floors in the hall, Room 2) and possibly c. 1380 or rather later.



Section G—H



Section J—K



Section L—M

	BRICKWORK		HUMUS
	FLINT WALL LOOSE FLINTS		GRAVEL
	MORTAR		CHALK LOOSE/HARD
	RUBBLE		LOAM
	COBBLES		CLAY YELLOW/BRO- WN
	PEBBLES		CLAY GREY/BLUEISH
	TILES		CLAY DARK/BLACK
	OYSTER SHELLS		OCCUPATION LAYER

Scale in feet

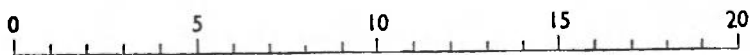


Fig. 5. Sections G—H, J—K and L—M



*Room 6.* The floor was thick gravel partly set in a scoop in the earlier levels (fig. 3, section A-B). In general there was one layer of occupation, but in the southern half of the room there was a hearth area, twice renewed, once with gravel and again with chalk. There was little significant pottery, but under the gravel floor there was a green glazed dish (fig. 11, no. 10) and the foot of a fine glass vessel (fig. 18, no. 18). These both date to the middle of the 14th century.

Rooms 5 and 6 were probably both in the nature of undercrofts with the solar and other rooms above them.

*Room 7.* This was almost entirely destroyed except for a fragment of the Phase 2 south wall.

North of the house was a flimsy outhouse resting against the north wall of the great hall. Only the west wall, of chalk, could be traced. To the east side of it was a floor of yellow clay with a black occupation layer above. On the west side of this outhouse was a gravel yard (fig. 3, section C-D) covered with a thick black layer with pottery and pig bones. Over this was a layer of oysters with above a further layer of occupation with bones and whelks. Both occupation layers provided a fair amount of pottery, that from the first dating before c. 1380 and that in the second being early 15th century (fig. 11, nos. 15-20).

North of the house was a small tile foundation (fig. 3, section C-D at the farthest limit of occupation on Yard 2) badly damaged by later building, which may have been a foundation for a boundary wall. It ran N.N.W. to S.S.E. Further north still was a layer of black occupation and shells (fig. 5, section G-H), which was cut by a foundation of the Period IV house, and, although there is no direct evidence, almost certainly dates from Period III. It is earlier than Period IV and contains pottery similar to the latest Period III material, coarse red ware with brown glaze. This layer covers the fill of gravel in the north moat of Period I and thus indicates that this part of the early moat was filled in by the end of the Period III occupation. The moats on the west and east sides had now stopped silting up but remained open, since the layers of gravel which fill them run over the Period III house.

South and west of Room 1 was a black layer with oyster shells. This gradually became a thin brown pebbly layer which spread over the whole of the Period II house, petering out some 40 ft. south of the Period III house.

As far as 19 ft. south of the porch there was a rough courtyard about 15 ft. wide, of flint, chalk and pebble (fig. 5, section L-M), which was covered by some dark occupation soil. This lay on top of the general accumulation over the Period II house just mentioned, and, while it may be of late Period III date, it may also have been a service road for the construction of Period IV, prior to the laying down of the courtyard.

#### PERIOD IV

In 1426 a licence was granted to the then owners 'to crenellate, enturret and embattle with stone, lime and 'brik' their manor of More'. That the result of this was the building of the Period IV house (fig. 6) is proved by the pottery from the building levels (fig. 12, 1-5) all of which is clearly attributable to the first quarter of the 15th century or earlier. This house<sup>1</sup> enclosed a large courtyard entered through a gatehouse on the south side. This entrance was flanked on the outside by two towers, probably in the form of semi-octagons. The moat was crossed by a wooden bridge supported on brick piers (*v. inf.* Appendix A). At the inner end extensive robbing had destroyed all traces of the drawbridge mechanism, though it was clear that brickwork extended right across the front of the gateway below road level.

A new moat surrounded the house from this time onwards; it was about 56 ft. wide on the north, west and east, but only 48 ft. wide on the south or front side. Except to the north where, owing to a gap in the clay dump, it was possible to dig a section (fig. 7, section S-T)

<sup>1</sup> A complete examination of this house was in no way attempted: enough was done to reveal its general plan and to show in what ways it had been altered and added to in after years. The whole question of the frontage on to the moat was rendered extremely difficult by the dumping of hundreds of tons of clay in 1937-39.



on the surface reached. The wall was then finished and offsets were left on both faces. Above these the wall was faced with dressed chalk blocks. After six courses of chalk the exterior was faced with brick in English bond<sup>1</sup>, laid on a string course of roof tiles. On the interior a slight offset corresponds with this level.

It should be noted here that the mortar of this west wall from below the pair of offsets (*v. inf.* fig. 24, samples 1, 2, 6, 7) is different from the mortar of the wall above (samples 3, 4, 5, 8). This may seem to suggest two periods of construction, but the section (fig. 4, section E-F) shows the only building level as a chalk spread on the inner side, sealing the foundation trench. The layers above this consist of dumped clay and gravel, containing early pottery, and spreads of trodden brick left during the building. No other wall was found with mortar similar to that from the lower part of this wall, neither was there a clean division at offset level. It seems certain that the two parts are of the same period, but sand from different sources was used for their mortar.

A layer of building rubbish was thrown on top of the gravel fill outside the wall and then the remainder of the spoil from the new moat was dumped here (fig. 4, section E-F) and against the walls of the new house. Under this dump in one place was a small black occupation layer, possibly the site of the builders' huts, in which was some pottery (fig. 12, nos. 1-5) and a spur (fig. 19, no. 24) datable to the first half of the 15th century.

Inside the building also, layers of clay and gravel were dumped to level up the site, and when this was partly completed the inner wall of the narrow western range of buildings was built on a foundation set therein. The mortar from this wall (sample 16) and from the upper half of the exterior wall is the same.

The northern wall was also on the line of an early moat, though here it had been filled in by the end of Period III. Here the new wall was deeply founded (its bottom was not reached) and continued at a width of 7 ft. 6 ins. for the whole length of the north side. It was, perhaps, founded on relieving arches.

The normal thickness for the walls above ground level was 2 ft. 6 ins. They were built of chalk rubble faced (fig. 3, section C-D) sometimes on both sides, sometimes, as in the gatehouse, only on the exterior, with brick in English bond set with mortar. This was normally yellow, but at the north-east corner where it was orange (samples 34, 37), this did not indicate any real difference. The wall facing on to the courtyard was buttressed on the north and south sides. Compared with the normal width, the west wall was narrow, being only 1 ft. 2 ins. wide above ground though set on a brick foundation more than double this, based on rammed chalk. The east wall of the courtyard was almost entirely destroyed by the rebuilding in Period V, but could have been similar.

It is difficult to estimate the width of the front range of buildings: the outer angle found at the base of the east side of the west gate tower may not represent the true line of the front wall, but may be several feet forward of its position, and connected with the drawbridge machinery. If this is correct, however, the range of buildings is 25 ft. wide. The base of the west tower of the gatehouse was of solid rubble masonry giving little indication of the walls above it.

The west range was narrower, only 19 ft. wide, but the east range seems to have been a little wider—23 ft.—although the destruction of the courtyard wall made it difficult to judge. What appeared to be the original junction was found in the south-east corner of the courtyard.

The northern range was 36 ft. wide and contained the principal rooms. That at the north-west corner was 48 ft. long and 25 ft. wide, was fitted from the beginning with a tile floor of which only the mortar spread (fig. 3, section C-D, Floor 1) remains and it may have been the Great Hall. The room to the east of it was filled with a great layer of black soil and bones and may have been the kitchen—it is certainly next to the later 'bridge over the backside where the kitchen stuff is brought in' (*v. inf.* Appendix A).

<sup>1</sup> The bricks measure 9 to 9½ × 4½ to 4¾ × 1¾ to 2¼ ins. and there are normally four courses to 11½ ins.

They are very sandy and friable, ranging in colour from deep to bright rose.

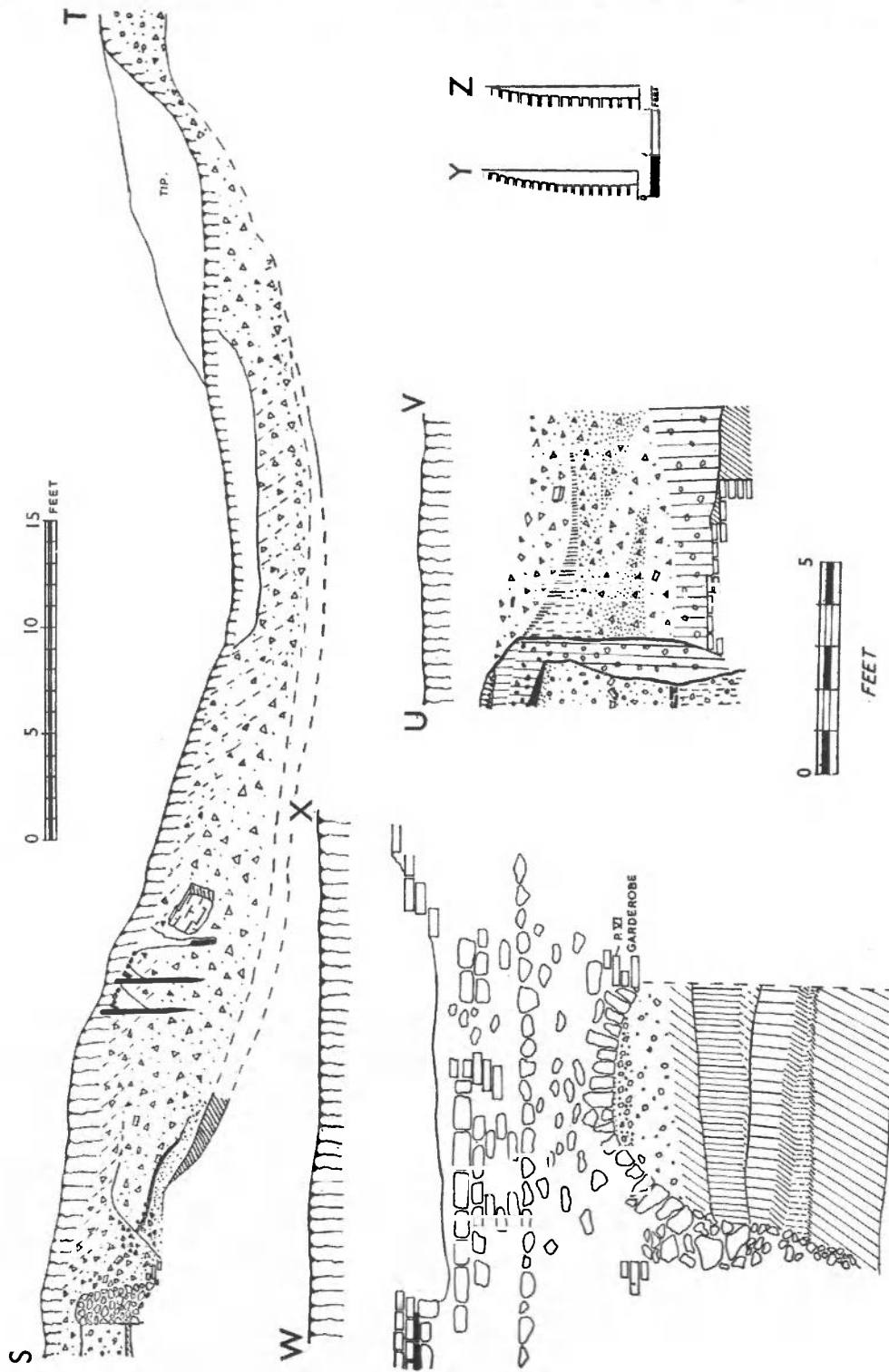


Fig. 7. Sections S—T, U—V, W—X and Y, Z

The remains of a possible corner turret at the north-east corner have been noted; farther down the east wall another wall of this date runs off to the east: this might be the foundation of one of a pair of interval towers between the two corner turrets.

At the north-east corner of the courtyard was a doorway leading into the north range from the east range over a threshold of squared stone blocks. This had an external arch of which the west base, 1 ft. 3 ins. square, was incorporated in the later west wall of the east range. The base may also have served for an arch in the east wall of the courtyard, for it is on the line of the corner revealed at the south end of the wall.

When the building of the house was finished, all the builders' rubble and some gravel from the foundation trenches was thrown into the area of the courtyard. It covered the mortar-mixing floors, the service roads and the remains of the Period III house, which, except for the eastern room, could have remained partly standing during much of the time of building, since nowhere, except on the east, was its destruction necessitated by the new building. It certainly was partly robbed, the roof tiles fell on to the floors and the rooms were filled with the kind of fine, loamy clay which occurs in pockets on top of the gravel: the result perhaps of the preliminary marking-out trenches for the foundations. Over all this was laid a courtyard of knapped flints (Pl. XIX, c and d), closely laid on a bed of fine greenish-yellow sand. That the courtyard was laid down last is shown by the section (fig. 3, section C-D) where it runs up against the wall and over the foundations. It was not laid early in the work, in order that it might not be destroyed by the builders' heavy carts. The pottery sealed by it is early 15th century in date (fig. 12, nos. 1-5).

The water supply for this house was carried in a wooden pipe (fig. 6), now decayed, but leaving a void 1 ft. 3 ins. in diameter (fig. 5, section L-M). It came straight from the gateway, but how it was brought in remains unknown for there was the drawbridge to negotiate; a gravity system must have been used—the source is up the hill side to the south—and the pipe taken down into the moat and up again into the house.

The words of the licence to build this house, and its general plan, should be compared with the much larger brick castle which was built at Herstmonceux in 1441<sup>1</sup>. There the plan is more elaborate, but in the main similar, though there was originally more than one court. The plan of the More like that of Herstmonceux seems derived from contemporary collegiate buildings; the More is indeed earlier than most of these, but is to be closely compared with the plan of Queen's College, Cambridge (1448). It is not impossible that the architect of the More was the same William Vesey who, it is suggested, may have been the architect at Herstmonceux. Henry, Bishop of Winchester, might have come into contact with Vesey who as a young man may, in the 1420's, have been attracting some notice at Henry VI's court; by 1437 he was carrying out commissions for the King at Sheen<sup>2</sup>.

A smaller brick castle, which was never finished, can be seen at Someries<sup>3</sup>, 2 miles S.E. of Luton, Bedfordshire. Here the gateway was 8 ft. wide and the courtyard 46 ft. from east to west. No moat had been dug<sup>4</sup>.

## PERIOD V

Warkworth refers to the manor 'of Moore whiche the saide Archebisshope (Neville) hade purchasshed and bylled it ryghte comodiusly and pleasauntly'. Neville's building was in the form of alterations which must have been made some time after 1460 but before 1470 when he was living there<sup>5</sup>.

<sup>1</sup> W. Douglas Simpson, 'Herstmonceux Castle', *Arch. Journ.* XCIX, 110 *et seq.*

<sup>2</sup> For a discussion of the collegiate influence and William Vesey see W. Douglas Simpson *op. cit.*, 118-120.

<sup>3</sup> O.S. Grid. Ref. T.L./119202. Plan in *V.C.H. Beds.* ii, 365.

<sup>4</sup> The bricks measure 9 × 4½ × 2 ins. and there are five courses to the foot. In essence the Someries plan is very similar to the More.

<sup>5</sup> *v. sup.* p. 139.

As far as could be ascertained the alterations were all to the east range. In the northern part of this range, where it meets the rear block, a cellar was inserted (fig. 6, and fig. 5, section J-K). The west wall of the east range was removed and the doorway into the north range blocked before the cellar (Pl. XXXc) was built into the corner formed by the outer east wall and the south wall of the north range. The west and south walls of the cellar were new, straight jointed against the older walls which were, however, now faced with brick down to the floor of the cellar 3 ft. 4 ins. below the courtyard; the straight joint was only to be seen, therefore, in the top surface where the walls had been robbed<sup>1</sup>. The cellar was roofed by a quadripartite vault of brick; there may have been ridge ribs to east and west, but there were none to north and south. The ribs of the vault were built of semi-octagonal bricks (fig. 22, no. 9A, B) rendered with plaster and the arching effect was achieved by thickening the mortar towards the wall thus causing the ribs to curve over as required. They were not bonded into the wall but were carried down through the mortar floor on to the build-up of broken brick, flint and chalk below (fig. 7, Y, Z). Part of the vault still remained in the two southern corners, curving about 4 ins. over towards the centre.

The mortar floor may have been a bedding for tiles, but none were found in position. In the east wall there was a window (fig. 5, section J-K), set in the Period V facing, with a sill sloping steeply up towards the outside ground level. This was later blocked when an additional wing was added in Period VI.

The mortar (*v. inf.* p. 194) of the cellar walls and the new brick facing was hard and white (sample 36), different from the mortar of the Period IV walls behind the brick facing (sample 37). The cellar mortar (sample 36) and the mortar from the reconstruction of the north-east corner tower form together a group (group 'd') on their own.

The west wall of the cellar was strengthened by the addition of a thin outer wall which, although of the same build was divided from it by a space of 1 ft. 9 ins., which went down 1 ft. below courtyard level. This outer wall was only 1 ft. 5 ins. thick, and its purpose is not entirely clear, for the vault of the cellar when complete must have risen some 6 ft. above the floor; including the thickness of the vault, this would mean that the floor of the room above would be about 4 ft. higher than the level of the courtyard. It is possible that this thin outer wall was built to take the weight of the floor off the vault and also to preserve a straight frontage on to the courtyard, where the line of the cellar wall was set back from the original facade.

The vaulting of this cellar is very different from the King's wine cellar at Hampton Court where the ribs spring from abutments near roof level to form typical Tudor arches. The vault there is of brick on stone piers. It seems that this cellar at the More is considerably earlier and also almost certainly earlier than Wolsey. To fit in with the documentary evidence it must then be ascribed to the period of George Neville (1460-1470), and this date fits well enough with the type of vaulting.

At the north-east corner of the Period IV building the wall running off to the east was levelled, and a facing of brick with lemon yellow mortar built across it from north to south on the line of the outer edge of the east wall. At the same time the wall on the wide northern foundation was levelled to just above ground surface and another wall with lemon yellow mortar built on it: this had been robbed away except for a thin spread of mortar. Also at this time the rectangular indentation in the Period IV corner (probably originally below the floor of the corner tower) was filled in and strengthened with a block of brickwork with yellow mortar; to the east a deep pit was dug which was full of rubble—this was not excavated, but may have been the top of a garderobe pit.

It is therefore suggested that this corner tower was reconstructed and enlarged to include a garderobe: this involved the alteration of part of the Period IV north wall and the abandonment of the supposed south wall of the tower. The mortar from this reconstruction is nearly

<sup>1</sup> The walls of the cellar still stood 20 courses, just over 4 ft. high. There were 4 courses to 10½ ins.,

compared with 4 to 11½ ins. in Period IV.

the same as that from the cellar (group 'd', samples 35 and 36 respectively). On this basis alone the reconstruction is dated to George Neville's period, although it is possible that so large an alteration would only have taken place when the entire east wing was remodelled in Period VI.

The only other construction attributed to this period is the brick and tile conduit which led from the gatehouse to the suspected area of the conduit head in the courtyard (fig. 5, section L-M) replacing the wooden pipe of Period IV. The trench for the conduit was first dug along the line of the pipe; this was abandoned, presumably because of subsidence, and the conduit was laid in a trench dug to the west. It had brick walls, still standing three courses high, set on a floor of glazed tiles, mainly yellow with some brown and green. A further row of bricks on top of these three courses was set back and occasional spaces were left in this row, 4 ins. wide, which may have taken wooden cross pieces. On such cross bars planks could have been laid to form a continuous inspection cover. The conduit cannot have been roofed with brick, since the space available between the top of the walls and the surface of the courtyard is not sufficient. The channel (1 ft. 5 ins. wide) rises 1 ft. in its journey between the gateway and a point half way to the site of the conduit head. Under the gateway where the conduit lies deep down it may have been entirely roofed by corbelling the bricks; for here traces of such a method remained, although fragments of mortar bearing impressions of wood lay in the conduit at this point. There was no silt in the conduit. There is a reference to plumbers 'forcing of the pipes over the moat'. The pipes must have been carried in this conduit and the water piped across the moat; once again there is the problem of passing the drawbridge. If the solution is that the pipes went down into, and through, the moat, then the system must have worked under gravity and the conduit must therefore have contained pipes.

The tiles flooring this conduit are normal floor tiles, but of a size known at the More only in this construction: the floor tiles associated with the Period IV building are  $4\frac{1}{2}$  ins. square and 1 in. thick; those normally found on the site are  $9\frac{1}{2}$  ins. square and  $1\frac{3}{8}$  ins. thick and date from the early 16th century. Thus the conduit tiles,  $8\frac{3}{8}$  ins. square and 1 in. thick, are placed in point of size between the two extremes and this may have a chronological significance. If so, the only building which they fit is that of George Neville between 1460 and 1470.

It is probable that the main plumbing system was also laid at this time. All that remains of it are the trenches from which the lead pipes have been robbed (fig. 6). They all converge on to the west centre of the courtyard to meet the conduit and it is in this area that the *age*, or trough, must have been located. One pipe—that from the south end of the west range—seems to have joined the conduit just inside the courtyard. A gutter of large flints, part of the original courtyard, led from the area of the trough to the south-west corner, where, presumably, it met a drain running into the moat.

## PERIOD VI

It is known that Wolsey did some building at the More in the years after 1521. Since the extent of Henry VIII's work is fully known, it is clear that the remaining large scale alterations must be attributed to the Cardinal. The records of this have entirely vanished, except for the one mentioned above<sup>1</sup>, and a persistent tradition. The pottery however makes it certain that the additions to be described belong to the early 16th century. These consisted of the building of new wings on the east and west sides of the house in the space left by the Period IV building, and the addition of another range of buildings north of the earlier north range.

Along the north of the site and continuing west across the area of the new west wing was a foundation trench for a wall which had been entirely robbed out. At G-H (fig. 6, and fig. 5, section) it ran over the Period I moat. Further west, at Q-R, the gravel and rubbish fill of the foundation trench contained one sherd, of hard red ware with a buff surface and a spot of brown glaze, which at the earliest is of the first quarter of the 16th century. Before

<sup>1</sup> p. 139.

the wall was built this area, which must have been covered with turf and material from the Period IV house, had been cleaned down to the top of the gravel dumped in 1426.

North of this wall and parallel to it, the original sloping bank of the moat was cut back to take a wall of chalk rubble faced with brick (fig. 7, section S-T). The mortar from this wall (samples 13, 14) is the same as the mortar from Garderobe Pit I in the west wing (samples 10-12, 18) also dated to Wolsey's time by constructional evidence (*v. inf.*). Half way between these walls was a round, straight-sided pit 2 ft. 9 ins. deep and of equal diameter, which although never used and filled in with clay and brick to form a soak-away, may have originally been dug to take a great post for the roof. It contained one 16th century floor tile.

In the same area, lying on a rough floor of scattered roof tiles, was a thin layer of black soil with many bones of ox, sheep or goat, pig, rabbit, hare and cod, and some 16th century pottery together with a very late Bellarmine sherd of the mid 17th century. It probably indicates a kitchen.

A drain of bricks set in white mortar (fig. 5, section G-H) ran north of the Great Hall area towards the moat in a north-easterly direction and contained a little black silt. It had been roofed by corbelling and was probably built later than the wall immediately to the south, but its period is uncertain.

Half way down the west wall of the Period IV building a pit, 13 ft. square, was dug down 6 ft. through the gravel tips (*v. sup.* pp. 151-2) to just above the silt of the east moat of Period I. Into this pit was set a brick garderobe (No. 1, Pl. XXA) its walls straight jointed against the earlier wall. The pit itself (fig. 7, section U-V) was cut down through a thin spread of black occupation which overlay the mortar spread connected with the building of the new west wing (*v. inf.* p. 158). Traces of mortar from the robbed garderobe walls rose 4 ft. against the earlier, Period IV, wall face; the garderobe probably rose high up the wall with chutes leading into it. Into this pit was built a square brick-lined garderobe with drainage outlets in three sides, its east wall, parallel to, but nearly 2 ft. from, the earlier wall, had been built to ensure that the gravel below the relieving arch (*v. sup.* p. 151) stayed in place. It is clear from sections dug across the garderobe that the builders, on finding the arch, did not attempt to cut down in front of it, but sloped the gravel away from it. The cross wall may only have been built high enough to hold back the layers below the arch (only the bottom three courses were bonded) for although in Phase I this wall marked the limit of the pit, in the second phase the silt ran over it.

