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A demesne residence at Otford was maintained almost certainly from Anglo-Saxon times by the archbishops of Canterbury and for the decade following 1537 by the sovereign. This paper is confined in scope to a descriptive study, based on all currently-available evidence, of the vanished buildings of the house in its final palatial form, after Archbishop Warham's sweeping changes of 1514–18 and Henry VIII's lesser modifications of 1541–43.

Knowledge of this immense structural complex has hitherto been remarkably superficial, due partly to the paucity of standing remains and the limited extent of archaeological excavations so far undertaken and partly to the lack of any detailed account in which interpretation of the considerable volume of primary documentation takes its proper place.² At the time of writing, publication of two relevant works is understood to be imminent: the first is an architectural history of the successive buildings by the present writer³ which it is hoped will redress the latter deficiency, while the second is Brian Philp's report on the 1974 excavation of the south-east corner of the site.⁴

¹ The term 'palace', nowadays applied to archiepiscopal and episcopal residences anywhere, was in the case of the Primate of All England formerly reserved for his seats at Canterbury and Lambeth (J. Cave-Browne, *Lambeth Palace and its Associations* (1883), 1 n.).

² Dennis Clarke and Anthony Stoyel, Otford in Kent – A History (1975), in many scattered references, went further than any previous publication towards describing the successive buildings in course of a detailed historical account. As a result of more recent research on which this paper is based, however, the plan (p. 102) can no longer be accepted as valid.

³ Anthony D. Stoyel, 'Otford', Palaces of the Archbishops of Canterbury from Lanfranc to Laud, in (Eds.) T.F.C. Blagg and T.W.T. Tatton-Brown (forthcoming).

⁴ Brian Philp, 'The Archbishops of Canterbury's Palace at Otford', Excavations in the Darent Valley, Kent (1984). Much of this excavation has already been published; see C.P. Ward, 'Emergency Excavations at Otford Palace, 1974', Arch. Cant., lxxxix (1974), 199–203. The excavation itself was largely carried out by the Otford and

The principal documentary sources are the series of medieval archiepiscopal ministers' accounts and three surveys made for the Crown in the sixteenth century. To avoid multiplicity of footnotes, source references in these documents are not quoted individually. As the house in its fully-developed form is under consideration here, it is naturally the Crown surveys that are chiefly apposite but, as will be seen, evidence from the earlier sources is sometimes illuminating. It is important to bear in mind that the surveys of 1548 and 1573 are no more than specifications with estimates for making good the more serious dilapidations of an almost-deserted palace; thus, like the ministers' accounts, they are concerned only with components in need of repair or rebuilding. That of c. 1541 is the only true survey, but its scope is so great, covering much more than the palace itself, that a large number of important buildings are dealt with summarily and others not at all.

For a proper understanding of the house in its ultimate guise, some explanation of its history is essential but must here be limited to a brief outline. Lands granted by charters of 821 and 822 to Archbishop Wulfred became the nucleus of an estate which by the time of the Domesday survey had developed into one of the largest and most profitable of the archiepiscopal demesne manors. Moreover, after Archbishop Pecham's death in 1292, Otford was the seat of a vast bailiwick comprising its own manor with those of Bexley, Northfleet and Wrotham.⁷ Fittingly, therefore, the manor-house at Otford was

plan printed as Illustration no. 1 (facing p. 5) is worthless, and the fireplace in Plate 6 is

District Historical Society's Archaeological Group with outside assistance; for its final stage, the Department of the Environment transferred authority to excavate to the Kent Archaeological Rescue Unit, who then took over. Philp's interpretation of the evidence is awaited with interest.

⁵ 1273: B.L. Add. MS. 29794, m.7. 1288–1440: Lambeth Pal. Lib., Account-rolls 830, 832–6, 846, 853, 857, 860, 865 and 868. For the purposes of this paper, translated transcripts have been used and the writer is much indebted to R.D. Clarke for making his extracts available.

⁶ c. 1541: MS. in private hands. A transcript is in Sevenoaks Library's Local History Collection (Gordon Ward's Notebook 'Otford v', 4-44) and is partly printed in D.G. Elder, Otford Past and Present (undated, c. 1950).