The facing of brick in English bond was built first, then the area behind was filled in as far as possible with coursed brickwork, finishing up the remaining gap with rubble and mortar. Since the sides of the pit overhung at least 4 ins., the walls of the garderobe were probably thinner at the top. The bricks measured  $9 \times 4\frac{1}{4} \times 2\frac{1}{8}$  ins. and there were four courses in  $10\frac{1}{4}$  ins. They were a mellow rose red in colour. The mortar (samples 10-12, 18) was the same as that of the moat wall (samples 13, 14). The garderobe floor was a thin spread of mortar, on which lay a peaty layer of wood and other organic remains, together with some small fragments of cloth. This was all that remained of the silt from the first phase of use.

Due to some change in plan the first construction was modified by dismantling the cross wall down to the bottom course and blocking the drainage outlets with walls one brick thick, unbonded with the main structure. Many of the bricks were broken and re-used, probably from the dismantled cross wall.

The silt layers of the second phase were thick and interleaved with spills of lime; they appeared to have been shot against the west side of the pit. They contained seeds of raspberries, currants, plums, cherries and grapes, remains of hazel, oak, beech and ash, bones of ox, sheep or goat, roe deer, four distinct individuals of fallow deer, rabbit, dog, cod or haddock and pike, wooden objects (fig. 18, nos. 27, 28) and pieces of oak, birch and ash, leather (fig. 23, no. 2), and pottery (fig. 12, nos. 16-19). The finds indicate a late 15th or early 16th-century date and the pit may confidently be ascribed to Wolsey's alterations.

The gravel spoil from the pit was filled back behind the brickwork and spread along the ground to the north (fig. 7, section U-V). It covered a series of mortar spreads in which were



the marks of long beams, and three post-holes. The beams were 8 ins. wide and extended some 32 ft. northwards parallel with the west wall of Period IV. The post-holes were 1 ft. in diameter and 1 ft. 11 ins. deep. These features may be traces of the scaffolding erected here during the construction of the new wing. Since they lie directly on top of the gravel dumped in Period IV, this area must have been cleared of topsoil before any work was begun. In one place a pit was dug and filled with building rubbish.

On top of this gravel dump was a layer of occupation earth which filled a small pit near the garderobe and continued as far north as the east-west wall of Period VI (*v. sup.*). Taken in conjunction with the garderobe, the scaffolding traces (which are more likely to have been outside a building than in it), and the cobbled surface of Period VIII, an outside feature, it seems likely that this area represents a long, narrow courtyard between the new wing and the older one, closed in at each end by the new buildings. This is a common feature at Hampton Court.

At the south-west corner of the site a further part of the foundation trench for this new wing was found. Outside it was a chalk rubble wall, the purpose and dating of which was obscure.

In the north-east corner of the site, a wall probably of this period was found 8 ft. below rubble near the edge of the moat. Half way down the east side of the moat a wide brick retaining wall was found, set in a cutting in the gravel slope. At this point a second wall ran eastwards into the moat, laid in part on a foundation of oak baulks  $3\frac{1}{2}$  ins. thick, and in part on the natural gravel; it was of rather rough construction but improved outside the line of the retaining wall. This was probably part of a projecting tower half way between the north-east and south-east corners of the new wing which seems to have been added to this side of the house. On the south side of this tower was a re-entrant, 4 ft. deep, into the wall of the moat, possibly the bottom of a garderobe chute.

This wall and tower is dated to Wolsey's period on account of its likeness in construction to the brick bridge pier, also founded on oak baulks, which was built midway along the inner lip of the north moat (Pl. XXB). The two baulks on which the pier lay measured 2 ft. by  $5\frac{1}{2}$  ins. and  $7\frac{3}{4}$  by 5 ins.; their length is unknown. The pier was built in English bond of bricks  $9 \times 4\frac{1}{2} \times 2$  ins. Its mortar (Sample 15) is different from any other, and it is clearly later in date than the retaining wall against which it was set. It was Wolsey who altered the direction of the main road<sup>1</sup>, and it may be supposed that this 'bridge over the backside' was built at that time. No entrance seems to have been made in, or through, the north range of Period IV, at any rate at ground level.

It is fairly certain that at this time the east wall of the courtyard was strengthened by the addition of a 3 ft. thick wall along its exterior. The narrow outer wall by the cellar was also rebuilt.

In the west half of the gatehouse a partition was built, later in date than the rest of the structure, dating from either Period VI or Period VII. It was however built on good foundations, whereas the Period VII partitions were not. The room in the east half of the gatehouse was floored with the later type of glazed floor tiles ( $9\frac{1}{2}$  ins. square and 1 in. thick) about this time: some few of them still remained around the edges of the room.

## PERIOD VII

This period is one of minor alterations and probably dates from the time of Henry VIII (*v. inf.* Appendix A). The new west courtyard of Period VI was divided up by two partitions underpinned with brick (fig. 4, section Q-R) and constructed in a shallow foundation trench. Between them was a yellow clay floor.

Along the western edge of the main courtyard a similar underpin of brick was laid which was, perhaps, the base for a covered walk and inside this, to the west, were three floors. Along the east side of the main courtyard a walk of brick was laid down in place of the flints,

<sup>1</sup> *v. sup.* p. 139.

At least two soak-away pits were dug around the edge of the courtyard and filled with loose brick. In one, that on the east, a roughly mortared drain of bricks still remained running towards the centre of the soak-away. They probably received rainwater from the gutters.

The only other addition of this period which was discovered was the garderobe and drain No. 2, (Pl. XXD) inserted into the Period VI east wing. The garderobe pit itself (fig. 5, section J-K) measured only 2 ft. 6 ins. square and was built in an irregular English bond of bricks  $9\frac{1}{2} \times 4\frac{1}{2} \times 2$  ins. The walls probably rose much higher than the 4 ft. that survive. The floor was brick, as was that of the drain, but it was covered by 2 ins. of very hard set mortar and rubble. The drain itself had probably been vaulted, for the gravel sides of the robbing trench hung right over the walls. The out-fall was through a gap cut into the re-entrant of Period VI. The sides and base of the gap had been rendered with mortar and there was then a 6 in. fall on to gravel. The floor of the garderobe and drain, on which lay some black silt devoid of finds, fell 8 ins. on its way to the moat.

Immediately to the west of garderobe 2 was a rough foundation of brick and mortar, which was traced for some distance to the south: it may have been a support wall down the centre of the Period VI east wing, as it is mid-way between the two walls. From its construction—it is set in a 6 in. deep foundation trench—it may possibly belong to Period VII. Its mortar, also, is similar in colour to that of garderobe 2.

#### PERIOD VIII

After the era of prosperity under Henry VIII the house began rapidly to decline. By 1566 it was in a sad state of repair, and by 1598 it was in ruins; it was destroyed between 1655 and 1661<sup>1</sup>. During the century before the destruction the house was occupied by squatters, who were well established by the time the roof of the Great Hall was sagging. They lived mainly in two parts of the house: first in the area of the Great Hall, later in the gate house and near the south end of the Period VI western courtyard. When they moved from the Great Hall it seems to have been because the building was by then too dilapidated to afford any protection; the gate-house still stood, for it was perhaps the strongest part of the house, then in ruins. There these people continued to eke out an existence until the house was destroyed; around the foot of the tower the rubbish of their occupation accumulated on the flints of the courtyard.

In the Great Hall (fig. 3, section C-D) the tiles were robbed from the first mortar floor on which they had been laid in 1426 and perhaps relaid more than once. For a while occupation debris accumulated on the mortar, but then a new bedding of coarse yellow mortar was put down on which a floor of tiles and bricks was laid. The tiles were put in first, many of them the wrong way up and re-used from an earlier floor. Next to them a hearth of bricks was made, with a brick-floored area around it (Pl. XXIA). Against the south wall of the hall the floor was made of bricks set on edge, or of large tiles, 1 ft. square and 2 ins. thick.

On this floor a layer of occupation accumulated but was soon cut through by a gully, at the north end of which was a small sump. South of the gully there was a post-hole, 10 × 9 ins. and 16 ins. deep. The post had been set in a round pit 20 ins. in diameter (afterwards filled in) and inclined at an angle of 80 degrees to the north. It must have supported the already sagging roof, the rainwater from which drained away down the gully. At this time there were two other small pits in the floor; one, next the south wall, contained the lead window ventilator (fig. 20, no. 11); the other, in the centre of the tiles, was empty.

It was not long before the gully silted up and the post was taken out; black earth then accumulated over the gully and post-hole. Over this a layer of bright yellow mortar was laid down, soon after which the entire area was refloored with yellow clay. On this the occupation only lasted a short while.

<sup>1</sup> *v. sup.* p. 141.

About the time the rainwater gully was in use a gap was cut through the south wall of the Hall, 2 ft. from the south-east corner, removing all the brick facing and chalk rubble core down to the top of the chalk foundation. This gap was on the line of a trench which continued north through the Hall and south towards the area of the conduit head. It thus almost certainly dates to the time when the lead water pipes were being robbed, possibly just before 1600; since the wall was carefully blocked up again with bricks, floor tiles, and portions of moulded bricks (fig. 22, no. 10D) the Hall must therefore have still been occupied. Over the filled-in robber trench north of the wall the debris of the final occupation of the Hall continued to accumulate.

In the room immediately north of the Great Hall was a large rubbish pit (fig. 5, section G-H) which belonged to this period. It was filled with ash and kitchen refuse and sealed by a layer of sand and gravel. The pottery from this complex (fig. 13, nos. 9-15) dates to the second half of the 16th century. By the end of the century the squatters had moved to the gate-house.

The silt in the moat on the north side of the house (fig. 7, section S-T) was all late, to judge from the pottery found in it (fig. 13, nos. 1-8). It seems therefore that the moat was periodically cleaned out before the desertion of the house c. 1555 and that this silt is accumulation of the years after that date. It contained however none of the 'metallic' wares (*v. inf.* p. 169) associated with the Great Hall layers, and probably dates to about 1575 or a little later.

After this time there was some demolition and the first layers of rubble and mortar fell on to the berm of the moat and over the silt. At once occupation on top of this continued (fragments of the same pot were found above and below the rubble) but only for short time; the collapse had made that part of the house uninhabitable.

The squatters then moved to the gate-house, possibly after a period of total desertion, for the gate-house pottery is almost all of the red 17th-century type with yellow glaze, a sudden change from the great hall pottery. First the conduit was robbed and the rubble from this thrown on to the courtyard: this is probably contemporary with the robbery of the pipes referred to above (p. 156). Over this rubble and all the south-west corner of the courtyard lay a thick layer of grey, gritty earth in which was a fair amount of early 17th-century pottery (fig. 14, nos. 1-13). At this time a soak-away pit was dug by the gate-house, like those of Period VII (which may also possibly date from this time, though no trace of Period VIII occupation was found near them). It was filled with loose brick and had a rough, mortared, brick drain which led the rainwater or sewerage to the centre of the pit. Over this general squatter occupation a layer of pebbles was laid, but about this time the squatters must have left, or the house have been demolished, for there was no further occupation.

The south half of the western, Period VI, courtyard also shows signs of occupation in the second squatter phase when a rough layer of cobbles was put down, into which two small pits were dug, one containing an ox skull. Over these pits and on the cobbles was a thin layer of occupation earth, containing some early 17th-century pottery, including part of a colander of red ware with yellow glaze (fig. 14, nos. 14-16).

### THE DESTRUCTION

Between 1655 and 1661 the house was demolished, the walls being robbed to floor level in most cases, sometimes below. The west wing of Period VI suffered most, for the foundations were completely grubbed out, but the frontages on to the moat were badly robbed too, especially in the area of the gatehouse. The rubble filling garderobe 2 was full of black dirt containing mutton and chicken bones and whelks; it was probably used as a rubbish pit by men engaged on demolition. The line of post-holes in the west side of the courtyard may represent props used in this work. In the section cut through the north moat (fig. 7, section S-T) it was observed that the walls had been knocked down, their rubble falling into the moat, and that then a robber trench had been dug along the front of the wall to remove the brick facing.

In the area of the entrance bridge on the south side a causeway of rubble was left, by which alone the moated area was entered until the filling of the moats in 1937-39.

Sometime late in the 17th century a pebble roadway was made through the centre of the site (fig. 3, section A-B; fig. 5, section L-M). Some of this overlay robbed walls and in it were several pieces of sack bottle (*post* 1650). It was possibly at this date that the site was laid out as an orchard: one tree stump hole contained a piece of Staffordshire comb ware (1700-1750), a clay pipe (fig. 18, no. 22), and a fragment of salt glaze ware.

Sometime later, possibly in the late 18th century, a wooden structure was erected on the south side of the north moat (fig. 7, section S-T). Part of a flight of steps with cobbled treads and wooden rises, portions of the latter being found *in situ*, led down towards the moat. The well preserved pointed timbers, three rows of which were found (6 × 4 ins. and as much as 5 ft. long) had been driven into the rubble at 2 ft. intervals from the bottom of small pits. Some pottery, not very closely associated with this work, being in the layer above it near the topsoil, seems to be 18th-century in date. The purpose of this structure is not at all clear: the depth to which the posts had been driven suggested a heavy superstructure. No 18th-century map shows any building here, but it is possible that it may have been part of some farm building.

From then on the site was little used. As late as 1935 brickwork could be seen in many places, especially by the moat, remains of the south-east corner tower being quite prominent.

## THE FINDS<sup>1</sup>

### POTTERY

General Discussion by J. G. Hurst

The sequence of stratified pottery from the More is particularly valuable; the dating of Periods I-III cannot be fitted precisely into the historical record but Periods IV-VIII can be closely linked with the documentary evidence. This is most important as it is the dating of late medieval pottery which is most doubtful. For the first three periods the dating has been determined by comparison with the sequence at the moated manor of Northolt which shows a similar development during the 13th and 14th centuries.

The dating of *Period I* depends entirely on evidence from other sites. The cooking-pots are made of a coarse, well-fired, grey ware tempered with large quantities of calcite grits. This ware has a local distribution in north Middlesex and Hertfordshire. It is found at Northolt<sup>2</sup>, Berkhamstead<sup>3</sup>, Otterspool near Watford<sup>4</sup>, and Elstree where there appears to have been a kiln site<sup>4</sup>. At Northolt this ware is found in very large quantities in period IE which appears to date after 1230, when there was a change in ownership of the manor, and it is sealed under layer II which contains coins of the first half of the 14th century. It is suggested, therefore that Period I at the More dates to the last half of the 13th century. The forms are suitable for such a date and may be closely compared with pottery from Bungay Castle, Suffolk, dating to the end of the 13th century<sup>5</sup>. Besides this well-fired ware there are a few sherds of much rougher ware which closely compares with that from Period ID at Northolt, which dates from about 1150 to 1230. There are no sherds of Saxo-Norman ware imported from East Anglia at the More nor any of the local early 12th-century shelly wares, both of which occur at Northolt. It is therefore suggested that these sherds at the More date to the last half of the 12th century and the first half of the 13th century. This fits in well with the historical evidence as there is no mention of the More in Domesday but by 1182 it was occupied (see p. 138). Fig. 8; 3, 8 and 11 are the most certain early sherds. Out of 338 sherds found in

<sup>1</sup> The majority of the finds has been deposited in the British Museum. A representative selection has been retained in the Merchant Taylors' School Museum.

<sup>2</sup> *Archaeol. News Letter*, 3 (July, 1950), 37; 3 (Mar., 1951), 149-50; and 4 (Mar.-Apr., 1952), 111-2.

<sup>3</sup> Sherds found in 1956 during the building of a new post office.

<sup>4</sup> Note forthcoming in the *Trans. St. Albans & Heris. A. and A. Soc.*, 1961.

<sup>5</sup> *Suffolk Inst. Arch.* XXII (1936), 334-8.

Period I contexts only 26 were glazed. The decoration of these sherds is typical of the late 13th century, and the rouletted decoration (fig. 9, 21 and 22) is common in the Oxford region whence these jugs apparently came<sup>1</sup>.

The *Period II* pottery is similar to that from Period I in form, but the ware is becoming much finer and sandy instead of gritty. Now for the first time a few sherds of cream ware, sometimes green glazed, occur. These come from the Surrey kilns and show the start of a change in emphasis which becomes common in the 14th century, when the local coarse wares are replaced by mass-produced pots traded long distances. During this phase the local wares continue but are gradually replaced by the imported wares from Surrey. At Northolt this same change occurs in Period II and is dated by coins of the first half of the 14th century. It is unfortunate that no coins were found at the More to confirm the dating but it is suggested that Period II at the More is co-terminous with Period II at Northolt and dates to the first half of the 14th century. This fits in with the historical evidence at both places as there was a change of ownership at Northolt in 1346 and at the More in 1364. It seems reasonable to associate the end of Period II at both sites with these changes. The making of cream Surrey ware and its trading to London was once thought not to have started until the middle of the 14th century but recent finds, such as the jug waster from Sutton<sup>2</sup>, show that this ware was already being made at the close of the 13th century and being taken to London<sup>3</sup>.

In *Period III* the hard sandy cream ware from the Surrey kilns predominates. Excavations in the City of London produce a great deal of Surrey pottery and by about 1350 it appears to predominate there. As, for example, at an oven excavated at the Tower of London dated by coins to c. 1350<sup>4</sup>. At Northolt Period III dates from 1346 to 1370 when there is documentary evidence of buildings being pulled down. This level contains Surrey ware only. At the More Period III continues until 1426, so it is important that this ware occurs in profusion at Northolt before 1370; this suggests that Period III at the More started by 1366 and perhaps earlier. Also at both Northolt and the More a very hard red ware with a pimply surface occurs. It lasts throughout the 15th century at the More but again was in use at Northolt before 1370. Fig. 11, 5 is a typical Surrey ware jug of a type usually associated with the first half of the 15th century. It is valuable, therefore, to have this example dated before 1426. Thumbed bases survived on certain types of pot from Surrey until the late 14th or early 15th century, fig. 11, 1 and 4.

There is little local pottery with which that from *Periods IV* to *VIII* may be compared. This is, therefore, in many ways the most important part of the series as it forms a valuable stratified sequence which is different from both that in London and in East Anglia. There are none of the typical London forms with a bib of glaze on the front nor any of the East Anglian white painted or sgraffito forms. The hard red ware which appears to predominate in the 15th century is typical of the East Anglian wares of this period without decoration, which start about 1350. It is however too early to identify the source of this ware. It appears to replace Surrey wares outside London in the 15th century. The 15th and 16th century jugs have a characteristic rim slightly everted and sloping outside. It is of interest to see the bifid rim (fig. 12, 6) and the bung hole (fig. 12, 16), usually regarded as 15th century features, in a context of the second quarter of the 16th century, Period VI. The Cologne stoneware (fig. 12, 12) confirms the dating of this group. The pottery from 1550-1650 (Period VIII) provides a very useful series for this much neglected period.

<sup>1</sup> *Oxoniensia* IV (1939), p. 102; VII (1942), p. 72, 5, 6 & 8.

<sup>2</sup> *Surrey Arch. Coll.* LII (1952), 83-4.

<sup>3</sup> *Ibid.* & *Brit. Mus. Quart.* 13 (1939), 37-8.

<sup>4</sup> Information from Mr. G. C. Dunning.

## POTTERY

PERIOD I, 1250-1300

*From the moat silt:*

- FIG. 8. 1. Large open bowl of grey ware with flint grits; sharply everted rim, beaded inside, angular shoulder.  
 2. Large bowl of dark grey ware. Flint grits; square stabbing on the inside of the thickened everted rim.  
 3. Cooking pot rim. Coarse grey ware, pink exterior surface, large flint grits and pitting due to weathering out of the grits. (Early 13th century).  
 4. Cooking pot rim. Smooth grey ware, rim with exterior concave bevel.  
 5. As above (4), grey soapy ware with grits.  
 6. As (5).  
 7. Small open bowl, coarse grey ware. Angular knife trimming on outside.  
 8. Cooking pot. Sandy grey ware, pink inner surface; uneven fingering on upper rim.  
 9. Jug rim. Red ware with grey core, flint grits. Upright rim with interior bevel.  
 10. Fragment, fine cream ware with good olive green glaze and lines of raised cable decoration.

*From the general occupation:*

11. Cooking pot rim. As (3) but more pitting.  
 12. Sagging base of jug, the angle knife-slashed. Buff-red ware with traces of green glaze.  
 13. Bowl rim, sharply tooled outer flange. Coarse gritty reddish-brown ware.  
 14. Large open bowl. Grey ware with a few grits; sharply tooled flat-topped rim.

- FIG. 9. 1. Open bowl as above.  
 2. Rim, brownish grey ware. Well-fired, sharply everted rim, interior bevel.  
 3. Rim, coarse gritty grey ware.  
 4. Rim of jar, simply everted. Grey ware coated with soot on outside.

*Period I material dumped from the cleaning of the moats at the beginning of Period II:*

5. Rim of small jar. Grey ware, everted rim.  
 6. Jug rim. Grey ware; flat-topped everted rim with slight beading, and finger-pressed cordon below.  
 7. Rim of small jar. Grey ware, interior bevel. A similar rim slightly thicker was not illustrated.  
 8. Jar rim. Coarse soapy black ware with white grits. Interior bevel.  
 9. Large open bowl. Grey-buff ware, slightly soapy. Everted rim with bevel on top surface.  
 10. Open bowl. Grey ware with black surface. Rim has sharp inner edge to interior bevel.  
 11. Cooking pot rim of sandy grey ware. Heavy, roughly fingered top.  
 12. Rim, grey ware; everted and squared outside.  
 13. Cooking pot rim. Coarse grey pitted ware; flared rim. (Early 13th century).  
 14. Cooking pot rim. Smooth grey ware; everted rim roughly trimmed inside.  
 15. Jug. Light buff ware with flint grits. Handle deeply thumb-pressed, each impression stabbed at the base.  
 16. Jug, grey ware. Flanged rim with stab mark on upper surface of handle where it joins rim.  
 17. Jug. Brownish-red surface and grey core, hard sandy ware. Sharply tooled angular rim.  
 18. Handle. Grey ware; open stab-marks.  
 19. Fragment. Grey ware with a few grits; combed decoration.  
 20. Handle. Sandy pink-buff ware with olive green glaze; deep stabbing.  
 21. Fragment with spring of handle. Ware as above, deep olive green glaze. Decoration: slashing and square rouletting, and the handle jabbed with a round point.<sup>1</sup>  
 22. Ware as (21), yellow-green glaze, square rouletted decoration.  
 23, 24. Ware as (21), olive green glaze with cable decoration. (This type is common in the Oxford region and has been produced at the Brill kilns).

*Type and ware of Period I, from the build-up levels of the Period IV courtyard:*

- FIG. 10. 1. Bowl. Light brown ware; everted rim hollowed inside.  
 2. Flanged bowl, grey ware.  
 3. Cooking pot. Buff-red sandy ware; flared rim with internal bead.  
 4. Cooking pot, grey ware. Flared rim with slight interior bevel.  
 5. Jar. Grey ware; thickened rim.  
 6. Jar. Grey ware with flint grits; everted rim with interior bevel.  
 7. Jar or bowl. Smooth buff-grey ware.  
 8. Cooking pot. Coarse sandy grey ware; frilled rim.  
 9. Small jar. Smooth grey ware with internal beading.

<sup>1</sup> cf. example from Cherry Hinton, Cambs. *C.A.S.*, XLVI pp. 27-8, fig. 1a.

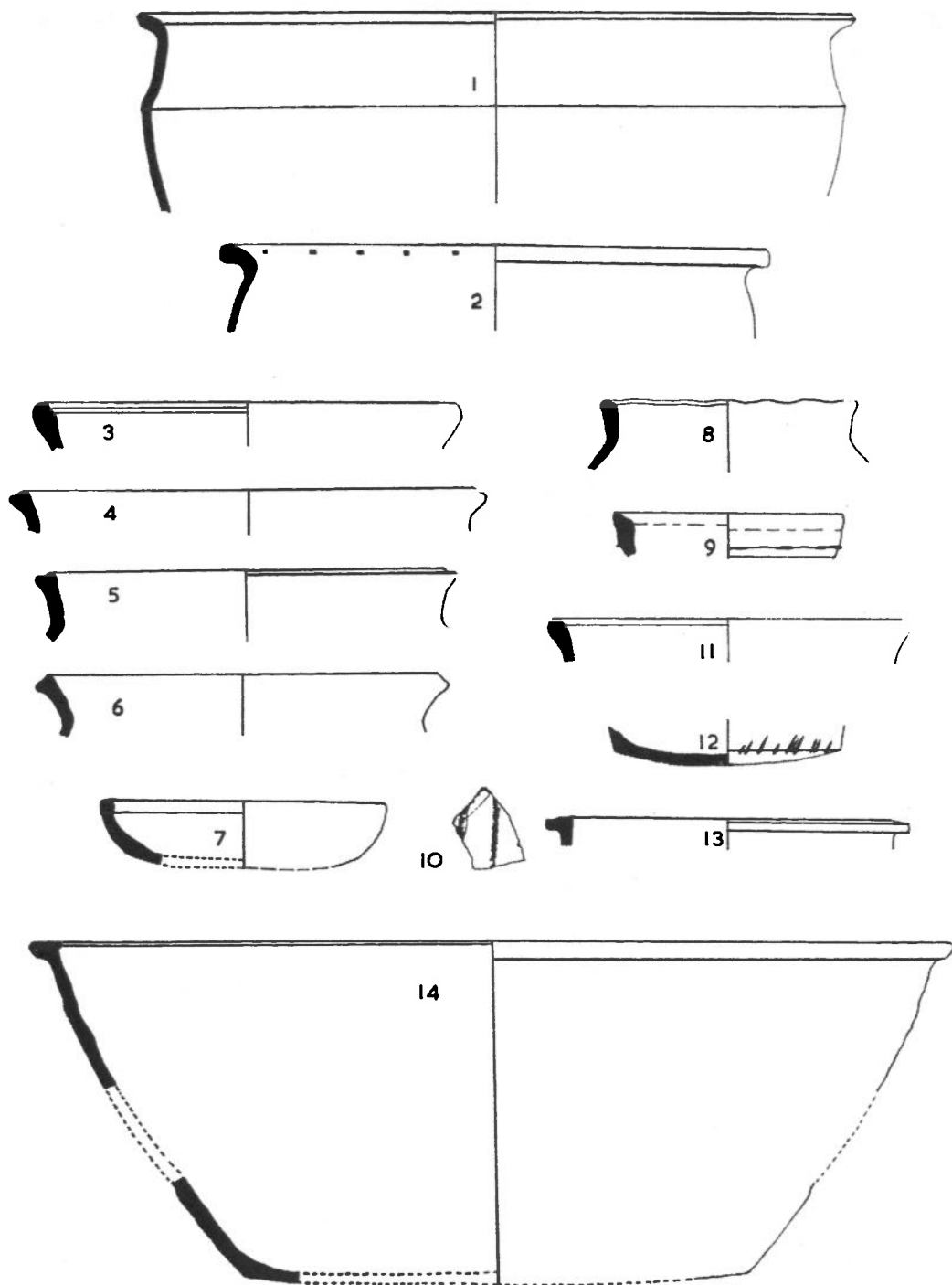


Fig. B. Pottery from Period I, 1250—1300 (4)

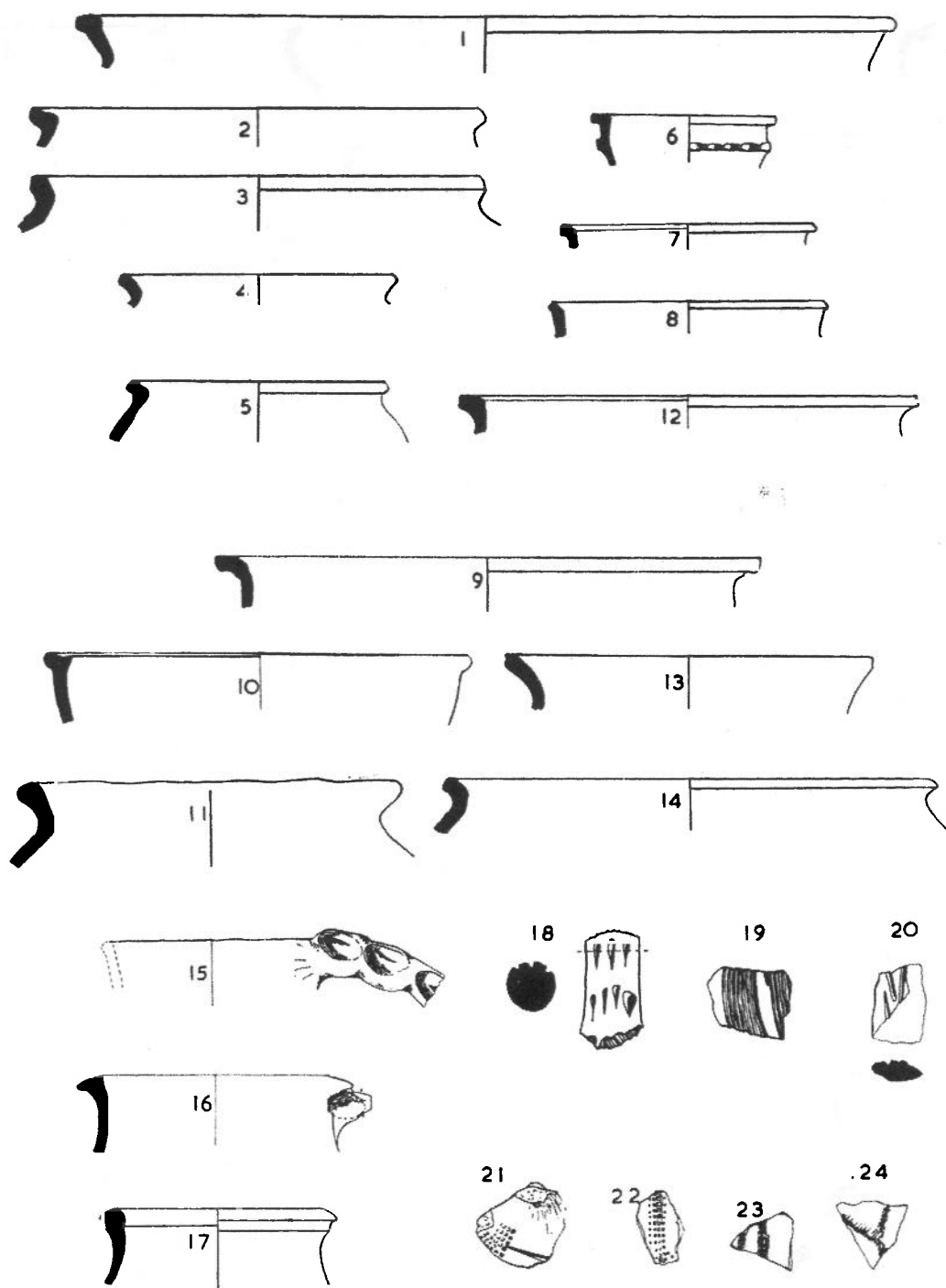


Fig. 9. Pottery from Period I, 1250—1300 ( $\frac{1}{4}$ )



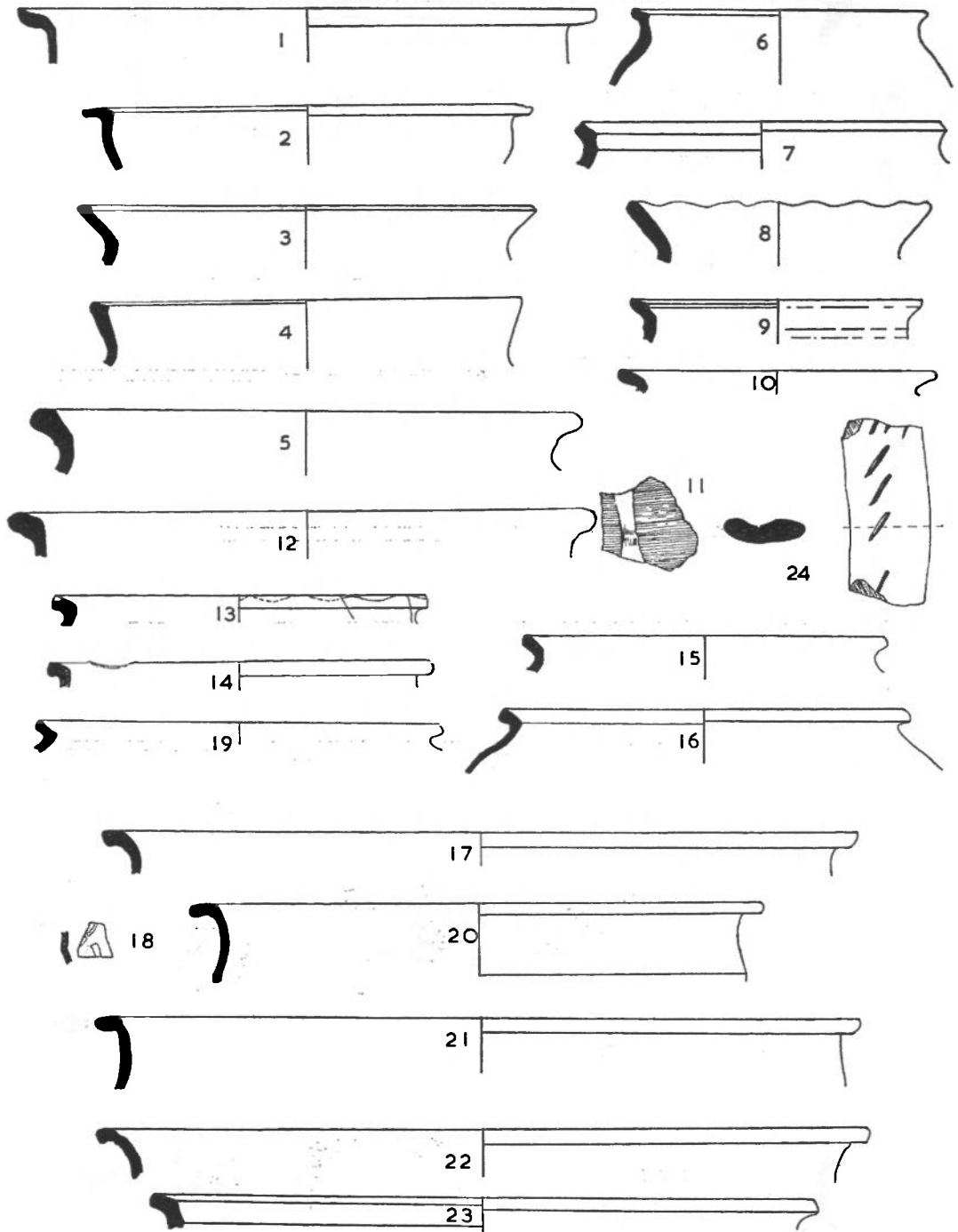


Fig. 10. Pottery from Period I, and from Period II, 1300—1350 (4)

## PERIOD II, 1300-1350

*From the gravel fill of the Period I south moat:*

10. Jar. Buff ware; simple everted rim.
11. Fragment, grey ware with surface lightly combed. Applied strip decoration.

*From the occupation of Floor 2 (fig. 3, section C-D):*

12. Large jar; smooth grey ware.
13. Jar. Smooth grey ware with finger-pressed rim.
14. As (13) but buff-red ware.
15. Jar; buff-grey ware.
16. Jar. Light buff-grey ware, smooth and soft.

*From Floor 3:*

17. Bowl. Brownish grey ware with a few grits. Everted rim hollowed on top.
18. Fragment of jug. Cream-buff ware, orange-yellow glaze with decoration of dark lines (1300-1325).

*From the occupation on Floor 3:*

19. Jar. Cream ware; everted hollowed rim.

*From the occupation on Floor 4:*

20. Large open bowl; grey ware.
21. As (20), rim bevelled within.
22. Large open bowl of fine buff ware. Slight cordon under rim.

*From Floor 2 of the area west of the wattles:*

23. Bowl rim. Fine grey ware, hard and well-fired. Angular profile.

*From the occupation layer outside the north wall:*

24. Jug handle. Smooth pink ware with deep olive green glaze and diagonal slashing.

## PERIOD III, 1350-1426

*From Room I, occupation on the floor (fig. 3, section A-B):*

- FIG. 11. 1. Finger-pressed jug base. Coarse pink-buff ware; a little brown glaze outside.  
2. Lid. Red ware with pimply surface, slightly soapy. This type of ware, first occurring here, persists to about 1530, Period VI.

*From Room 2, occupation on Floor 3B:*

3. Wide-mouthed bowl. Soapy red ware; everted rounded rim with slightly beaded top. The fracture shows how the rim was folded over and smoothed onto the junction with the neck.
4. Thumb-pressed jug base. Greyish-cream ware with green glaze. Probably from the Surrey kilns.
5. Jug of cream ware. Probably from the Surrey kilns.
- 6, 7, 8. Three small Surrey-type rims.

*From Room 2, Floor 4:*

9. Storage jar. Hard grey ware. Outside rim sharply tooled and undercut.

*From Room 6, under the floor:*

10. Bowl of fine pink-buff ware. Light apple green glaze inside and out.

*From Room 6, occupation on floor:*

11. Large jar of coarse creamy-white ware. Expanded rim with slight interior bevel.

*From Room 4, occupation on Floor 2:*

12. Storage-jar of coarse and soapy soft red ware with black surface. Decoration of thick applied strips. Rim expanded, outward sloping, and roughly tooled.

*From the accumulation over the Period II house:*

13. Bowl. Fine cream ware with green glaze: broad flanged rim, sloping outwards. Probably from the Surrey kilns.
14. Lid of very fine pink-buff ware. A few spots of clear glaze on underside.

*From the occupation on Courtyard 2, north of the house:*

15. Jar of reddish-pink ware with elaborate neck, heavily moulded rim sloping inside.
16. Neck and rim of jug with slightly pinched-out spout. Cream ware: patches of thick green glaze.

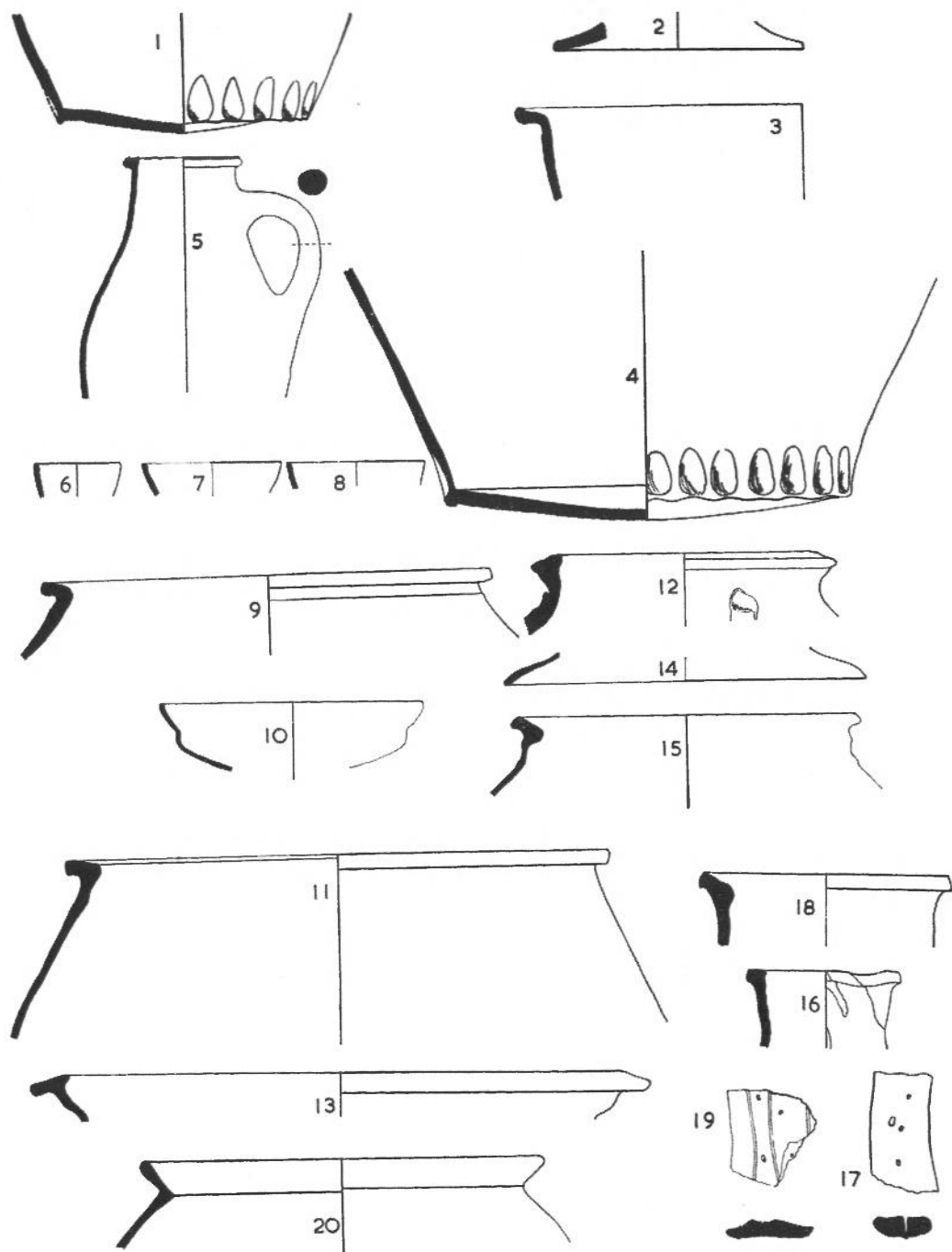


Fig. 11. Pottery from Period III, 1350—1426 (½)

*From the occupation on Courtyard I, north of the house:*

17. Handle. Cream ware: deep stabbing down centre.
18. Heavy rim. Red ware with grey core. Line of white slip on exterior circling the pot, covered with clear yellowish glaze.
19. Handle of creamy-grey ware: deeply grooved and stabbed. Olive green glaze.
20. Jar. Fine reddish-buff ware. With everted rim and patches of bright green glaze.  
Mr. E. M. Jope kindly examined some of this pottery. In his opinion none of the pottery that he has seen comes from the Brill kilns, but the rim forms seem typical of the London region and are not to be found beyond the chalk escarpment of the Chilterns (see note below, pp. 173-4).

## PERIOD IV, 1426

*Sealed by the building layers of the 1426 house:*

- FIG. 12. 1. Jug. Soapy red ware with pimply surface. The rim form occurs at this date for the first time and continues in a modified form until about the third quarter of the 16th century.
2. Base. Cream ware with spots of green glaze. Very rough surface round the base angle.
  3. Base. Cream ware; roughly removed from the wheel.
  4. Neck of jug. Light brown ware with thick, deep olive green glaze.
  5. Lid of coarse reddish-pink ware.

## PERIOD VI, c. 1520

*From the occupation in the new western courtyard of Period VI:*

6. Cooking pot. Soft red ware with a tendency to flake. Patches of interior dirty greenish yellow glaze. Marked bifid rim.
7. Storage jar. Very fine reddish-brown ware apparently containing mica. Heavily moulded upright rim. A round scar on the side indicates a former lug or applied plate of decoration.
8. Lid. Soapy deep red-brown ware with pimply surface.
9. As (8); but pinky-brown.
10. Jug neck; the rim with outward slope. Coarse red ware with a little surface pitting.
11. Jug neck. Fine creamy-pink ware. Rough beading within rim.
12. Sherd of grey Cologne stoneware with applied and moulded decoration in relief of leaf and stem. Mid-16th century.<sup>1</sup>
13. Rim of a brown glazed tyg.
14. Open bowl; soapy reddish-buff ware.
15. As (14) but hard red ware with traces of 'metallic' brown glaze.

*Group from the silt of Garderobe 1:*

16. Jug of hard red ware with brown surface. Flat-footed base and pinched-out spout: spigot hole near base, strap handle. Patch of glaze on belly under spout.
- 17, 18. Jug rims. Hard grey ware.
19. Small pot of hard brown ware. The rim has the exterior slope usually found on jugs.

## PERIOD VIII, c. 1550-1650

*From the moat silt (fig. 7, section S-T):*

- FIG. 13. 1. Cooking pot of deep buff ware. Angular rim, hollowed inside and sloping downward outside.
2. Siegburg jug. (1st quarter of 16th century).
  3. Jug base of coarse red ware.
  4. Jug base with traces of thumbed root of handle. Cream-yellow ware with grey surface; rough trimming on bottom. Fragments of (2)-(4) were found above and below the first rubble debris.
  5. Jug base of coarse red ware, with spring for handle. Interior brown glaze.
  - 6, 7. Two sherds of Netherlands maiolica, 1550-1600. Probably from the shoulder and lower angle of an albarello-shaped drug pot.<sup>2</sup>
  8. Rosette, applied moulding; from a pot of 'Tudor green glazed' ware.

*From the squatter occupation of the Great Hall, c. 1550-1600 (fig. 3, section C-D):*

9. Fragment of Netherlands maiolica.
10. Jug: neck, rim and base sherds. Grey 'metallic' surface: typical upright rim with outward slope. There were many sherds of this type in the squatter occupation of the Hall.
11. Red ware jug with band of yellow glaze round body. From below the squatter tile floor.
12. Jug rim: ware as (10).
13. Lid: deep rose-red ware.
14. Small jug of cream ware with green glaze. From under the blocking of the hole in the south wall of the Great Hall.
15. Small jug. Thin grey ware with green exterior glaze.

<sup>1</sup> cf. J. G. Hurst and J. Golson, 'Excs. at St. Benedict's Gates, Norwich, 1951 and 1953, *Norfolk Arch.* XXXI, i. Fig. 17, 1.

<sup>2</sup> Mr. Bernard Rackham kindly examined these sherds.