^{1548:} P.R.O. E 101/497/4. 1573: P.R.O. E 178/1100.

Transcripts of the 1548 (extract only) and 1573 MSS. are printed as Appendices I and II in Capt. C. Hesketh, 'The Manor House and Great Park of the Archbishop of Canterbury at Otford', Arch. Cant., xxxi (1915), 16–22. The first omits the Great Stable, presumably in error, and both contain serious transcriptional inaccuracies. The

too late in date to have come from the palace.

⁷ F.R.H. Du Boulay, The Lordship of Canterbury: An Essay on Medieval Society (1966), 196 et al.

progressively enlarged and rebuilt over the centuries, from a probable Anglo-Saxon hall to a known enormous Tudor palace.

Archbishop William Warham conceived a magnificent house of proportions unprecedented in England. His original intention to rebuild at Canterbury was frustrated by a dispute over the extent of land available to him, so he turned to Otford where there were no such restrictions. Its proximity to London suited him well for, as Lord Chancellor from 1504 to 1515, this was an important consideration. The work was already in progress in 1514 and is recorded as involving the entire demolition of the earlier manor-house except for the walls of its chapel and great hall.8 It may reasonably be surmised, however, that some at least of the outlying service buildings were spared. William Corneford appears to have been the master carpenter and had evidently completed his contract by September 1518.9 Unfortunately, the identity of the master mason is unknown and the building accounts have apparently not survived. Lambard, writing in savagelybiased vein, alleged that the cost was £33,000, but other more reliable evidence demonstrates that it was in fact much less, though no figure can be given.10

The resultant house must in its day have been one of the wonders of Britain and beyond. Not only was the former site now occupied wholly by new and renovated buildings but an immense extension outside the old moat almost trebled its area. Wolsey's Hampton Court, marginally later but very nearly contemporary, has been described by Pevsner as the grandest of all houses built in England at the time, at least 300 by 550 ft. (92 by 168 m.) in size. A 1980 survey of the site of Otford Palace, however, shows its dimensions to have been 370 by 530 ft. (112.7 by 161.5 m.). Of the two, Otford had the more courtyard-space, so that in terms of actual building area Hampton Court was possibly larger but only slightly so. 12

This was not mere ostentatious vainglory. The status of the medieval archbishops, second only to the sovereign, was generally regarded quite naturally by all classes of society as entitling them to houses of extravagant splendour. By virtue of their princely office, they entertained the most distinguished of guests and doubtless there were occasions when it was virtually a matter of national prestige that

^{8 (}Ed.) P.S. Allen, Erasmi Epistolae (1910), v, 352.

⁹ Sevenoaks Library Local History Collection, Gordon Ward's Notebook 'Polhill i', 119, 121, and 123.

¹⁰ William Lambarde, A Perambulation of Kent (1576), 377; W.K. Jordan, 'Social Institutions in Kent 1480–1660', Arch. Cant., lxxv (a special vol., 1961), 96 n.

¹¹ Nikolaus Pevsner, The Buildings of England: Middlesex (1951), 67.

¹² In both cases, the measurements quoted exclude outlying service buildings.

Fig. 1. (facing). Otford Palace: Suggested Ground-floor Plan, c. 1546.