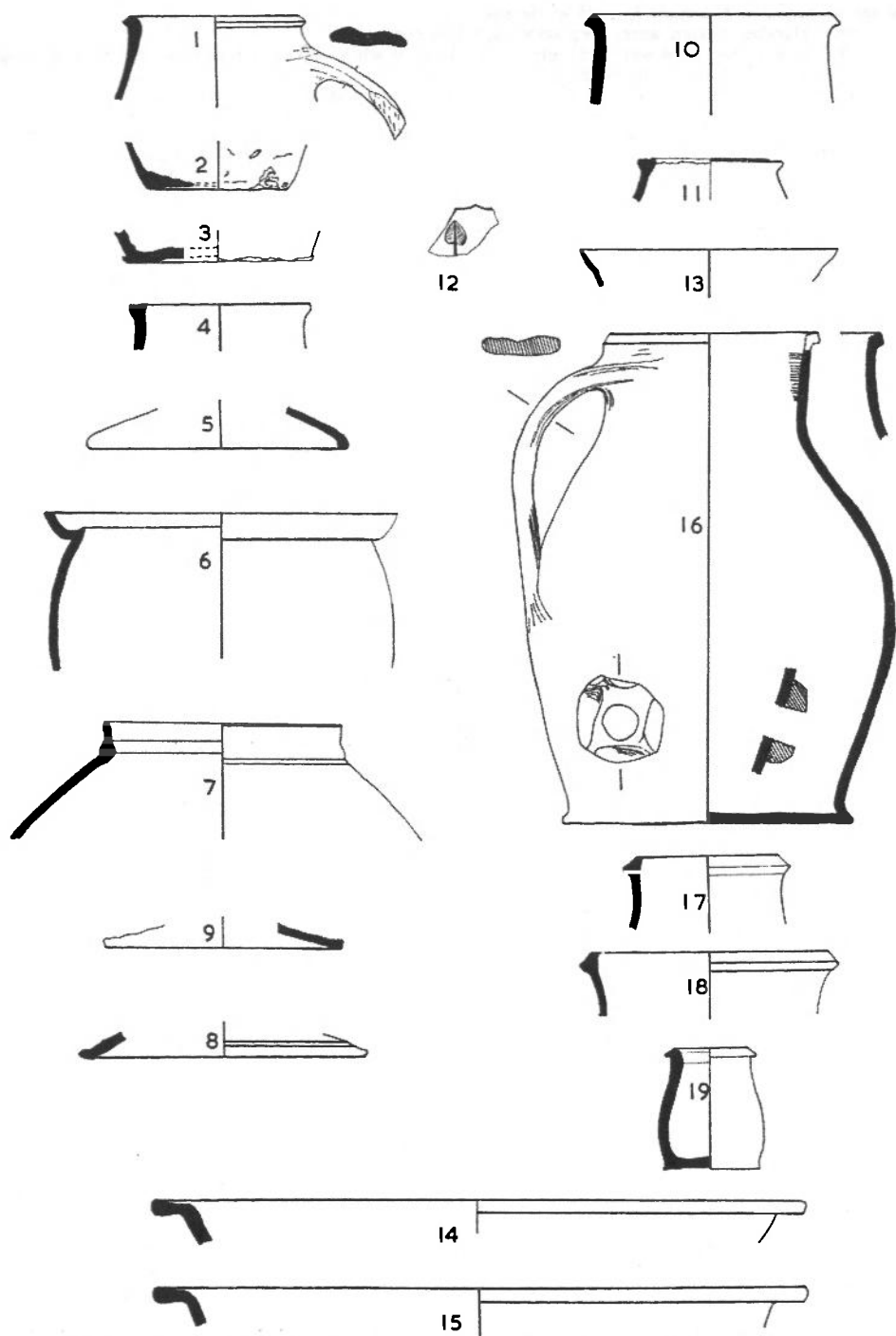


Fig. 12. Pottery from Period IV, 1426, and Period VI, c. 1520 (¼)

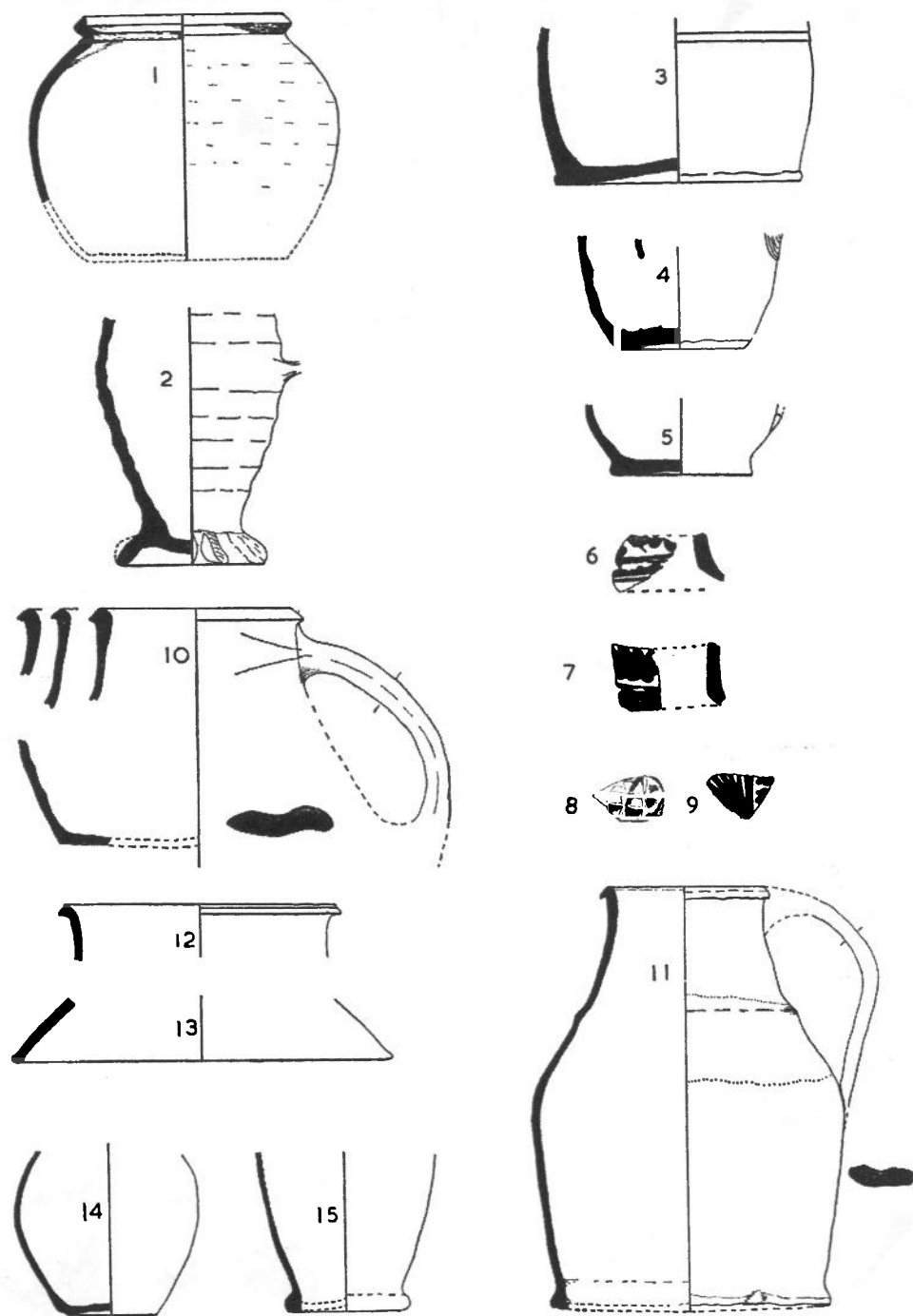


Fig. 13. Pottery from Period VIII, c. 1550—1600 ( $\frac{1}{2}$ )

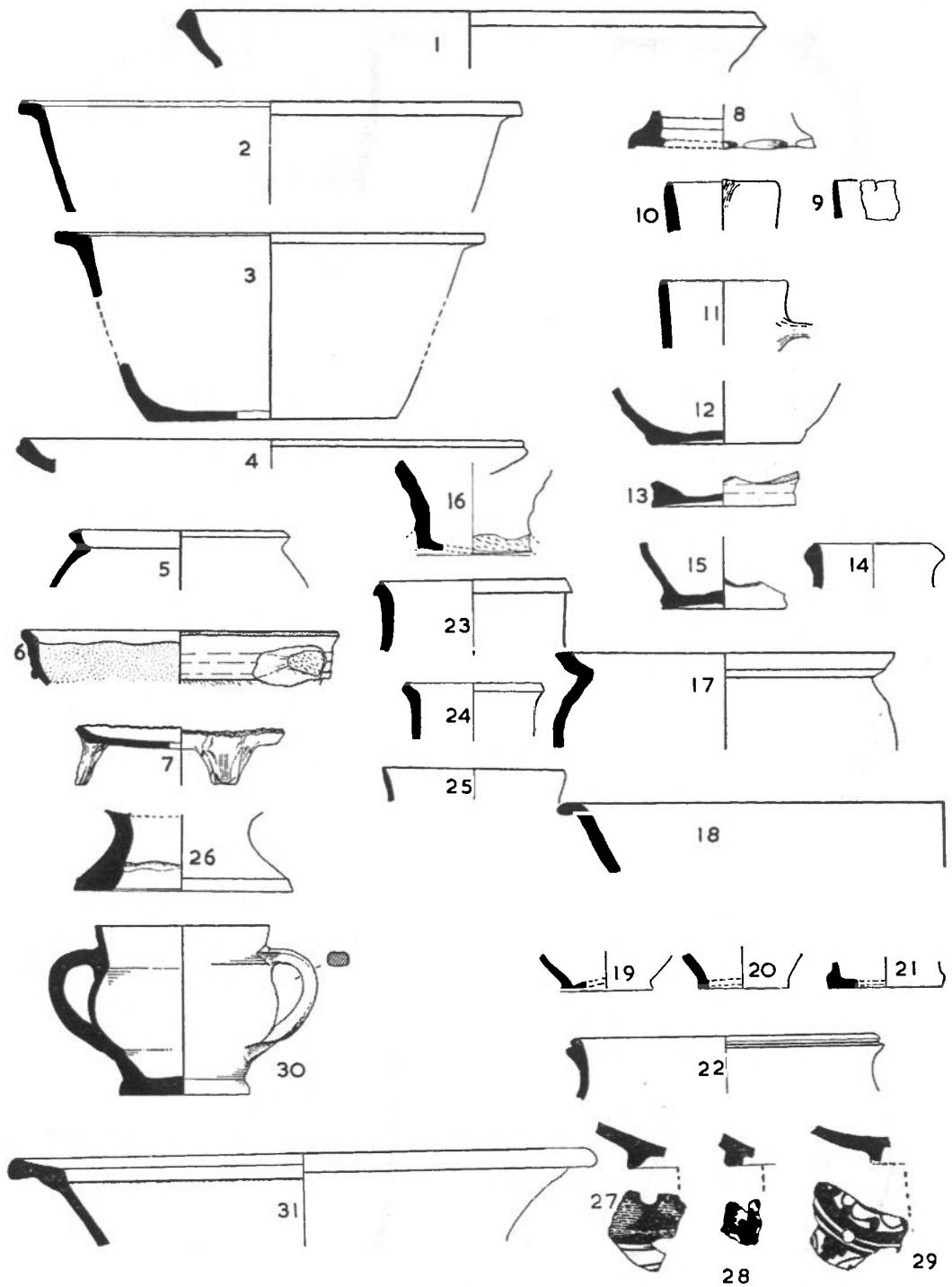


Fig. 14. Pottery from Period VIII, and the Destruction, c. 1650 ( $\frac{1}{2}$ )



From the squatter occupation in the Gatehouse, 1600-1650:

- FIG. 14. 1. Grey ware bowl, the rim sloping outside. Exterior glaze green; interior yellow-brown glaze over red interior surface.  
 2. Open bowl of red-buff ware. Squared rim with bevel on top.  
 3. Open bowl, red-buff ware. Interior yellow glaze.  
 4. Shallow bowl with moulded rim. Yellow glaze.  
 5. Small jar of buff-red ware. Angular rim hollowed inside.  
 6. Bowl; red ware, clear glaze over white slip inside and on rim. Remains of a handle spring.  
 7. Pipkin base. Red ware, sooted outside, yellow glaze inside.  
 8. Frilled base of buff ware.  
 9, 10. Rims of small pots of hard, fine grey ware.  
 11. Neck of a Siegburg jug.  
 12. Base of hard red ware with interior red-brown glaze.  
 13. Base of red ware, interior dull olive glaze.

From the occupation at the south end of the Period VI courtyard, 1600-1650:

14. Red ware; 'metallic' grey surface and brown glaze.  
 15. Tyg base. Reddish-purple ware; thick black glaze.  
 16. Siegburg base. Grey to brown 'metallic' glaze.<sup>1</sup>

#### THE DESTRUCTION, c. 1650

From the layer of rubble covering the site:

17. Jar of coarse red ware; flattened everted rim, hollowed inside.  
 18. Open bowl of soft red ware.  
 19, 20, 21. Tyg bases.  
 22. Red bifid rim; brown surface.  
 23. Jug rim of pimply reddish-brown ware.  
 24. Jug rim with pinched-out spout. Red ware; yellow glaze.  
 25. Tyg rim.  
 26. Base; thick buff-cream ware. A type of pedestal base, hollow underneath.  
 27. Base of a Maiolica dish in red paste. Probably Spanish; 1550-1600.<sup>2</sup>  
 28, 29. Two bases of Netherlands maiolica, probably from Holland; 1550-1600.<sup>2</sup>  
 30. Two handled posset cup in red ware with yellow glaze.

From the Seventeenth century road through the site:

31. Open bowl of fine red ware.<sup>3</sup>

### MEDIEVAL POTTERY FROM PERIOD III

By E. M. JOPE

- A. (Not figured.) A convex base of a fairly large vessel, of reddish brick hard fired ware with rounded quartzite particles up to 2 mm. across. Inside it has a thick irregular patch of dirty deep green glaze, the green being due to the addition of copper to the lead compound used for glazing, as the red fabric indicated firing under oxidising conditions, when the ferrous iron green changes to ferric browns and reds. There is a thin film of colourless glaze extending evenly up the side of the interior, through which the body colour shows to give a deep orange.

This base shows a serious firing crack; the vessel has however remained usable as the crack has filled (or been filled) with the glaze as it has fused. The sequence here suggests separate biscuit and glaze firings, but this is not certain. This base also shows the concentric ridges from wheel-throwing extending inside at least half way towards the centre, the underside of the base being entirely smooth, with a little knife-trimming. On the whole it is most likely that this convex base was produced by gradually easing the vessel off the turntable with a knife pushed under it at the same time as the body was lifted up, some striations on the base showing that the turntable was being rotated slowly as the knife was inserted under the pot. The side of the pot above the base angle has also been trimmed with a knife.

- B. (FIG. 11, 20.) Fragments of a pot with out-turned rim flange, with a base perhaps flat; not apparently knife trimmed, though in parts it may have been wiped with a cloth. It is of a very fine orange buff ware slightly gritty and harsh to the tongue and teeth, with a very few water-rounded quartzite particles.

<sup>1</sup> cf. Hurst and Golson, *op. cit.*, Fig. 17, 4. (1550-1600).

<sup>2</sup> Examined by Mr. Bernard Rackham.

<sup>3</sup> Hurst and Golson, *ibid.* Fig. 21, 1 and 2.

The ware has fired to a rather laminated structure. On the inside it bears uneven patches of a dirty green glaze, the green accumulating towards the edges of the patches. This green is again due to copper. Another piece of base is similar, but the glaze is speckled green, showing that it has not been heated for so long after the copper filings had been dusted on, that the copper green has diffused evenly through the glaze.

Other fragments of similar ware seem to come from different pots, one especially having a thin film of transparent glaze (through which shows the orange colour of the fabric), speckled with bright green resulting from dusting on copper filings (see E. below).

- C. (Not figured.) A jug rim of fine buff ware similar to B, but bearing on this piece no glaze. This simple profile could well be 14th or 15th century.
- D. (FIG. 11, 15.) Top part of a pot with rim flange projecting both inwards and outwards. The fabric is reddish and bricky, with a fair number of rounded quartzite particles up to about 1 mm. It has a thin even creamy buff surface layer about 0.5 mm. thick. This covers equally both inside and outside surfaces and for this reason was probably not an applied dip, but the result of wiping over with a wet cloth while still green, resulting in a surface layer of finer particles.
- This rim form is commonly enough found in the London region (i.e., bounded by the chalk scarp on the north) in the 14th and 15th centuries. It may be found as far west as Maidenhead and Reading (*Berks. Archaeol. J.*, 50 (1947), 66, fig. 9, nos. 1, 2, 3).
- E. (Not figured.) A body fragment of a pot similar to D, but with the buff layer confined to the outer surface. On the inside are spots of orange glaze, interspersed with smaller spots of green. These spots of orange glaze about 8 mm. across emanate from a small pit about 1 mm. across in the fabric. These pits were formed when small fragments of the galena (lead sulphide ore) or other lead compound dusted over the surface on heating removed silicate material from the clay minerals of the fabric to form the lead silicate glaze. Such pitting of the surface is by no means uncommon on medieval glaze, indicating a coarsely powdered lead material, and may be seen on several other pieces from the More. Many of the small separate greenish spots, arising from a copper (or bronze) particle, have quite a different appearance, forming very little glaze and causing no pit. The dark green spots on lead glazed areas often show a bright globule of metallic copper at the centre enclosed in a lead silicate glaze. Globules of lead can also occasionally be seen.

## ROOF STRUCTURES

By G. C. DUNNING

The fragments of decorated roof-tiles and associated structures belong to the manor-house of Period III, and from the deposits in which they were found (p. 148) it is inferred that the roof was re-covered with these materials c. 1380.

The fabric is fairly consistent; it is sandy, grey in the core and reddish-brown or buff on the surfaces. The ridge-tiles and the other fittings are all boldly decorated in broad stripes of white slip, forming a trellis or criss-cross pattern with border lines on the tiles, and parallel stripes or bands on the finials and louver. Over this decoration a poor lead glaze, yellow or light green, is partially applied. Mr. E. M. Jope suggests that where the glaze now appears as a yellow powder, it results from the poorly fired application of a lead compound, apparently as lead oxide (litharge). Thus the glaze firing has not been hot enough for the formation of lead silicate from the clay minerals of the fabric, a condition also noticed on some of the pottery (*v. sup.*). The consistency in the fabric and slip decoration of the ridge-tiles and other structures described below suggests that all are products of the same pottery, which presumably is located somewhere in the vicinity.

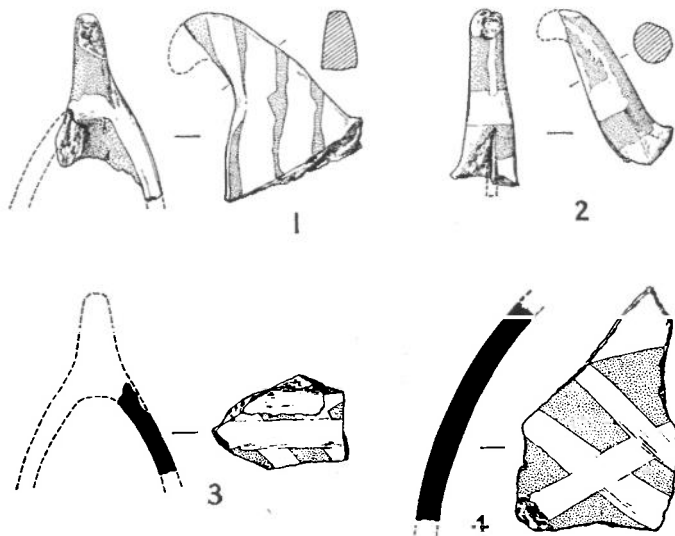
The ridge-tiles at the gable ends, and possibly on dormer windows, had decorative spur finials, of which there are two complete examples and the place of attachment of another. In addition, the roof carried a large ventilator or louver, presumably on the ridge above the central hearth of the hall. The roof of the late-14th century manor house would thus have a striking appearance, the ridge enlivened by the contrasting colours of the red tiles and the white stripes, and the skyline relieved by the spurs at the gable ends and the large louver midway along the crest.

In the drawings (figs. 15, 16) the white slip pattern is left blank, and the rest of the surface is stippled.

## SPUR FINIALS AND RIDGE-TILES

FIG. 15

1. End of a ridge-tile with a spur about  $2\frac{1}{2}$  ins. long, oblong in section, projecting obliquely beyond the vertical end of the tile. The tip of the spur is broken, but it appears to have curved over and pointed downwards, as restored in the drawing. At the junction of the spur with the tile, the thick clay is pierced underneath by deep stab-marks nearly 1 in. long apparently made by the point of a knife. The white stripes on the tile are continued on both sides of the spur.
2. Separate spur  $3\frac{1}{2}$  ins. long, roughly circular in section. At the lower end is a deep stab-mark.
3. Fragment from the side of a ridge-tile, with place of attachment of a spur.
4. Curved side of a ridge-tile, decorated with a trellis of white slip below a border line.

Fig. 15. Spur finials and ridge-tiles ( $\frac{1}{4}$ )

Decorative pottery finials in the form of a spur over the gable-end are a feature new to the study of medieval roofs. In fact the spur finials found at The More are the first of this kind to be discovered. It is, however, certain that spur finials existed at least three centuries before the examples described here. The evidence is in the Bayeux Tapestry which, as southern English work of the late 11th century, may be taken to depict current fashions in England. In the Tapestry are shown churches, palaces and houses with finials at the gable ends<sup>1</sup>. These take the form of short upright posts, knobs, foliated scrolls and, on the roof of Harold's palace at Bosham, long horizontal spurs serrated along the upper edge. Similar but more restricted evidence is given by the late 12th-century life of St. Guthlac of Croyland, in which the buildings have finials of only two kinds, either a spur finial ending in a scroll or spiral, or a foliated finial with a small spiral in front<sup>2</sup>.

<sup>1</sup> *The Bayeux Tapestry* (ed. Sir Frank Stenton, 1957). See Pl. 30, Harold's palace at Bosham; Pl. 32, Westminster Abbey; and Pls. 47 and 52, houses near Hastings.

<sup>2</sup> Sir George Warner, *The Guthlac Roll*, Roxburghe Club, 1928. For scroll finials see Pls. I, III, V, VI, VII and XII, and for foliated finials see Pls. X, XI, XIII, XVI and XVII.

The material of these Norman finials is more likely to be wood than baked clay, which is unknown as a material for covering medieval roofs before the 13th century. The shapes were probably carved out of boards or blocks of wood, and the details cut on the sides by a chisel or knife.

It is suggested that the late 14th-century spur finials from The More represent, in a reduced and simplified form, the wooden scroll-ended finials of the Norman period. In the 13th and 14th centuries the wooden prototypes were translated into baked clay.

## THE LOUVER

FIG. 16

The fragments are made of sandy ware, grey in the core and reddish-brown outside; the inside surface is blackened by smoke stain. The outside has a thick white slip, applied in broad bands apparently in a trellis pattern on the lower fragments, and combined with pellets in the spaces between the bands on the upper fragment. Over the decoration is a poorly fired yellow-green glaze.

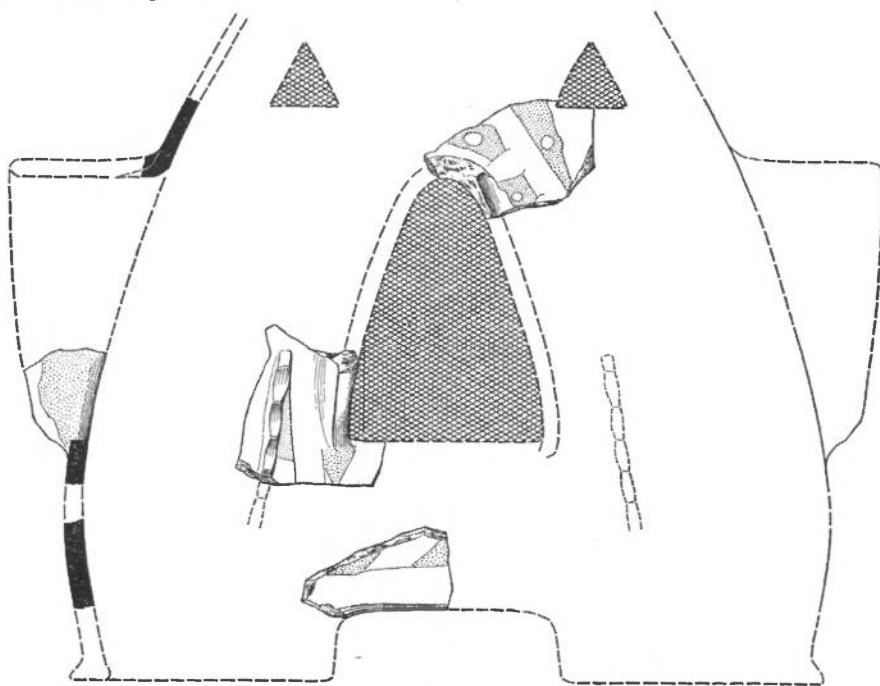


Fig. 16. Reconstruction of Louver (½)

All the fragments have wheel-marks on the inside, which give the slope of the pieces and show which way up they are to be placed, and also help to determine their relative positions. The curve of the lower fragments enables the maximum diameter to be estimated at about 16 ins. From these indications the structure can be reconstructed as beehive-shaped, with the greatest diameter near the base. The side was pierced by large triangular apertures, which could be either four or six in number. The two large fragments have part of the lower side of an opening and its apex. The left side of the opening is flanked by a prominent flange, made separately and then pressed against the side of the structure. The flange was continued round the apex of the opening, as shown by the broken edge with a structural join on the upper fragment, where the flange was attached. This fragment also shows that the flange was

continued down the right side of the opening. The size of the aperture cannot be determined from the surviving fragments; in the drawing it has been made  $5\frac{1}{2}$  ins. high and 4 ins. wide at the base, by comparison with the opening on a very similar louver found at Warmington, Warwickshire, which is discussed below. The flange, which springs from the lower corner of the opening, increased in width upwards and at the top of the opening it projected about  $2\frac{3}{4}$  ins. beyond the side of the louver. No flange was present along the base of the opening.

The upper fragment shows, to the right of the top of the large triangular opening and at a higher level, part of another opening with a flat base and the return on the left side. The side of the louver is here curving inwards, so that this opening was probably also triangular and quite small, not more than about  $1\frac{1}{2}$  ins. each side.

The third fragment is from the lower part of the louver near the base. It has part of an oblong slot, which evidently was similar in shape and position to the slot on the louver from Warmington.

On the side of the louver to the left of the large triangular opening is an applied thumb-pressed strip. The strip ends above at about halfway up the opening, but it continued lower down the side of the louver.

The louver from The More, as far as can be determined from the surviving fragments, was thus very similar to the louver from Warmington in size, shape, the arrangement of the large apertures with flanges or baffles, and the slot in the base.

The louver from Warmington is here illustrated (fig. 17) and described by kind permission of Miss J. M. Morris, F.S.A., and the Warwick County Museum, for comparison with the

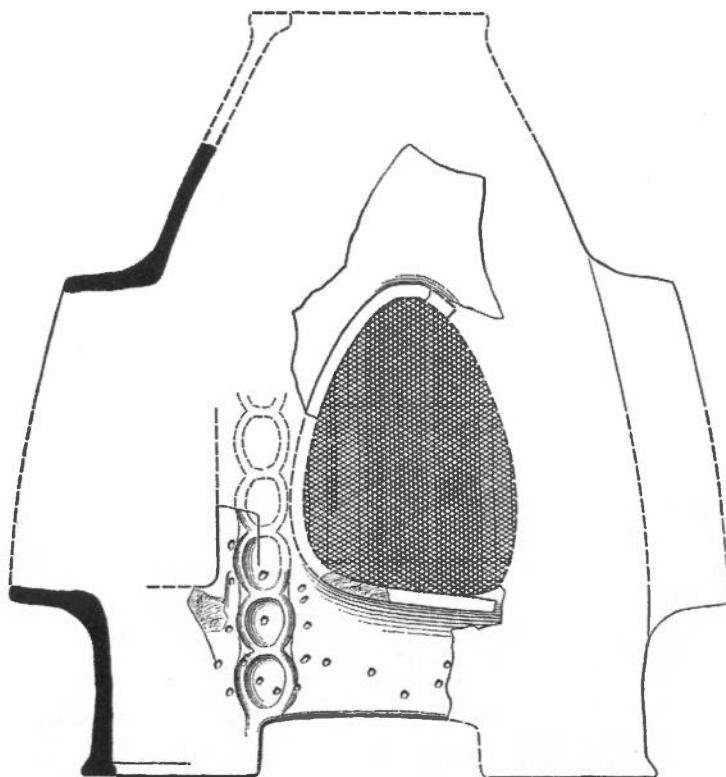


Fig. 17. Louver from Warmington ( $\frac{1}{4}$ )

fragments from The More. The site was partially excavated in 1955-6, when walls and floors were found and identified as belonging to a secular grange, dating from the 14th and 15th centuries. The finds include pottery of this date, ridge-tiles, and the louver.

The louver is made of fine grey ware with light orange-red surfaces. The outside is entirely covered by green glaze of good quality. The fragments comprise a large piece giving the diameter at the base and provided with two large openings of different shapes in the side, and two separate pieces from the tops of the openings. It is possible from these fragments to reconstruct the main features of the louver, which was beehive-shaped, 12 ins. diameter at the base, and remains to a height of 13 ins. It may be restored as about 16 ins. high and 5 ins. diameter at the top, which was probably pierced by a large hole<sup>1</sup>.

The side of the louver was pierced by large triangular apertures, which the spacing shows were four in number, each about 6 ins. high and  $4\frac{1}{2}$  ins. wide at the base. These openings had a prominent flange projecting  $1\frac{1}{2}$  ins. from the side. The flange was present round the top, down the left side, and along the base. The flange along the base, however, ends on the right side in a cut edge which is glazed, so that the flange was not continued down the right side of the opening. This gap in the flange is a curious feature, though clearly the purpose of the flange was to act as a wind baffle, comparable with the baffle round the openings on the louver from The More.

Between the triangular openings were apertures of another shape. Part of one of these is present on the large fragment. It has a vertical right side, formed by a bar of clay 1 in. wide between it and the adjacent triangular aperture, and a level base. A scar below the base shows that a flange was present here, but again no flange was present on the right side of the opening.

The side of the louver between these two openings has decoration of a vertical applied strip with large thumb impressions. These impressions and the side of the louver below the apertures have deep stab-marks.

The base of the louver below the triangular aperture has a rectilinear slot, 1.2 ins. high and about  $4\frac{1}{2}$  ins. long, the edge of which is also stab-marked. The purpose of this slot, which corresponds exactly with the slot on the louver from The More, should be to fit the louver over the ridge-tile, but clearly the slot would not fit the usual shape of ridge-tile but was made for some structure with a flat top. This feature is therefore not explicable without further evidence of the construction of the roof.

The identification of these large pottery structures as roof-ventilators is supported by a contemporary reference. In 1363 four earthen pots (*oll' lur'*) were bought for the smoke-vent (*sumerell'*) of the barn at Hadleigh in Essex, and four others for the smoke-vent of the King's hall in Rayleigh park, at the high rate of 1s. 2d. each<sup>2</sup>. The price is three times that paid for a chimney-pot for the Palace of Westminster in 1278. Elsewhere I have recently made a study of 13th-century chimney-pots<sup>3</sup>, and clearly the reference in 1363 is to more elaborate structures than these, though the same function was performed by both.<sup>4</sup>

#### ROOF TILES

A large number of roof tiles were found from Period II (c. 1300) onwards, but nearly all were badly broken and only a few could be measured:

Period II.  $11 \times 6\frac{3}{4} \times \frac{1}{2}$  ins. 2 peg holes.

Period III.  $? \times 7 \times \frac{1}{2}$  ins. 2 peg holes.

Some tiles had streaks of green or yellow glaze.

<sup>1</sup> The restoration of the top is confirmed by a fragment recently sent to me by Mr. A. H. Oswald, F.S.A. This was found in excavations at the moated site at Hawkesley Farm, Longbridge, Warwicks., and is dated c. 1400. The open top,  $5\frac{1}{2}$  ins. diameter at the mouth, is a collar about 2 ins. high made separately and joined to the upper part of the louver. *Trans. Birmingham Arch. Soc.*, LXXVI (1958), 45, fig. 6, 3.

<sup>2</sup> Quoted from L. F. Salzman, *Building in England down to 1540*, p. 100.

<sup>3</sup> G. C. Dunning, 'Medieval Chimney-pots', in *Studies in Building History*, in the press.

<sup>4</sup> Since the discovery at the More, a number of other finds have established the pottery louver as a fairly widespread feature of the medieval roof. The most relevant find is from St. Margaret's St., Canterbury, where Mr. S. S. Frere found large pieces of a conical louver about 21 ins. in diameter at the base and remaining to a height of 12 ins. It had large triangular apertures, about 5 ins. high and  $3\frac{3}{4}$  wide at the base, of which one is nearly complete. Fragments of similar louvers, also provided with baffle plates round the apertures, are known from Stonar and New Romney in Kent, London, Southampton, Bristol and Chester. Several can be dated fairly closely, and it may be stated that the range in date is from the late 13th c. until the close of the 14th c.

A ridge tile was found in the Destruction level; 12½ ins. long, 5 ins. high and 9½ ins. wide at the base.

In addition to these, some pieces of decorated finials and ridge tiles (fig. 15) were found in the Period III house in Room 2, in the occupation on Floor 3B, and in the make-up for the Period IV courtyard over the same house. The tiles must therefore have come from the demolition of the roof about 1426. Presumably they were put up about the middle of the life of the house since some fragments (? broken at time of putting them up) were found on Floor 3B.

## WINDOW GLASS

Mr. Bernard Rackham kindly examined this material and his report follows:—

'The mention of Galyon Hone (see below p. 199) is important and significant, as most of the fragments on internal evidence could date very well from the reign of Henry VIII, and the ornamental Roman lettering (fig. 18, No. 1) on the large piece, and on several fragments (i.e., No. 2), can be closely paralleled in the work of Hone at King's College Chapel and in other inscribed glass of the period (e.g., the roundel in the Victoria and Albert Museum from Carrick Priory with badge of Edward VI as Prince of Wales: H. Read, *English Stained Glass*, Pl. 55). Fig. 18, No. 2, with 'D' in enamel and yellow stain, at first glance suggested the possibility of the 'D' in MON DROIT (from the royal motto), but the surviving scrap of the preceding letter does not seem to be an N. (Mr. Rackham now agrees with our suggestion that we may have the remains of Wolsey's motto: *Deus mihi adiutor*' (for analysis see p. 181).

One piece (not illustrated) has a bird scratched through a feathery diaper on brown enamel ground, which can be matched in early Tudor heraldic glass, as in the shield from Carrick mentioned above and a shield from Nonsuch, Surrey, with arms of Jane Seymour (W. Drake, *History of English Glass-painting*, frontispiece). The way in which this piece is cut suggests the possibility of part of a small shield of curved outline with, inserted in the field, a circular charge such as a rose or bezant in glass of another colour. Another piece bears a staff or possibly an architectural pillar in brown enamel.

The thick piece of blue glass (No. 3) with wide border and chequer pattern seems likely to be from a different and earlier glazing. The treatment is not distinctive enough for close dating (15th century?).

### List of the Glass

- FIG. 18. 1. Inscribed T O R with enamel (black on drawing) and yellow stain (see p. 181).  
 2. Inscribed (?A) D with enamel and yellow stain.  
 3. Blue glass, wide border and chequer pattern. Probably earlier than the rest.  
 4-8. Fragments of a decoration of flowers, leaves and branches.  
 9-12. Fragments of various decorative motifs, 11 may be part of an inscription.  
 13, 14. Borders. 14 has a leaf and may be part of a vine tendril.  
 15. Maltese cross with circles and dots against an enamel ground.  
 16. Sections of edges of window-glass panes.

## THE GLASS OBJECTS

The glass objects (with the exception of FIG. 18, nos. 17, 19) were most kindly examined by Dr. D. B. Harden. Glass, both stratified and unstratified, was found, but most of it was not sufficiently interesting or important to warrant publication.

FIG. 18. 17. Head of an alembic. The following note is kindly contributed by Mr. E. Greenaway, Science Museum: 'The vessel is evidently a portion of an alembic, the distillation apparatus which was in use from Alexandrian times until the 18th century. The name 'alembic' was originally applied only to the upper part of a two part apparatus, the lower being any vessel in which liquids could be boiled and known as a 'cucurbit'. From the 10th century onwards the term was often used for the combination of both parts.

This vessel is an alembic proper. It has the characteristic run in which the liquid condensed in the head of the vessel would collect and run down the spout into a receiver. It could have been used in the kitchen for a variety of purposes, such as the preparation of flavours, essences and medicinal remedies.' From the silt of Garderobe 1. This silt is mainly c. 1520, but it is just possible that the alembic might have got in any time down to the destruction c. 1650, although it is unlikely. Vessels of this sort were found at St. John Street, Chester, in a refuse pit attributed to the first half of the 17th century (*Journ. of the Chester and N. Wales Archib. Arch. and Hist. Soc., New Ser. XXXIII, 21 and Pl. V, 1*). They were, however, there called Posset Cups, and published upside down (see p. 181).

18. Base-ring of a flask or beaker of greenish colourless glass of the type of metal frequently found in the 16th and 17th centuries in this country. This piece was, however, securely stratified below the floor of Room 6 of the Period III house and thus dates about 1360.  
 19. Neck of a 17th century wine bottle of green glass, after 1650. From the Destruction level in the moat c. 1650. This may be intrusive or an early example.



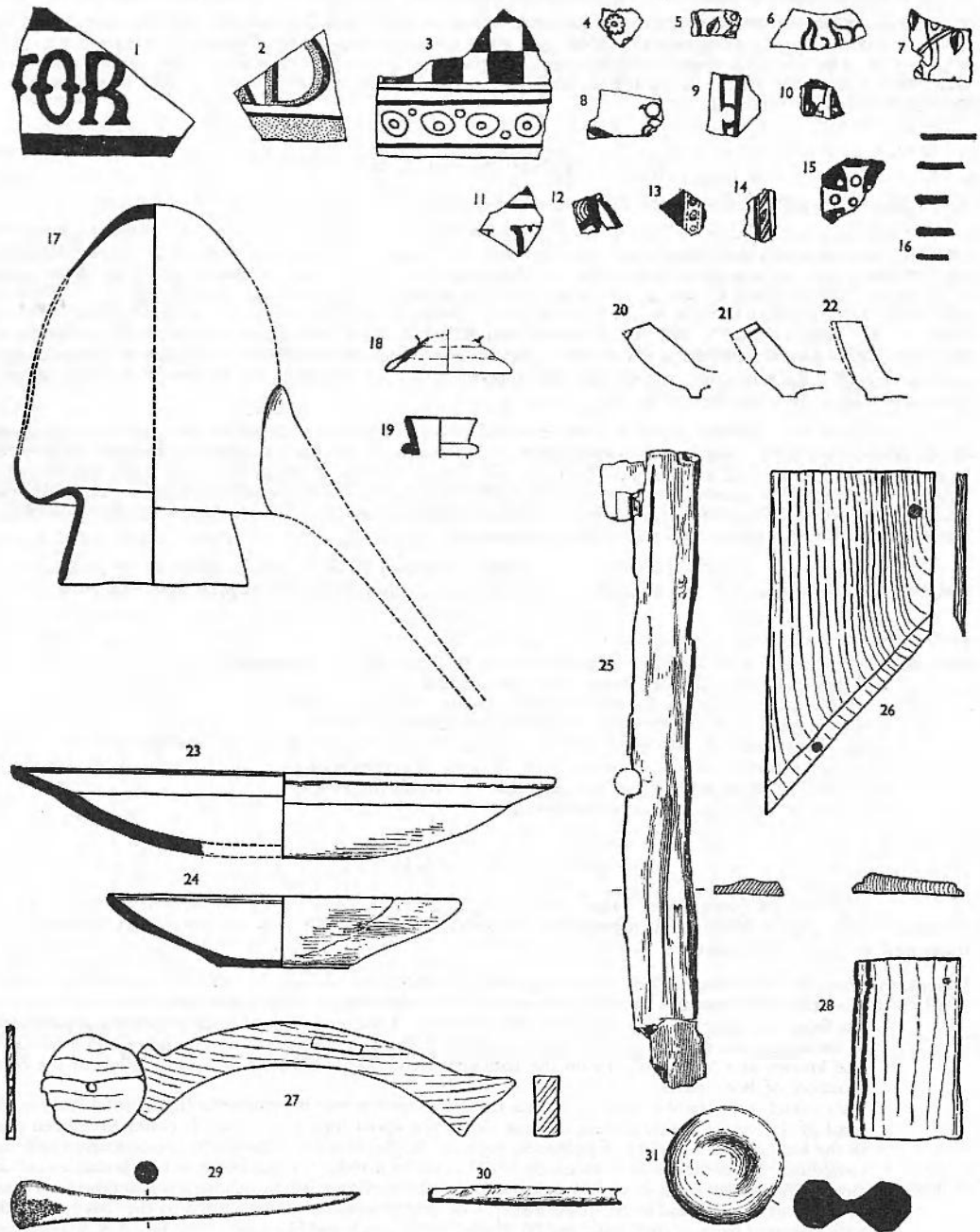


Fig. 18. Window glass and objects of glass, wood, clay, bone and chalk  
 (Scales: 1-25,  $\frac{1}{4}$ ; 26,  $\frac{1}{16}$ ; 27-8,  $\frac{1}{8}$ ; 29-31,  $\frac{1}{2}$ )

## ANALYSIS OF GLASSES

By L. Bick (Ancient Monuments Laboratory)

A proximate, qualitative spectrographic examination in the carbon arc was carried out on four samples, in an attempt to discover the general nature of the glass and colouring matter. The fragments of alembic (1) were found almost completely devitrified, but here and there a thin core of clear glass had remained, never more than a third of the thickness, and it was a sample of this core that was isolated and examined. Tiny fragments of coloured glass were flaked off the painted lettering, for analysis along with a sample of the clear glass base (2-4).

Results for significant elements are given below.

Element	(1)	(2)	(3)	(4)
		Painted window Fig. 18, (2)		Fig. 18, (1)
++ = present	Alembic,			Reddish
+ = trace			Dark brown	pink
— = absent	Fig. 18, (17)	Clear, pale-green base	edging (‘outside surface’)	outline of letter ‘O’ (‘inside surface’)
Barium ... ..	++	++	...	...
Calcium ... ..	++	++	++	++
Copper ... ..	—	+	—	+
(Iron)... ..	(+)	(+)	(+)	(+)
Lead ... ..	—	+	—	++
Magnesium ... ..	++	++	—	—
Silver... ..	—	—	++	+
Sodium ... ..	—	—	—	—
Tin ... ..	—	—	—	++

Under the particular conditions of analysis, it is not possible to detect potassium, and this may thus have been present. The absence of sodium should probably be seen as a result of leaching-out during burial, since the basic materials, though clearly differing from each other, must all have been soda-lime glasses. The colour of (3) seems to be due to silver, that of (4) in the main to lead with tin as opacifier. In both cases one may suspect some reversion due to decay during burial, and thus suggest possibly red (or black?) for (3) and yellow (to brown) for (4) as original colours.

I am indebted to the Courtauld Institute of Art, London University, for permission to use their spectrograph, and to the British Non-Ferrous Metals Research Association for help in interpreting the results.

THE CLAY PIPES<sup>1</sup>

Two pipes came from the Destruction level (1655-1661). These are Oswald Types 6 b (c. 1650-1680) (fig. 18, 21) and 8 b (c. 1680-1720) (fig. 18, 20) which must be an intrusion owing to moles, etc.

One other pipe (fig. 18, 22) came from a hole for one of the orchard trees (?end of 17th century). It is Oswald Type 10 b (c. 1690-1740).

<sup>1</sup> See *The Evolution and Chronology of English Clay Tobacco Pipes*, Adrian Oswald, *A.N.L.*, Vol. 5, No. 12, 243 *et seq.*

## WOODEN OBJECTS

- FIG. 18. 23. Bowl from the west moat of Period I, 1250-1300. Part of this bowl was found in the first layer of silt laid down after occupation commenced, and the larger part on top of the last layer of Period I silt. Presumably broken off before burial, this part had perhaps been lying discarded until thrown in. 'The wet fragments were soaked in acetone, and then ether; the ether was removed under vacuum, and the wood was immediately impregnated with polyvinyl acetate solution in toluene'<sup>1</sup>. The wood has been identified as beech (*Fagus sp.*) by Mr. J. F. Levy, of the Botany Department, Imperial College of Science, who considers from botanical evidence that the object originally had a deeper section. It appears to have been worked from a block of roughly tangential section, flat-sawn at some distance from the periphery of the log.<sup>2</sup>
24. Bowl from the south moat of Period I. 'An X-ray showed definite evidence in four places of repair in antiquity by means of iron nails or rivets. The very poor condition of the latter suggests that they had, in fact, rusted completely before the bowl was thrown away, as similar repairs found elsewhere (e.g., at Hungate, York<sup>3</sup>) under similar conditions were well preserved.'<sup>1</sup>
25. Probably a stave of a bucket. From the silt of the Period I south moat. 'This was allowed to dry out naturally but slowly.'<sup>1</sup> Mr. Levy has identified the wood as beech (*Fagus sp.*).
26. Large roof shingle, chamfered on one edge. Nail traces in both holes. Probably oak. From the top of the Period I silt in the west moat, c. 1300.
27. Long wooden object with mortice cavity in the centre. Thin round plate at top end, possibly part of the same piece of wood. From the silt of Garderobe 1, c. 1520.
28. Small roof shingle, rebated on both long edges. The two holes have traces of rusted nails. Probably oak. From the silt of Garderobe 1, c. 1520.

## METAL OBJECTS

- Pl. XXIV. Pins from various levels, especially from the occupation on the floor of Room 6, Period III, 1350-1426. They range in length from 3½ in. to 7⁄8 ins. [The heads sometimes appear to have a line incised around them due to the method of making the pins—the heads were normally made of wire 'wound' on separately<sup>4</sup>.] They first appear in Period III and are found until the beginning of Period VIII, c. 1550.

*Objects of Bronze*

## FIG. 19.

1. Decorative plate with two holes for attachment. Larger hole in the centre. Pattern incised. From the general Period I occupation level. 1250-1300.
2. Needle or bodkin. The top end together with the eye has broken off. Occupation on floor of hut. Period I, 1250-1300.
3. Flat round plate with punched decoration. The outer edge is bevelled, as are the under edges of the three attachment holes and the central opening. The pattern seems to show sprays of flowers or leaves. From the occupation on the floor of Room 6, Period III, 1350-1426.
4. Strap-end buckle. From Period III occupation over Period II house, 1350-1426. Heavy well made loop. The pin, of lighter metal, is made from a thin strip bent to go round the shaft and to form a cylindrical pin of hollow section for the main part of its length. cf. London Museum, *Medieval Catalogue*, Pl. LXXVI, 4.
5. Cast ring, roughly diamond-shaped section. From the make-up of the Period IV courtyard, c. 1426.
6. Thin plate with two holes for attachment. Provenance as No. 5, c. 1426.
7. Thin round plate with domed centre and raised border with embossed decoration. Small hole in border for attachment. Large central opening. Unstratified, but probably Period IV, c. 1426.
8. Button, shank missing. From the clearance at beginning of Period VI in the area of the western courtyard, c. 1520.
9. Button, shank missing. Below Period IV courtyard, c. 1426.
10. Small button with remains of an iron shank. The Destruction level, c. 1650.
11. Button with iron shank soldered on to the bronze. From the squatter level in the gatehouse, 1600-1650.
12. Thin bronze plate in the shape of a heart with a central hole for attachment. Possibly a dress ornament. Great hall squatter occupation, 1550-1600.
13. Thimble. Punched pitting to form a grip. The thimble has been holed in several places. From the *post*-1520 occupation in the western courtyard. Not later than 1550.

<sup>1</sup> Examined and treated by Mr. L. Biek.

<sup>2</sup> For wooden bowls see *Antiq. Journ.* XVII, 414 *et seq.* and especially Fig. 3, 4.

<sup>3</sup> See report in this volume, p. 86 and Fig. 20.

<sup>4</sup> Examined by Mr. Biek.

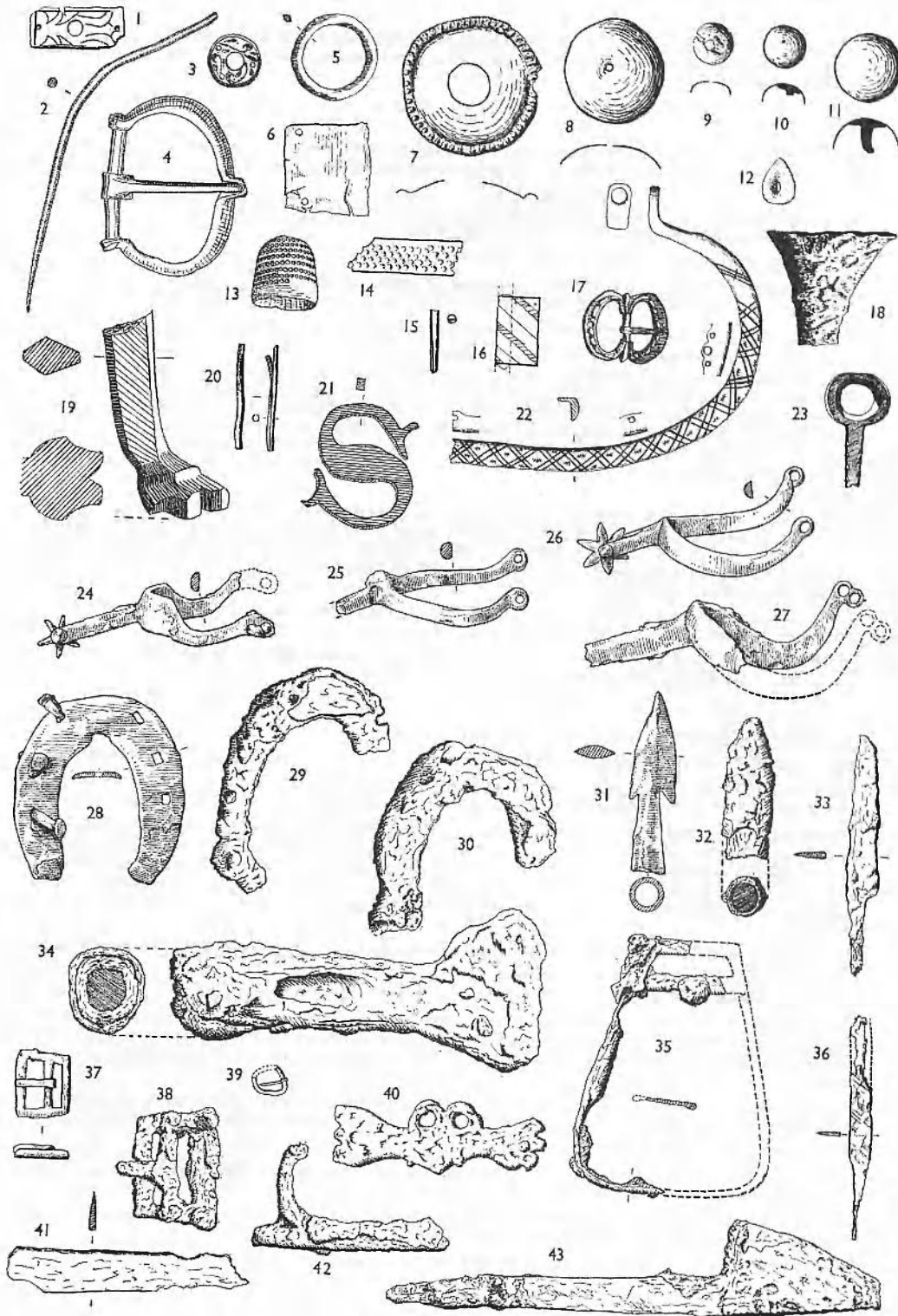


Fig. 19. Objects of bronze and iron ( $\frac{1}{2}$ )  
 (Scales: 1-23,  $\frac{1}{2}$ ; 24-30, 33-39,  $\frac{1}{4}$ ; remainder  $\frac{1}{2}$ )

14. Fragment of a ring, diameter  $\frac{5}{8}$  in., with punched pitting to form a grip for needles, etc. This shows no sign of the top of a thimble having been broken off and so must be a ring. From the Destruction level, c. 1650. (Drawing expanded).
  15. Boot-lace tag with a rivet passing through holes near the top. Squatter occupation in western courtyard, 1600-1650.
  16. Decorated boot-lace tag. This contained part of a tape or ribbon bootlace, rolled to go inside tag (*v. p. 192*). Holes for a rivet, 1520-1550. Many of these tags were found all dating from Period VI, c. 1520, or later. Some have rivets and rivet holes (Pl. XX1b).
  17. Small 'spectacle' buckle with raised cable decoration. *cf.* London Museum, *Medieval Catalogue*, Pl. LXXVII, 8. From courtyard; probably third-quarter 16th century.
  18. Very rough skilnet foot. Round section. *Post-1600*.
  19. Skilnet foot. Period III. Occupation on floor of Room 1, 1350-1426. *cf.* London Museum *Medieval Catalogue*, Pl. LVI. Several fragments of skilnets were found, one very soot-blackened.
  20. Boot-lace tag. [This tag contained some fibrous material possibly the remains of leather<sup>1</sup>], c. 1520-1550.
  21. Lombardic 'S'. Rectangular section. Mr. R. H. Pearson, who has seen the letter considers it to be from an early monumental brass about 1325. Such letters were let into the stone and fixed with pitch; most of them have now vanished, but there is one letter still in place in Wells Cathedral. There are about 48 loose letters and 28 stops in museums: 16 letters and 7 stops (including an 'S' exactly parallel to this one) were found on the site of the Greyfriars, London, in 1908, and are now in the British Museum together with 5 other letters. It must have come to the More in a slab which was to be used for building, possibly from Sopwell Abbey whence came lead in the time of Henry VIII. From the Destruction level in Garderobe 1.
  22. Purse frame. Lattice decoration, with chevrons, made by knife nicks, in the spaces between. The lines are made by inlaying(?) iron into deep cuts in the bronze of the frame. The iron has in places rusted or fallen out. *cf.* London Museum, *Medieval Catalogue*, 162-171. This frame does not seem to fit in with the classification there adopted. Not only is it later (occupation of gatehouse squatters 1600-1650; though, of course, it may be a survival) but its decoration is not paralleled.
  23. Small copper object with 'barbing' on the shaft. It is not clear whether the end is broken or not. Possibly a modern intrusion, from the Destruction level, c. 1650.
- In addition to the above there were various fragments of bronze wire and plates. Also a copper tack and a small wire(?) dress-ornament, c. 1520-1550 (Pl. XX1b).

#### *Objects of Iron*

24. Rowel-spur. Six-pointed rowel. From the make-up for the Period IV courtyard, c. 1426.
25. Spur, possibly an early rowel spur. From the Period IV building level outside the west wall, c. 1426.
26. Rowel-spur. Six-pointed rowel. From the make-up for the Period IV courtyard, c. 1426. [Drawn from the X-ray: plated with non-ferrous metal, probably tin or silver, but no trace of decoration<sup>1</sup>].
27. Rowel-spur, exaggerated shank. From the squatter occupation in the Great hall area, 1550-1600. [From the X-ray it is possible to conclude that this was a rowel-spur and that it carried decoration in the form of a ring and possibly also a central dot. There is also considerable evidence of plating with a non-ferrous metal, probably tin or silver, and in view of this the 'ring-and-dot' decoration might well have been chased producing an extra thickness, or alternatively a greater retention, of plating metal at that point<sup>1</sup>].
28. Horseshoe from the silt of the Period I west moat, c. 1250-1300. *cf.* London Museum, *Medieval Catalogue*, Fig. 36, 9, dated 1241-63.
- 29, 30. Two horseshoes from the make-up layers for the Period IV courtyard, c. 1426.
31. Arrow-head. [The state of preservation as shown in an X-ray is much worse than would be expected either from its appearance or from the conditions under which it was found (*v. p. 142*)<sup>1</sup>]. From the silt of the Period I west moat, 1250-1300. *cf.* London Museum, *Medieval Catalogue*, Fig. 17, 15, dated 1241-63.
32. Arrow-head, badly rusted. It may have been copper-plated or brazed, since much green corrosion products were seen where the rust flaked off. From the mortar of the re-flooring of the Great hall, c. 1550.
33. Knife blade. Unstratified, probably c. 1426.
34. Adze head. Traces of the wooden hafting still remain inside the flanges. From black occupation over Period VIII gully in Great Hall, 1550-1600.
35. Stirrup. From the squatter occupation in the gatehouse, 1600-1650. *cf.* London Museum, *Medieval Catalogue*, Fig. 25, 2, there dated 13th or 14th century.
36. File. Occupation in western courtyard, Period VI, 1520-1530.

<sup>1</sup> Examined by Mr. Biek (see p. 193, Soil).

- 37. Buckle. [Drawn from the X-ray: plated with a non-ferrous metal, probably tin or silver<sup>1</sup>.] From the squatter occupation at the south end of the western courtyard, c. 1600-1650.
- 38. Buckle, badly corroded. Possibly from horse equipment. From squatter occupation in the Great Hall area, 1550-1600.
- 39. Small buckle of lead alloy with an iron pin. From the Destruction level, c. 1650.
- 40. Decorative iron plate with nails for attachment at each end. From the Destruction level, c. 1650.
- 41. Knife blade. From the dump from the cleaning of the Period I moat, 1250-1300.
- 42. Another type of 'bracket' nail for holding pipes. Provenance as No. 43.
- 43. 'Bracket' nail for holding clapper-board or pipes to brickwork. From the make-up for the Period IV courtyard, c. 1426.

FIG. 20, 1, 2. Small wide-bottomed iron objects. The base almost comes to a sharp edge. Make-up for Period IV courtyard, c. 1426.

- 4. Sliding bolt, round bar and rectangular lever. Occupation level in Period VI western courtyard, c. 1520.
- 5. Iron hook with handle. Probably a baling hook used for carrying large bundles (possibly of hay). Period III, occupation level on Floor 2, Room 4, c. 1350-1426.

A series of iron nails was found in the Destruction level. These fall into set sizes: 1,  $1\frac{3}{16}$ , 2,  $2\frac{1}{2}$ ,  $2\frac{1}{8}$ ,  $3\frac{1}{10}$ ,  $3\frac{1}{8}$ ,  $4\frac{1}{2}$  and  $4\frac{1}{8}$  inches. Of these the  $2\frac{1}{2}$  and  $2\frac{1}{8}$  ins. were by far the most common.

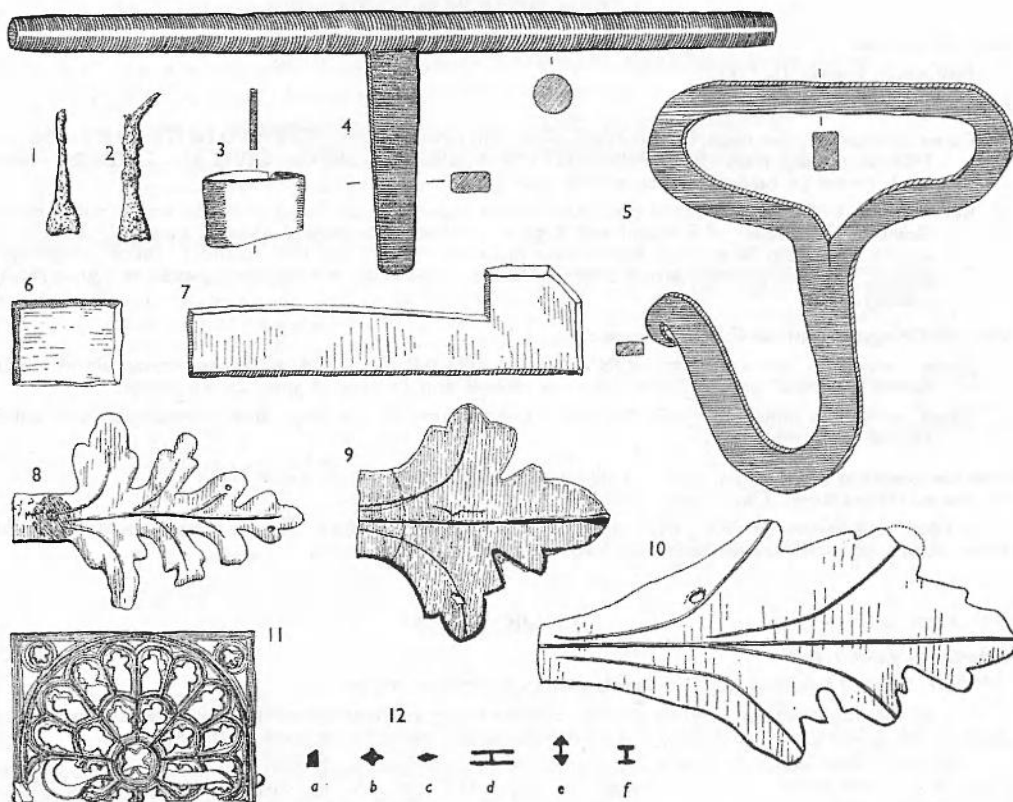


Fig. 20 Objects of iron and lead  
(Scale:  $\frac{1}{2}$ ; excepting no. 11,  $\frac{1}{4}$ )

<sup>1</sup> Examined by Mr. Biek.



*Objects of Lead.*

FIG. 20. 3. Ring of strip lead.

6. Weight, exactly 1 oz., with bevelled edges.

7. Plate with bevelled edges.

8-10. Oak leaves, all with traces of gilding and holes for nails. These must have been attached to wood or plaster wall surfaces in the house during the time of Wolsey or Henry VIII, and are a clear indication of the rich decoration at this period. Several other fragments were found.

11. Lead ventilator from a window. Other examples of these of an earlier period were found at Clarendon Palace (*Antiq. J.* XVI (1936), 83) and one exists in a window at Hampton Court (Law, *History of Hampton Court*, 160). *cf.* closely a 15th-century example from Stanley Abbey, Wilts. *Arch.* LX. ii. 515.

12 a, b, c. Binding strips of various sections, for use in binding the larger sections of leaded glass into position. A great deal of this was found and the commonest type was c.

12 d, e, f. Window-leading of three sections. d. only occurred once and may be from an early glazing. e. occurred more often and was much heavier than both the other types. f. was the commonest; nearly every piece of window-leading found—some 160 pieces—was of this type. In every case the flanges were soldered on to the central rib. There is at present no dating evidence, except that none of the leading was earlier than 1426. All the above were found in the Destruction level of c. 1650. A fair amount of thin strip lead ( $\frac{1}{8} \times \frac{1}{8}$  in.) was also found; this had frilled edges and was probably used for binding.

## COINS AND TOKENS

From the Humus:

Halfpenny, George II, 1737.

From the Rubble Destruction Layer:

Groat, Edward IV, first reign, light coinage, quatrefoils by bust. Obv: EDWARD DI GRA REX ANGL Z FRANC, facing bust. Rev: POSVI DEVM ADIVTORE MEVM CIVITAS LONDON. Initial mark crown (c. 1466-7). Silver, weight 29.0 grains.

Real of John I of Portugal (1383-1433). Obv: Latin legend in a curious Lombardic script 'John, by the Grace of God, King of Portugal and Algarve', saltire stops, around arms of Portugal. Rev: Latin legend 'Our Help Who made heaven and earth'. *cf.* Ferraro Vas, nos. 10 and 4. Billon, weight 43.3 grains. This was probably struck towards the end of the reign and may have passed as a groat in this country.

From the Occupation on the Cobbled Courtyard:

Jetton, early 16th century. Obv: BONV-BEONV-BRVNEVN, shield of France, crown above. Rev: BONEVV-ROIIVNEO BVEN, alternate crowns and lis around rose, crown above.

Jetton, early 16th century, legends illegible. Obv: (?) Conventional ship. Rev: Alternate crowns and lis around rose, crown above.

From the post-1550 Floor (fig. 3, Section C-D under the Third Floor in the Great Hall):

Jetton, 16th century. Obv: Shield of France. Rev: Legends illegible.

These three jettons probably all came from the Nuremburg factories. We are grateful to Mr. R. H. M. Dolley, F.S.A., of the British Museum, for help with several of these coins.

## FLOOR TILES

*Netherlands Maiolica Tiles*

Mr. Bernard Rackham has very kindly examined these and writes:

'The tile fragments are of great interest, and are really important as evidence for the still incomplete history of the beginnings of Maiolica (tin-glazed earthenware) manufacture north of the Alps.

They are floor tiles, not wall tiles like the later English and Dutch delft tiles still surviving in many houses all over the country. With two exceptions they can be attributed very well to the period when Wolsey was Abbot of St. Albans, 1521-1530. They are thus contemporaneous with the floor tiles in the chapel of The Vyne in Hampshire, built by Sir William (later, 1523, Lord) Sandys early in the reign of Henry VIII. Sandys was Treasurer of Calais and the tiles are reputed to have been brought by him from Boulogne. They were formerly supposed to be Italian (see C. W. Chute, *History of the Vyne* (1888), 23) in spite of the fact that some of them have Dutch names on them; my suggestion that they were made at Antwerp by potters of Italian descent, probably by Guido di Savino from Castel Durante, is discussed at length in my *Early Netherlands Maiolica*, and has generally been accepted by Dutch and Belgian writers (Dr. de Jonge, Prof. J. Helbig, etc.).



The tiles, with the exception of Fig. 21, (15) and (16), are evidently part of a mosaic pavement composed of squares separated by oblong hexagons, an arrangement which originated in Persian wall tiles, 14th-15th century, and spread to floor tiles first in Spain, then in Italy and the Netherlands. Some complete panels of this sort from a pavement in the Abbey of Herckenrode, near Liege, are in the Musees Royaux at Brussels; they are recorded as having been made by a Venetian settler at Antwerp, Petrus Frans. Some of them show a sort of rosette, blue with spots of orange and green, similar to that on fig. 21, 7; exactly similar rosettes occur on Netherlandish drug pots. Something like the trellis and enclosed spots on (13) is on one side of a vase dug up in Holland or Belgium (precise spot unrecorded) (ref. de Jonge, fig. 16) on the reverse side of which is a motif common on Netherlandish drug pots, but of Italian origin to which there is a parallel on (5).

The small blue fragment (15), has a motive I do not know on tiles, which is, however, consistent with a 16th-century date.

The large, much damaged, piece (16), seems to be later in date than the others. It has a pattern originally made up as a mosaic of separate octagonal, cross-shaped, and oblong hexagonal tiles (as in Persian tilework) but now, for convenience, painted over square tiles. The Dutch authorities give 'end of 16th century', as the earliest date for this type; it is just possible this fragment proves that it goes further back. The leg bone of a chicken or rabbit(?) embedded in the clay is something to which I know no parallel'.

FIG. 21. 1-3. Leaves and orange flowers.

4. Formalised leaves.

5. Orange flowers and corner motif.

6. Blue and orange diamonds.

7-10. Sprays of blue flowers with orange and green centres.

11, 12. Small broken fragments (11) similar to (1)-(3).

13. Orange lattice decoration with green spots.

14. Large round motif of green, orange and blue with a floral bunch in the corner.

15. Blue on white. Central motif within a circular border.

16. Composite pattern of several tiles in blue, orange and green (see above).

(The tiles are made of a fine white clay and are  $\frac{7}{16}$  in. thick. All come from the Destruction level, c. 1650, but must date from before 1552 (see p. 141).

#### English Decorated Floor Tiles, (lead glazed)

FIG. 21. 17. Tile  $4\frac{1}{2}$  ins. square of fine red ware. Stamped pattern, filled with white clay and glazed yellow. (cf. *Medieval Paving Tiles in Bucks.*, Christopher Hohler, *Records of Bucks.* XIV, design P 88, pp. 9 and 113). This is certainly a Penn tile. It has been found at North church in Herts., and is known from several sites in Bucks. From the Period II occupation on top of the dump of soil cleaned from the Period I moat, 1300-1350.

18. Tile  $4\frac{1}{2}$  ins. square. Ware coarser than No. 17, with a large chalk 'pebble'. Stamped pattern, filled with white clay and glazed yellow-green. (cf. Hohler, *op. cit.*, design P 79, p. 112). Probably a Penn tile, only known otherwise from Grove Chapel, Bucks. From the Destruction level. Presumably this must come from the Period IV building or later.

19. Tile, coarse red ware. Deeply stamped pattern filled with white clay, glazed yellow. This pattern does not occur in Hohler's corpus. It may represent a bird sitting on the tail of some beast walking left, or on a branch of a tree, which while it would seem more likely does not seem to fit the pattern so well. From the Destruction level near the gate-house. *Post*—1426.

#### Plain Floor Tiles

The only glazed floor tiles found stratified under the courtyard were  $4\frac{1}{2}$  ins. square and 1 in. thick. These all had dark to light green brown glaze and were found near the great hall.

The floor of the conduit was made of larger tiles (p. 156) and is dated, partly on their evidence, to Period V, c. 1460. These tiles, glazed brown, green or yellow, are  $8\frac{1}{2}$  ins. square and 1 in. thick.

The later tiles are again larger. These are  $9\frac{1}{2}$  ins. square and  $1\frac{1}{4}$  ins. thick, glazed green, yellow or brown. They seem to date from the first quarter of the 16th century and are used for the floor of the east half of the gate-house and re-used for the squatter floor in the Great Hall. They are similar in size, glaze and ware to those in the side chapels at King's College Chapel, Cambridge. For prices see building accounts (p. 198).

The latest type of tile found is  $10\frac{1}{4}$  ins. or more square and 2 ins. thick, sometimes glazed very dark green or black. It only occurs in the squatter levels of the Great Hall, and is scarce.

One tile, of the early 16th-century type, was found, which has a wedge shape (fig. 21, 20). This may have been used for filling in the spaces left against a wall, for the tiles were set on diagonal lines to the walls.

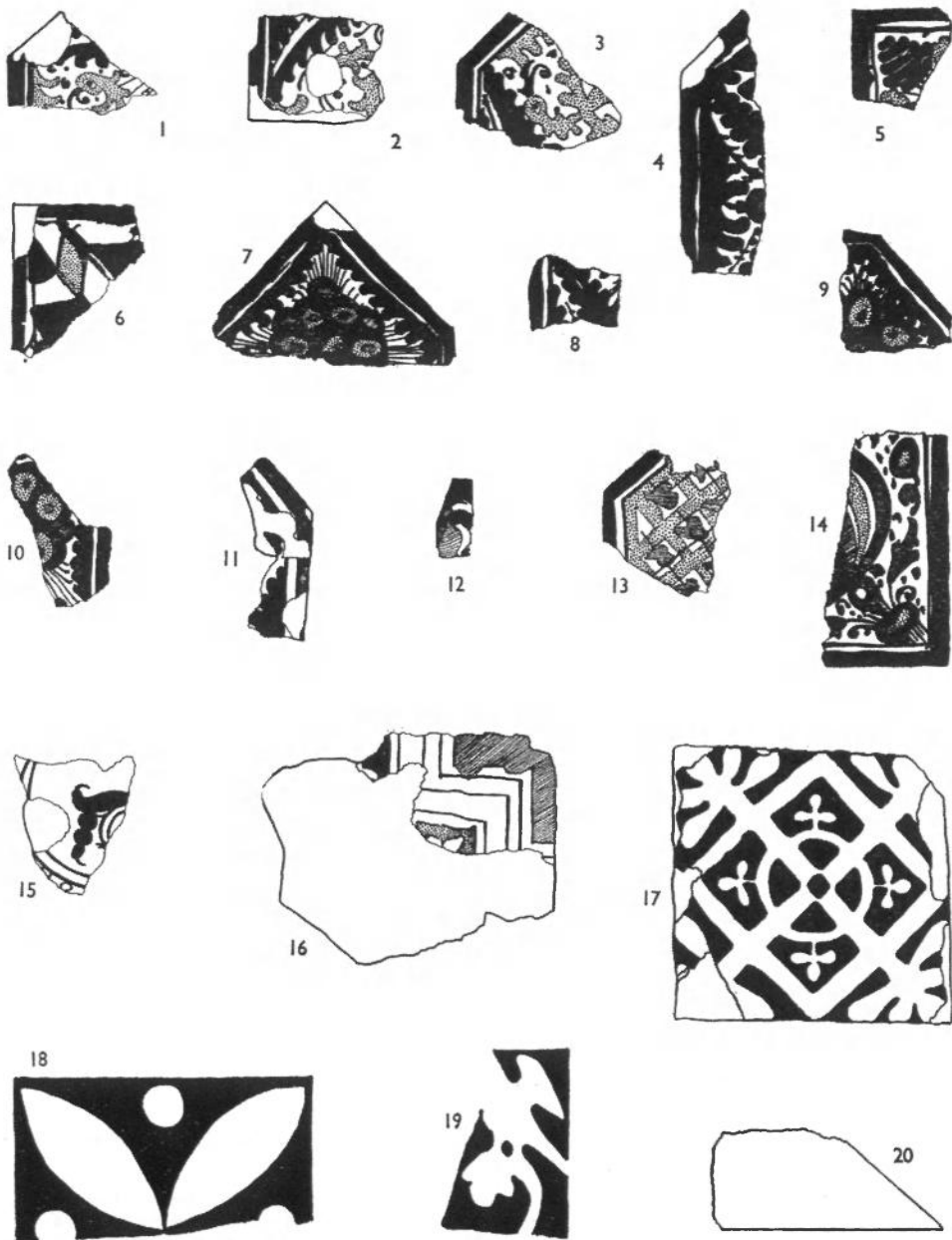


Fig. 21. Floor tiles (1-19, reduced to  $\frac{1}{3}$ ; 20, to  $\frac{1}{6}$ )  
 Colours: 1-16; black represents blue; stipple, orange; hatching, green

## BRICKS

One fragment of an early yellow brick was found in the Period III house, *c.* 1350-1426. This is a solitary piece. It measured 4 ins. by  $1\frac{3}{4}$  ins., but its length is unknown.

Normal brick sizes have been given (p. 152, 155, 157-9) and a contract for their making is quoted above (p. 198). As well as the normal bricks however there was a large number of moulded, rubbed or cut pieces displaying various architectural features.

- FIG. 22. 1. A. Chamfered, (stretcher)  $9 \times 4\frac{1}{2} \times 2\frac{1}{10}$  ins. B. Chamfered, (stretcher)  $? \times 4\frac{1}{2} \times 2\frac{1}{2}$  ins. C. Chamfered with curve (stretcher)  $? \times 4\frac{1}{2} \times 1\frac{7}{8}$  ins.  
As used for a string-course just above the wall footings at Someries.
2. A. Double chamfer  $6\frac{1}{2} \times 4\frac{1}{2} \times 2$  ins. B. Double chamfer  $8\frac{3}{8} \times 4\frac{1}{2} \times 2$  ins.  
These fit on to each other and might have been used for ribbing.
3. Double cut (stretcher)  $? \times 4\frac{1}{8} \times 2$  ins.
4. Drip mouldings (headers and stretchers):  
A.  $9\frac{1}{4} \times 4\frac{1}{2} \times 2$  ins. B.  $? \times 4\frac{1}{2} \times 2$  ins. C.  $? \times 4\frac{1}{2} \times 2$  ins.
5. Curved mouldings:  
A.  $4\frac{1}{2} \times 4 \times 2$  ins. B.  $? \times 4\frac{1}{2} \times 2\frac{1}{2}$  ins. (stretcher). C. 2 ins. thick.
6. Round ended:  
A.  $? \times 4\frac{1}{2} \times 2\frac{1}{2}$  ins. (stretcher). B.  $1\frac{3}{4}$  ins. thick.
7. Concave moulding:  $? \times 4\frac{1}{2} \times 2$  ins.
8. Concave moulding:  $? \times 4\frac{1}{2} \times 2$  ins. Doorway or window.
9. Semi-octagons:  
A.  $9\frac{1}{4} \times 4\frac{1}{2} \times 2$  ins. B.  $8\frac{3}{8} \times 4\frac{1}{2} \times 2\frac{1}{2}$  ins. Both from the cellar vaulting. C.  $? \times 4\frac{1}{2} \times 2\frac{1}{2}$  ins.  
A vaulting rib. D.  $? \times 4\frac{1}{2} \times 2$  ins.
10. Door and window mouldings:  
A. Semi-circular.  $9 \times 4\frac{1}{2} \times 2\frac{1}{2}$  ins. B. Semi-circular.  $?8 \times 3 \times 2$  ins. C. Semi-circular rib. 2 ins. thick. D. Rib.  $2\frac{1}{2}$  ins. thick. E. and F. Some type of ribbing, probably purely ornamental.
11. A decorated brick found in the garden wall by the farm. Probably 16th century.
12. A. Window, central rib.  $? \times 4\frac{1}{2} \times 2$  ins. B. Window, central rib.  $? \times 4\frac{1}{2} \times 2$  ins.
14. Attached rib.

## ARCHITECTURAL FRAGMENTS

- FIG. 22. 13. Door jamb; iron stained, glauconitic and foraminiferal chalk. From Period II building, Oven 3. 1300-1350.
15. Moulding, probably from a window or doorway.
16. Small moulding.
17. Cornice and attached, half-round pilaster. Early Renaissance Moulding.
18. Small moulding.
19. Attached rib.
20. Angular moulding. (13-20 are from the Destruction level of *c.* 1650).
21. Projecting rib. From the make-up for the Period IV courtyard, *c.* 1426.
22. Projecting rib, flat end. From the occupation on Period III floor, Room 4. Probably fallen in during the building of the Period IV house, *c.* 1426.

## QUERNS

- FIG. 22. 23. Lower stone of rotary quern. From the topsoil over the gate house. Probably *c.* 1600-1650. (Mrs. J. E. Morey notes that this is of basalt similar in appearance to the tephrite basalts of the Eifel district of Germany).
24. Mortar or lower stone of quern (Dark grey shelly limestone, Sussex or Purbeck 'marble'. J.E.M.) From Floor 3, Period II building, *c.* 1300-1350.
25. Mortar or lower stone of quern. (Basalt similar to (23) J.E.M.). From the occupation layer on Floor 4, Period II building. *c.* 1300-1350.
26. Mortar or lower stone of quern. (Buff, shelly Purbeck limestone. J.E.M.). Used in the otherwise flint courtyard of Period IV, *c.* 1426.  
A further badly broken quern stone (of basalt) similar to (23) was found in the Destruction level *c.* 1650, in the moat.

Stone specimens examined by Mrs. J. E. Morey but not illustrated were as follows:

1. Hone stone from floor of Room 6, Period III, *c.* 1350-1426 quartzite and micaceous sandstone.
2. Hone stone from the occupation on floor of Room 5, Period III: glauconitic and micaceous sandstone.
3. Building stone from the Destruction layer: fine-grained crystalline limestone, possibly Liassic.
4. Rubbed stone, possibly a pestle, from the general occupation of the house of Period II: ferruginous quartzite.
- 5, 6, 7. Building stones from Period III foundation boulders: sandstone; ferruginous sandstone; semi-consolidated ferruginous sandstone.

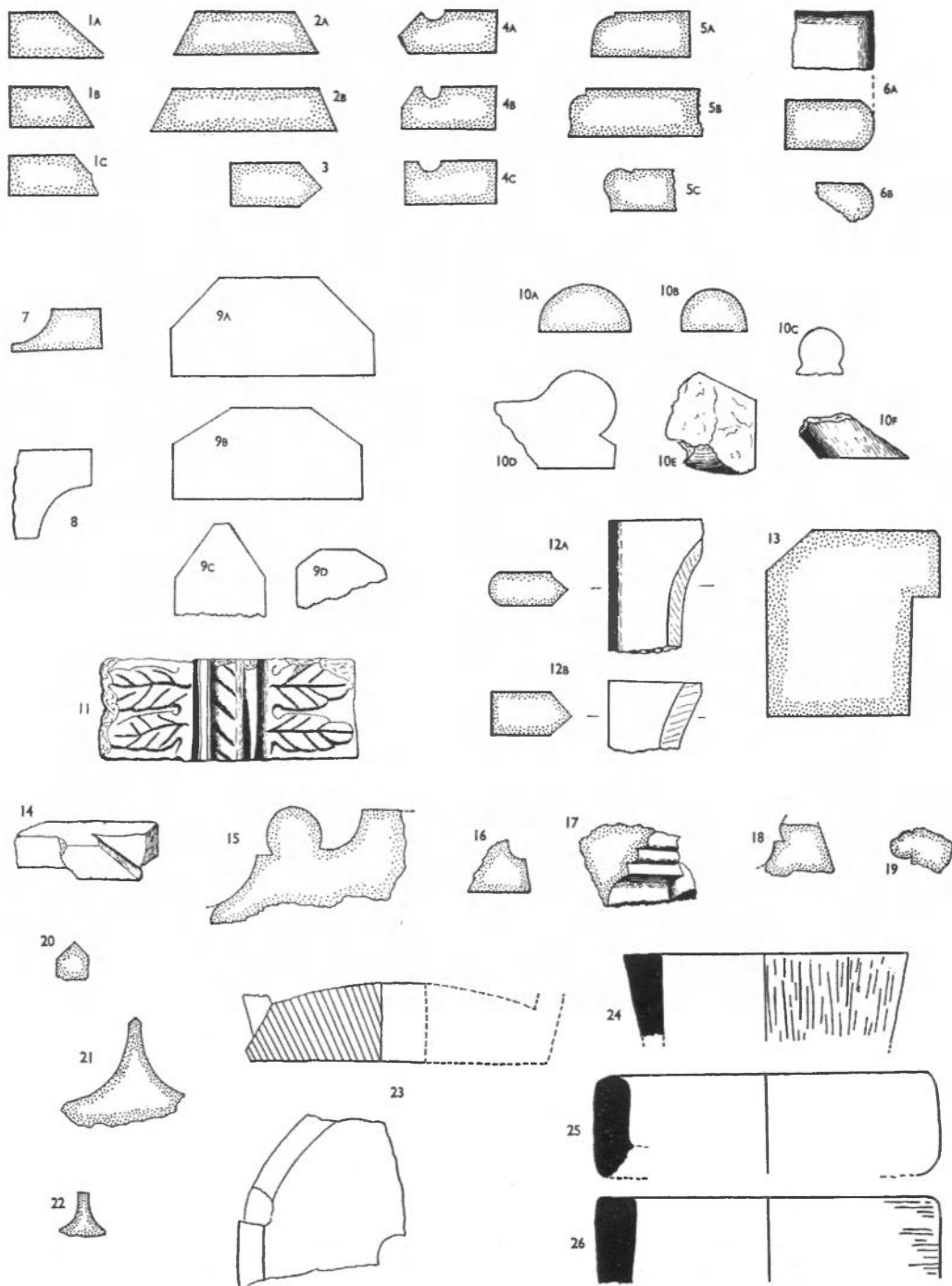
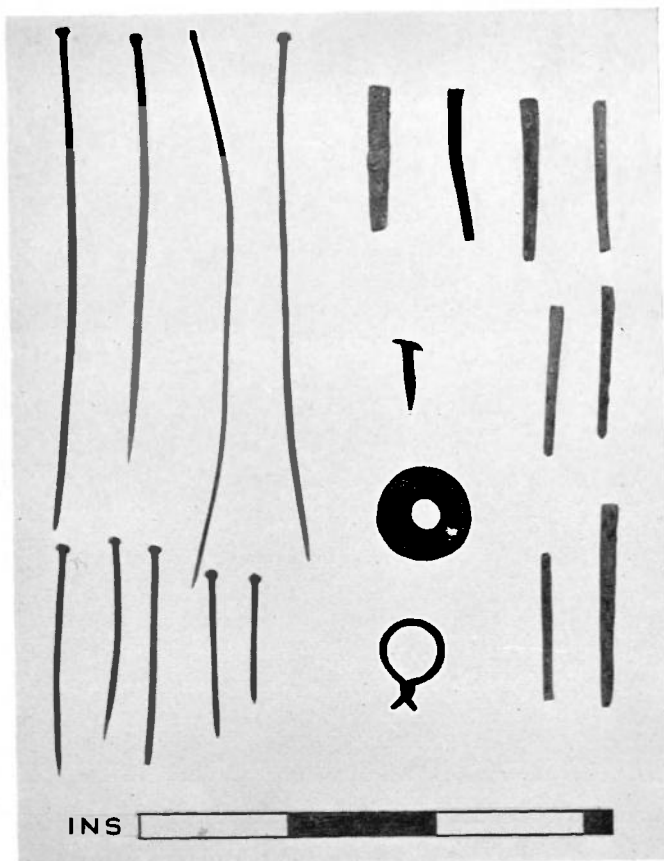


Fig. 22. Architectural fragments and querns  
 (Scales:  $\frac{1}{2}$ : excepting nos. 11, 23-26,  $\frac{1}{4}$ )

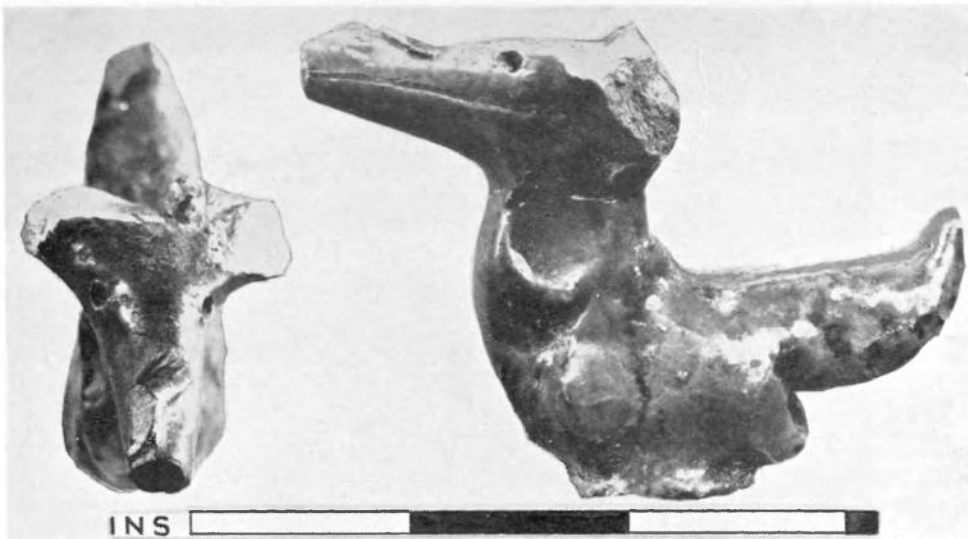


A. Period VIII. Tile and brick floor in the area of the Great Hall, looking east



B. Pins (left) and bootlace tags (right), a tack, decorated plate, and a wire twist

(*Photograph: M. B. Cookson*)



A. Green glazed pottery animal, side and front view (see p. 191)



B. Carved capital (see p. 191)  
(Photographs: M. B. Cookson)

## CARVED CAPITAL

Pl. XXIIb. Two grotesque animals, horned, facing outward, and bound by their tails to a central upright post. This nearly detached capital is probably from a lavishly ornamented chimneypiece. From the topsoil. (Friable calcareous glauconitic sandstone. J.E.M.).

## LEATHER

- FIG. 23. 1. Complete right sole of an adult's shoe. Fairly broad heel and not excessively pointed toe. From the silt of the west Period I moat, 1250-1300. It should be compared with the sole from St. Benedict's Gates, Norwich,<sup>1</sup> which is about 150 years later in date. The toe is more pointed and the heel narrower.
2. Slightly damaged right sole of a child's shoe. From the silt of Garderobe 1, c. 1520. This type is considered, to have gone out c. 1550. There was a small patch of cloth near the toe.
3. Left side of (?) a left boot. Stitching inside for flap or tongue. The boot must have laced down the front. From the silt of the west moat, Period I, 1250-1300.
4. Right side of (?) right boot. From the silt of north moat, Period I, 1250-1300.
- A number of other leather fragments and pieces were found, chiefly in the Period I moats, but none are identifiable except these.

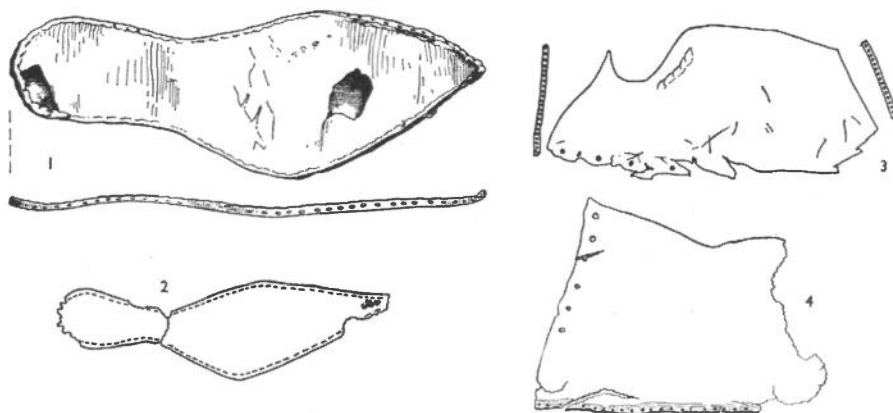


Fig. 23. Boots and Shoes (1/2)

## MISCELLANEOUS OBJECTS

- FIG. 18. 29. Bone pin made from (?) a shank bone of a sheep or pig. From the Period VI occupation in the western courtyard, c. 1520.
30. Bone (?) pin with round shaft and squared head. From the Destruction level, c. 1650.
31. Spindle whorl. Chalk; never finished. From the make-up for the Period IV courtyard, c. 1426. There was also found (not illustrated) a white metal (possibly silver) straw-needle. Stamped with maker's initials R.V. just below eye. Very irregularly made. From the squatter occupation in the Great Hall. It is possibly an intrusion via moles. If not it is 1550-1600.
- Pl. XXIIA. Fantastic animal. White pottery glazed bright green, probably from the Surrey kilns at Cheam. It may have had very long ears, for something has been broken off from its ears and the crown of its head which seems to have twisted over and lain on its nose where there is another mark of a break. The base is round and has been, perhaps, broken off a pottery vessel. From the make-up for the Period IV house, c. 1426.

<sup>1</sup> Hurst and Golson, *op. cit.*, *Norfolk Arch.* XXXI, part 1, Fig. 25, 3, and also the Hungate excavation

in this volume, pp. 105, 106, and Fig. 30.



## CLOTH REMAINS

by Miss Elizabeth G. Crowfoot

From the silt of Garderobe 1, c. 1520.

1. One fragment,  $c. 5 \times 7.6$  cm. at widest. Wool, dyed or pigmented brown. Warp (?) S—spun. Weft (?) mainly Z—spun, but after each 17 Z threads there are 2 S—spun threads; there is no indication of a change of colour, and the threads are similar, but the faint line in the weave would probably have shown (cf. striped and checked patterns obtained by change of spinning direction in Danish Iron Age Textiles). Weave, firm and regular  $2 \times 2$  twill, count c.  $13 \times 13$  threads per cm.
- 1A. One fragment,  $8.7 \times 9.5$  cm. at widest, with three cut edges and the rest torn away; possibly gusset shaped, but no trace of sewing. No selvedge. Wool, dyed or pigmented bright brown (see below). Weave as in No. 1. This piece is matted with water. Presumably Nos. 1 and 1A are part of the same thing.
2. Two fragments, one  $c. 1$  cm.  $\times$  9 mm., attached to fragment of (?) bark or leather; one  $1.1 \times 1$  cm.; some loose threads. Wool. Warp and weft Z—spun, rather uneven. Coarse plain weave, count  $c. 6 \times 5-6$  threads per cm.
3. From the west moat, Period I, 1250-1300. Three fragments twill and three small scraps. The largest measures  $5.6 \times 4$  cm. at widest. No selvedge. Wool, dyed or pigmented sepia brown. Warp and weft Z—spun. Weave regular  $2 \times 2$  twill, count 10-11  $\times$  10 threads per cm.
4. From the boot-lace tag (fig. 19, No. 16 and p. 184). From the courtyard. Textile from inside boot-lace tag. Fragment of tape or ribbon boot-lace, rolled to go inside tag; length 2.1 cm. width probably  $c. 1.2-1.5$  cm. Wool or hair.

The British Cotton Industry Research Association kindly identified the material of (4) as wool or hair. The appearance suggests the latter.

Warp, 2-ply, Z—spun. Weft—Z spun, fine. Weave, plain warp weave, very even, count c.  $56-58 \times 18$  per cm. Selvedge of outer edge visible (broken off).

The British Hat and Allied Feltmaker's Research Association, through Mr. D. Haigh, kindly examined the material of (1), (2), and (3).

Their conclusions were as follows:

'Each of the three materials submitted is wool of moderately fine counts (54s.-64s.). No other fibres were noted.

The dye could not be detected, but iron is present in each sample; to a much greater extent in the sample from the moat than in those from the garderobe. It is likely that much of this iron is contamination, though it is probable that the dye was produced on an iron mordant. No other mordanting material was found in appreciable quantity.'

## BOTANICAL SPECIMENS

These, excepting the Period I bracken, were kindly identified by Dr. George Taylor, then Keeper of Botany, British Museum (Natural History), and his staff.

PERIOD I, 1250-1300

From the silt of the west moat; 'Remains of some fern fronds, probably bracken' sufficiently well-preserved for identification, by Dr. C. R. Metcalfe at the Royal Botanic Gardens, Kew.

PERIOD III, c. 1350-1426

From the occupation over the Period II house; ash.

PERIOD IV, c. 1426

From the make-up of the courtyard; oak.

PERIOD VI, c. 1520

From the occupation on the western courtyard; ash, birch, hazel, willow or poplar.

PERIOD VIII, c. 1575

From the first rubble fall in the moat and the occupation on it; beech, oak (carbonised plant, and post).

From the squatter occupation in the Great Hall; oak.

From the dark layer in Garderobe 2, c. 1650; ash, birch, willow.

## FAUNA

The mammal bones were kindly identified by Dr. F. C. Fraser, the bird bones by Miss P. A. Lawford and the fish by Mr. A. C. Wheeler, all of the Department of Zoology, British Museum (Natural History). Copies of a detailed list are retained by the Museum.

The mammal bones are mainly from domestic animals, or from animals that might be expected in the area. It is evident from this material that the use of edible birds became more common after the beginning of the 15th century. A number of the bones show signs of having been cut, one hare calcineum has been burnt, and the roe deer antler (from silt of Garderobe I, Period IV) has a worked beam.

A short list of identifications follows:

PERIOD I: ox, sheep, pig, horse, rabbit, domestic fowl, ?pheasant or domestic fowl.

PERIOD II: ox.

PERIOD III: ox, sheep, pig, horse, rabbit, fox.

PERIOD IV: ox, sheep or goat, pig, fallow deer, cod (probable), domestic fowl, partridge, goose, swan, duck (size of Mallard), song thrush, starling.

PERIOD VI: ox, sheep or goat, pig, fallow deer, rabbit, hare, cod (probable), domestic fowl, goose, swan, partridge, wood pigeon, pheasant, buzzard, sparrow hawk.

From the silt of Garderobe I, c. 1520: ox, sheep or goat, fallow deer (remains of four distinct individuals, 2 immature, 1 adult, 1 old animal), roe deer, rabbit, dog, cod or haddock, pike, goose, domestic fowl, rock dove.

PERIOD VIII: ox, sheep or goat, pig, fallow deer, hare, rabbit, domestic fowl, goose, partridge, woodcock.

### MOLLUSCA

These were kindly identified by Mr. G. L. Wilkins. All species found were edible.

PERIOD I. From the moat silts; *Ostrea edulis*, *Helix aspersa* (edible land snail), *Cepaea nemoralis* (hedge snail).

PERIOD II. From the occupation; *Ostrea edulis*, *Buccinum undatum* (edible whelk), *Cardium edule*, *Mytilus edulis* (common mussel).

PERIOD IV. From the make-up layers of the house; *Buccinum undatum*, *Mytilus edulis*, *Helix (Cepaea) nemoralis*, *Cardium edule*.

PERIOD VI. From the occupation on the western courtyard; *Ostrea edulis*, *Cardium edule*, *Mytilus edulis*, *Buccinum undatum*, *Helix aspersa*. From the silt of Garderobe 1: c. 1520: *Mytilus edulis*, *Cardium edule*.

PERIOD VIII. From the moat silt; *Ostrea edulis*, *Anodonta cygnea* (freshwater swan mussel), *Cardium edule*, *Mytilus edulis*, *Helix sp.*, *Neptunaea antiqua* (smooth edible whelk).

From the squatter occupation in the Great Hall; *Ostrea edulis*, *Cardium edule*, *Buccinum undatum*, *Mytilus edulis*.

From the squatter occupation at the south end of the western courtyard; *Nucella lapillus*.

### NOTE ON THE SOIL CONDITIONS

By L. Biek (Ancient Monuments Laboratory)

Conditions were found in some respects to resemble those at Hungate<sup>1</sup> wherever there had been continuous waterlogging, as in the lower garderobe and moat levels. Comparable grey colours and patches of blue vivianite were observed (p. 143) and objects of wood (fig. 18), and leather (fig. 23) and remains of cloth (p. 192) as well as other organic debris were all found in a similar, relatively good state of preservation.

The most striking aspect was again provided by some of the iron objects: in the black, grey and blue surface colorations and the absence of rust, as well as in the conservation of outline. The latter is clearly evident in fig. 19: in the lower half, which shows only iron objects, the spurs (24-27) and buckle (37) should be regarded because they were drawn from the X-rays or in a 'formalised' manner; (28) and (31) then stand out from the rest, particularly by comparison with their immediate neighbours, even though not sound internally (p. 184).

Field sections were again inspected with specialists from the (then) Chemical Research Laboratory, Department of Scientific and Industrial Research. Samples were taken and examined at that Laboratory. While it seemed probable that (in suitable anaerobic levels) the observed inhibition of corrosion had been largely due to the presence of a fair amount of organic matter, and although conditions resembled those on one of the rare industrial sites where inhibition has been observed, the results were equivocal and no definite conclusions could be drawn.

### THE BUILDING MORTARS

By Dr. N. Davey, by permission of the Director of Building Research

(Department of Scientific and Industrial Research)

The mortars fall into five fairly distinct groups. The sand used throughout appears to be of the fine local type which exists in extensive deposits in the Moor Park area. The earliest samples of sand, presumably derived from shallow working, contain very high amounts of loamy silt, but this decreases notably in the later samples. This point is illustrated well in the average grading of the groups plotted on fig. 24. Presumably the introduction of brickwork to the site resulted in a demand for greater quantities of sand and this must have been dug more deeply. In consequence the sand was cleaner and the proportion of loamy silt from the surface was less.

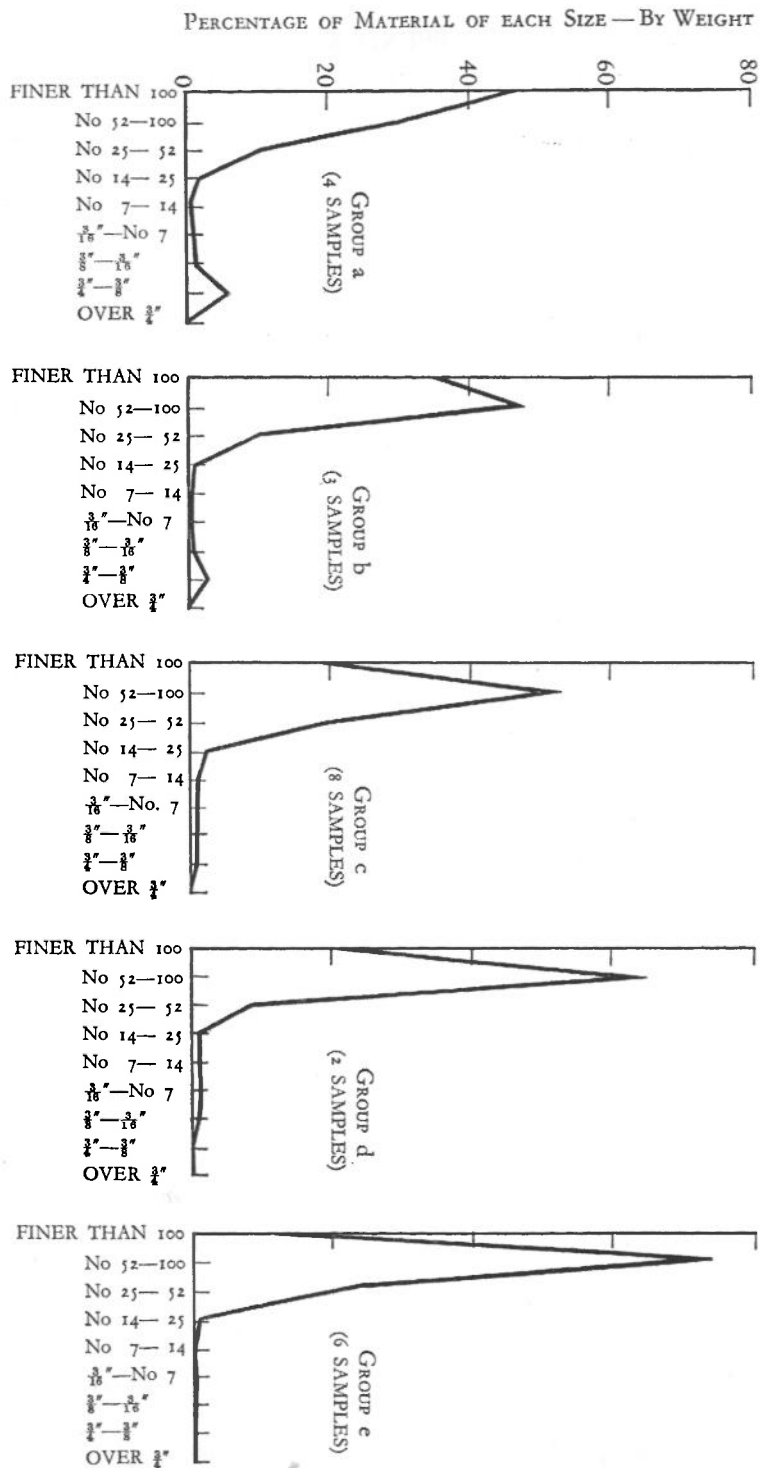
My analyses suggest that samples 1, 2, 6 and 7 in Group (a) from the lower half of the chalk and flint wall by Garderobe 1 are the earliest I have examined and that this Group (a) is rather earlier than Group (c), which was dated 1426 by the excavators; in fact stratigraphically it must be, but how much earlier it is impossible to say.<sup>2</sup>

<sup>1</sup> See report on Hungate in this volume, Appendix II, pp. 107-9.

<sup>2</sup> See p. 152. Group (b) mortars derive from walls of Period III which are sealed by, and therefore earlier than, Period IV structures (Groups (a) and (c)). M.B.

*Analyses of sands from lime mortar samples from the walls of The More*

Group	Identification Number	Description	Analysis of aggregate:— Percentage of material retained between the following British Standard sieves:—								Remarks	
			over $\frac{3}{4}$ "	$\frac{3}{4}$ "- $\frac{3}{8}$ "	$\frac{3}{8}$ "- $\frac{1}{8}$ "	$\frac{5}{16}$ "- No. 7	No. 7- 14	No. 14- 25	No. 25- 52	No. 52- 100		Finer than 100
a	1	Chalk and flint wall by Garderobe 1	o	3.3	0.6	0.9	0.9	2.7	13.2	34.0	44.3	Excavators' dating 1426
	2	—Lower half ditto.	o	o	4.2	0.9	0.8	2.0	11.9	32.9	47.3	
	6	ditto.—arch ring	o	16.5	0.6	1.6	1.5	2.7	8.4	23.1	45.5	
	7	ditto.	o	4.7	0.7	1.5	1.0	1.8	14.0	35.8	40.5	
		Average o		6.1	1.5	1.2	1.1	2.3	11.9	31.4	44.4	
b	20	Flint wall, W. wall of Room 1	o	2.6	0.1	0.3	0.5	1.2	11.6	47.8	35.6	Excavators' dating 1350 to 1426
	27	S. end of wall between Rooms 2 & 3	o	3.5	o	o	0.2	1.2	10.4	52.8	32.1	
	30	S. wall of Room 1	o	2.5	0.5	0.1	0.5	1.5	10.3	43.5	38.0	
		Average o		2.9	0.2	0.1	0.4	1.3	10.8	48.0	35.2	
c	3	Chalk and flint wall by Garderobe 1	o	o	o	1.6	2.1	2.4	16.3	53.0	24.6	Excavators' dating 1426
	4	—upper half ditto.	o	o	2.1	3.2	1.7	3.6	18.2	54.1	16.9	
	5	ditto.—brick facing	o	o	o	1.1	2.1	3.6	24.7	52.3	16.0	
	8	ditto. ditto.	o	o	0.4	2.4	2.0	2.2	20.0	53.7	19.3	
	16	Inner brick wall parallel to chalk and flint wall by Garderobe 1	o	o	0.1	o	0.4	0.8	19.4	59.0	20.1	
	19	Flint wall by Garderobe 1	o	2.8	0.6	0.9	0.8	0.9	16.2	52.5	25.5	
	34	E. wall of? Period IV building	o	3.7	2.1	2.1	2.6	2.5	26.0	45.6	14.2	
	37	ditto.	o	o	1.1	1.9	2.8	3.6	22.9	48.2	19.5	
		Average o		0.8	0.8	1.6	1.8	2.4	20.4	52.3	19.5	
d	35	Addition to E. wall of? Period IV building	o	o	1.5	1.5	2.0	1.3	10.0	63.0	20.5	Excavators' dating c. 1460
	36	Brick facing of cellar at N.E. corner	o	o	o	1.0	0.3	0.7	6.2	67.0	25.0	
		Average o		o	0.7	1.2	1.1	1.0	8.1	65.0	22.7	
e	10	Garderobe 1—cross wall	o	o	o	0.2	0.1	0.5	11.0	73.5	14.6	Excavators' dating 1520
	11	ditto. —S.E.block	o	o	o	0.2	0.2	0.5	15.0	70.0	14.4	
	12	ditto. —W. alcove blocking	o	o	o	o	0.2	0.5	12.7	73.0	13.6	
	13	Moat section. Chalk retaining wall	o	o	0.6	0.8	0.6	0.4	12.0	71.0	13.4	
	14	ditto.	o	o	o	0.1	0.7	0.9	10.1	74.2	13.9	
	18	From brick from Garderobe 1	o	o	o	0.1	0.2	0.6	16.1	71.3	11.7	
	Average o		o	0.1	0.2	0.3	0.6	12.8	72.2	13.6		
	15	Moat section. Brick bridge pier	o	o	o	0.8	0.4	0.8	25.3	62.0	10.8	Probably later than 1520



PARTICLE SIZE (BRITISH STANDARD SIEVES)

Fig. 24. Grading characteristics of sands used in the walls of the More

APPENDIX A  
THE BUILDING AND REPAIR ACCOUNTS

The accounts for the work done at the More during the reign of Henry VIII are contained in five of James Nedeham's pay books preserved in the Bodleian<sup>1</sup>, in two preserved at Longleat House<sup>2</sup>, in two among the Newcastle MSS. at Nottingham<sup>3</sup>, in one at the Public Records Office<sup>4</sup>, in one among the Foljambe MSS.<sup>5</sup>, and in one at the British Museum<sup>6</sup>. The accounts<sup>7</sup> cover the period April, 1534 until July, 1544. There are a few gaps, but only two of any length between Michaelmas, 1537 and Michaelmas, 1538, and between Michaelmas, 1540 and Michaelmas, 1541<sup>8</sup>. The accounts are too short to enable a reconstruction of the house to be made without the help of original plans and views, such as has recently been done for Theobalds<sup>9</sup>, but they are sufficient to give some idea of the house, the materials and the workmen.

A letter written by Froude, the historian, to Lord Ebury states that "in 1568 a survey was taken of this estate" (surely the 1566 survey, though the following description is not to be found in it) "but the only trace that is left of it is the following brief description of the house: 'The Mansion was of brick, the chief buildings forming a square court, which was entered by a gate-house with towers. The whole was moated. It was then in a delapidated state.'"<sup>10</sup>

This picture of the house is essentially correct, for as far as can be reconstructed from the disconnected entries in Nedeham's pay books, there was a base court and an inner court. Around the former court lay a variety of lodgings, the stables, divided into the King's and the Queen's, the storehouse, and probably the boiling, bolting and coal-houses. Somewhere outside the base court were the storeyard and the timber or wood yard. In the centre of the court was the conduit head before which were 'great ditches'. The water was brought to the conduit head by a vault of brick and there are many references to the cleaning of the conduit head and the repairing and making of houses for the suspirals. The inner court was entered from the base court by the great bridge over the moat. This must have been of wood on brick piers since there is mention of mending and planking it. At the inner end of the bridge was the drawbridge before the turreted gatehouse.

There were gutters to bring the water from the river to the moat; at one time bricklayers were at work 'shortening and mending the great pipe that conveyeth all the filth out of the said manor on the moat'.<sup>11</sup> There is reference also to 'the mowing of grass and weeds in the moat for the King's grace to fish'.

It was hoped that it might be possible to form some plan of the buildings on the inner court: the material however was too scanty. In the centre of the court was an *age*, or trough, and a further conduit head. From here the pipes led off to different parts of the building.

On this court were the royal apartments divided into the Queen's side and the King's side, though in actual practice it is obvious from the accounts that they were joined on to each other in more than one place. They seem mainly to have been on the first floor and stairs led down from the King's bedchamber to the chapel closet, so the chapel was probably on ground level. There is no indication of the position of the hall, but it may well have been on the far,

<sup>1</sup> MSS. Rawl. D, 776, f. 205r-231r; 777, f. 1r-34r; 779, f. 71v-72v; 780, f. 109r-160r; and 781, f. 40r-120v.

<sup>2</sup> Longleat House Archives Misc. MSS. XXIX and XXX, f. 20. We are grateful to Miss Dorothy Coates, the Librarian at Longleat, for information about these MSS.

<sup>3</sup> Newcastle MSS. 65 and 66, in Nottingham University Library.

<sup>4</sup> P.R.O. E 101/504/2 f. 43 *et seq.*

<sup>5</sup> Foljambe MSS. in private possession. No ref. number.

<sup>6</sup> Brit. Mus. Add. MS. 10109. P.R.O. A03/1276 is a copy of f. 123 of this MS.

<sup>7</sup> They are very similar to those illustrated on Pls. 8 and 9 of *Building in England*, by L. F. Salzman.

<sup>8</sup> These gaps are common to all Nedeham's accounts.

<sup>9</sup> Sir John Summerson, 'The Building of Theobalds, 1564-1585'. *Archaeologia*, 97, 107-126.

<sup>10</sup> Letter quoted in *Moor Park* by the Rev. Bayne.

<sup>11</sup> The spelling of quotations from these accounts has been modernised, except in the case of certain special words.

or north, side of the court, near the north-west corner. The King's apartments included an upper and a lower long gallery, which may have been part of Wolsey's additions, for he built long galleries at Hampton Court and York Place. The cellar mentioned in the accounts may be the one found in the north-east corner of the courtyard. The battlements seem to have been of brick and also of wood, for there is a reference to carpenters taking down the battlements of the King's chamber of estate.

Each of the following rooms existed in both the King's and Queen's apartments:

Bedchamber	Dining Chamber	Raying Chamber
Chamber	Gallery	Stole Chamber
Chamber of Estate	Great Chamber	Watching Chamber
Chamber of Presence	Privy Chamber	
Closet	Privy Closet	

The King's apartments contained in addition:

Great long gallery; holy day closet; kneeling place; lower gallery; new chamber; privy kitchen and winding stairs to it; stool chamber and wardrobe of beds.

The Queen's apartments contained in addition:

Chamber ward; kitchen; two pallet chambers; waiting chamber; wardrobe of the robes; and a privy bridge from the privy closet.

As well as these rooms and a number of small chambers not otherwise identified there are the following:

Cellar; chambers belonging to Dr. Butts, The Comptroller, The Lord Marquess of Exeter, The Master of the Horse, Mr. Noore, Sir John Russell, The Queen's Maidens, the Squires of the Body and two chambers for the Knights of the Body; a chapel and a gallery to it; several other galleries; long gallery in the garden; lodgings belonging to the 'Lord Amyerall', Master Cafferon, the Lord Great Chamberlain, the Duke of Norfolk and the Lord Privy Seal; tower 'where the Lord Privy Seal lieth'; Hobby's house; at least nine sets of stairs, tower on the inner gate; tower next the park, several jakeses; great kitchen, kitchen, kitchen chamber, kitchen larder house; scullery; ewery place; pantry; inner pantry, pastry place, privy butlery; privy pantry<sup>1</sup>.

Over the moat on the north side of the inner court was a wooden bridge on brick foundations, described as 'the bridge over the backside where the kitchen stuff is brought in'.

The decoration in some of these chambers was extremely rich, and during the period of these accounts much work was done on interior decoration. Thus in the King's chamber of presence joiners were paid for 'sorting and setting together of the old battons and frettes, with drawing the compasses of the frettes in the roof, but also joining and setting up of the said battons and frettes, with pendants, bosses, syngells and battons, with making of new battons and frettes to accomplish and fulfil the said frett in the roof of the King's chamber of presence'. Later they 'rebated clapptres, made battons and set in to them Antike in the same chamber'. In the King's chamber 'monyowns and transomes' were made for the clerestory and a number of new windows were put in all over the house, including a bay window of thirty lights in the King's new chamber. The King's great long gallery was partly repaved with paving tiles at 16d. for 50. The hall was whitened, plastered and yellow ochred; red lead was employed upon battons and windows there. In the hall also two great escutcheons within a garland with the Queen's arms were gilded and painted; in the King's privy chamber '14 badges gilt of the smallest sort'; in the King's closet '16 cognizances with letters gilt with fine gold with bice, of the middle sort, and 3 of the smallest sort'; and in the second chamber for the Knights of the Body 'a great escutcheon within a garland with the queen's arms gilt'. Five small cognizances were also gilded with H(enry) and A(nne). This was also done at Hampton Court, but later changed to H and J<sup>2</sup>. In the Queen's chamber of estate an antique border was cleansed and restored, laid with bice and mended where broken.

<sup>1</sup> Some of these names probably duplicate each other as there was no uniformity in this over the

ten year period of the accounts.

<sup>2</sup> Law, *History of Hampton Court*, 164, 179.

## EXCAVATION OF THE MANOR OF THE MORE, RICKMANSWORTH

Bricklayers pencilled a wall before the great kitchen and a tinned iron bar was used to stay the wainscot ceiling between the closet and the King's kneeling place. Three posts were set up in the privy butlery to stay the floor of the watching chamber. Plasterers worked on the timber walls of the Queen's stairs and whitened the brick walls of the same stairs (it is probable that there was a considerable amount of black and white external timber work in some places at the More).

Outside the house there were several buildings and other constructions which were either repaired or built during this period. The highway was mended several times with, in all, 326 loads of gravel and rubbish, especially in the area where the sluices and highway met, and between Rickmansworth and the manor. There was a great gate into the park and a number of sallying gates into it also. A bridge called Tolford Bridge was first mended and later replaced by a new one. Batchworth Heath Lodge was new lathed and replastered; Tolpits house 'which was ready to fall down for lack of reparations' was repaired and mended 'for the King's gardener to live in'. In the park were several lodges: the lodge, the upper or farther lodge, the middle lodge and 'the warren lodging, westward in the park'. A frame was made 'for a house to be set at the lodge in the said park to lay in hay for feeding of deer in the winter, and in the one end of the said house is made a lodge for the keeper to live in'. Bricklayers made 'sixteen great corners of bricks to set the house up made for deer in the park for the said deer to lie under in stormy weather'. Also in the park were the lime-kiln, the mortar heap, the saw-pit, the timber or woodyard and Westmester pond, which had to be cleaned out on one occasion; nearby there was a brick-kiln, possibly even in the park<sup>1</sup>. In addition to the great park there was an outer park. To the east of the manor a new lawn was made, and a new deer house set in it; at the end of the lawn was a covert for deer. Earth was dug to be laid in knots in the gardens, which also contained butts made of turf. Next to the garden was a long covert at the north end of which was 'the parroke next the garden'. The orchard was somewhere near the main block of the house, possibly to the north. There was also the King's great fish pond yard and some fish ponds.

### Materials

Wood was mainly bought locally in Sarrett, Rickmansworth and Ruislip or cut in the park. Brick was bought at 4/6d. the 1,000 from Richard Bocher of Rickmansworth<sup>2</sup>, who also sold plain tile at the same price and paving tile at 16d. for 50. Brick and tile were also bought from Richard Redyng of Ruislip at the same prices and also roof and corner tile at 2/3d. for 50. An agreement was made with Richard Redyng and Richard Gysby which is worth quoting: 'To Richard Redyng and Richard Gysby at diverse and sundry times for a bargain in gross with them made for the making and burning of 400,000 brick, that is to wit every brick cont. in length 9½ inches of assise, in breadth 4¾ inches and in thickness 2¾ inches of assise. Price the making of every thousand delivered into the said manor 2/8. The said Richard and Richard finding all manner of things for the making of the same, only excepted wood for the burning of the said brick to be delivered in the said park ready felled at the King's charge, and tallied and carried at the charge of the said Richard and Richard, and also except earth for the making of the same under digged—£53 6s. 8d.'. Richard Redyng and Richard Bowcher (or Bocher) also supplied lime at 2/- the load with carriage. Freestone was bought from Gabriel Goldam of London, mason, at 4d. the foot. Ironwork was supplied by Rauff Walter of Batchworth, Thomas Adeyne (or a Deane) of Rickmansworth and Michael Upon, smith, of Windsor. John Sturgeon supplied the nails: his prices were 1,000 double tenpenny nails at 8/-, 1,000 single tenpenny nails at 4/2, 1,000 sixpenny nails at 2/6, 1,000 fivepenny nails at 2/-, 1,000 fourpenny nails at 20d., half a bag of sprags at 3/2, and half a bag of roof nails at 2/4. Plaster of Paris came from John of Roone (Rouen) at 12/- for two mounts. The lead was brought from

<sup>1</sup> Dr. Norman Davey says that he remembers a cart-track of crushed 'tudor' brick leading in the direction of the More from Grove farm, on Batchworth Heath Lane. This may have been from the

brick-kiln.

<sup>2</sup> Brick was made in Rickmansworth as early as 1427, *v. Salzman, Building in England, 143*. This was probably in the area of Woodcock Hill.

Sopwell Abbey and in all amounted to 8 fothers 3 quarters 21 pounds<sup>1</sup>. A grindstone was bought from Thomas Ivy of Limehouse, taken by water to Ele's wharf and by John Ele from his wharf to Temple Bar and thence to the More by John Mylward, who did a great deal of the local carriage.

### *Workmen*

The carpenters were paid at 9d., 8d., 7d., 6d. and 5d. the day. Thomas Jakolyn worked at 9d. the day, and Christopher Estwood, John Lyan and Thomas Castelman at 8d.; two months later Castelman and Estwood were working at 7d. the day. The joiners working at 8d. the day were John Gylbard, John Gyngson and William Symonds. The sawyers worked at 6d. the day, the bricklayers at 8d., 7d. or 6d., and the tilers for the same wages. The plumber was George Hynde, who was later, in 1542, to become the King's Sergeant Plumber<sup>2</sup>, and he worked at 8d. the day. Two other plumbers worked at 6d. the day. The senior plasterer, who worked at 9d. the day, was William Elder, and his juniors worked at 7d. the day. Plasterers' labourers worked at 5d. and common labourers at 4d. the day. The purveyor was John Williamson who had 6d. a day. The glazing was carried out by Galyon Hone, the King's Chief Glazier, who was paid no set wage, but for piece work: he presumably had a salary. The painting was done by John Veithe (or Hethe) of London, who was working also at Hampton Court with Henry Blakston<sup>3</sup>. In 1534 the clerk was John Style at 6d. a day, in 1535 it was Antony Pontesbury; by 1536/37 it was Thomas Kekoroll, and later John Hulberd. In 1543 the clerks were Philip Reyers and later William Blacknall who was clerk at Hamsdon, Ampthill, Chobham, Okyng, Horsly and Enfield<sup>4</sup>.

For one year—1535/36—a complete account exists for all expenses at the More. The wages came to £229 13s. 3d.; the emptions to £126 15s. 0 $\frac{3}{4}$ d.

<sup>1</sup> *Bodleian MS. Rawl. D 809 f. 2r.*

<sup>2</sup> John H. Harvey, 'The Medieval Office of Works', *J.B.A.A.* 3rd ser. VI, 76.

<sup>3</sup> *Law, op. cit.*, 126.

<sup>4</sup> *Brit. Mus. Add MS. 10109 passim.*