Notes

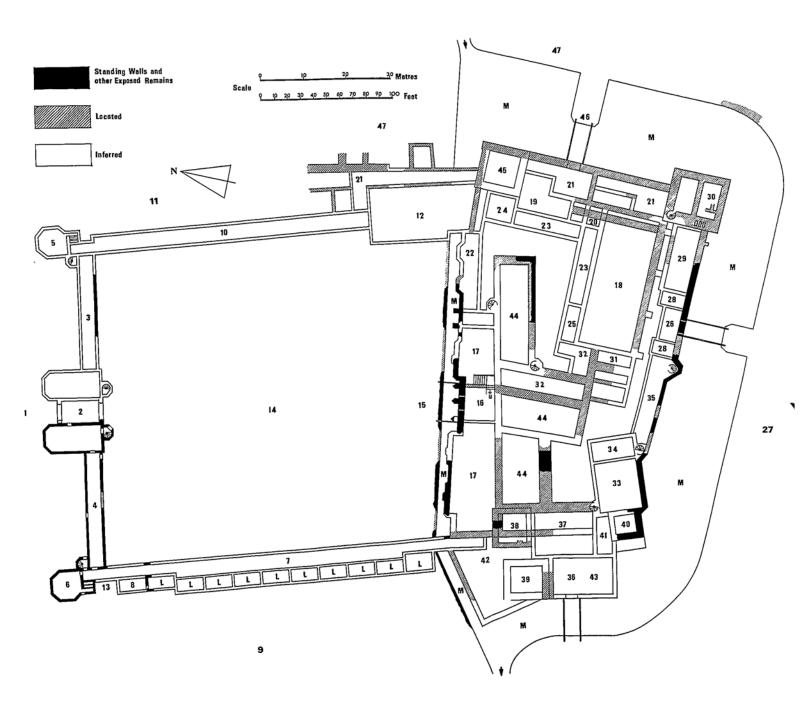
- (a) Evidence of the differences in upper-storey arrangements is too limited to justify a separate first-floor plan. Distinctions between the two levels are indicated in the key below by the use of the abbreviations (GF) for ground floor and (UF) for upper floor.
- (b) Components which, although lacking documentary authority of existence, can be reasonably assumed from other evidence to have occupied the positions marked are printed in italics in the key.
- (c) Several components are shown on the plan in outline only, without any attempt to indicate partition walls, porches and other structural features known or likely to have existed, the positions of which must remain purely conjectural.
- (d) A number of walls indicated as 'located' consist only of foundations and in many cases the superstructure walling is unlikely to have been as thick as marked. A few such foundations are probably of early walls which were not rebuilt in the Tudor palace and thus, in fact, have no place in this plan.
- (e) Except for main entrances, the plan does not show doorways and the like unless still existing (many of them blocked). Windows have been omitted altogether.
- (f) The year quoted for this suggested plan is one following completion of Henry VIII's alterations.

Key

M Moat.

- L Lodgings (on two storeys) not specified elsewhere in the key.
 - 1 Base Court.
- 2 Great Gatehouse, double-storeyed with flanking towers of three storeys.
- 3 North Gallery (eastern part), doublestoreyed.
- 4 North Gallery (western part), doublestoreved.
- 5 Tower at north-east corner, three-storeyed.
- 6 Tower at north-west corner, three-storeyed.
- 7 Privy Gallery, double-storeyed.
- 8 (GF) Garden tool-store. (UF) Chamber. 9 Pleasure garden.
- 10 East gallery, double-storeyed.
- 11 Kitchen garden.
- 12 Great Stable.
- 13 (GF) Garden porch. (UF) Balcony.
- 14 Inner Court.
- 15 Bridge at main entrance.
- 16 (GF) Main entrance vestibule and adjacent staircase. (UF) Guard room.
- 17 Great Gallery, double-storeyed.
- 18 (GF) Beer- and wine-cellars. (UF) Great Hall.
- 19 Great Kitchen and other domestic offices.
- 20 (GF) Servery, with scullery and pantry adjoining to north. (UF) Lodging.
- 21 Gallery, double-storeyed.
- 22 Little Gallery, double-storeyed.
- 23 (GF) Partly service corridor, partly domes-

- tic offices. (UF) Green Gallery.
- 24 (GF) Part of domestic offices. (UF) Chambers.
- 25 (GF) Part of service corridor. (UF) Lodgings.
- 26 South gatehouse and bridge.
- 27 Great Park.
- 28 Stables.
- 29 Courtyard with cloistered galleries and lodgings.
- 30 Tower at south-east corner, three-storeyed.
- 31 Solar.
- 32 (GF) Gallery. (UF) New Gallery over part.
- 33 (GF) Hall below Chapel. (UF) Chapel.
- 34 (GF) Wardrobe (sacristy) of Chapel. (UF) Part of Chapel (choir).
- 35 Lodgings.
- 36 Little Gatehouse and west bridge.
- 37 (UF) Great Chamber.
- 38 Tower.
- 39 Tower.
- 40 Small tower at south-west corner (possibly bell-tower of Chapel).
- 41 Lodgings.
- 42 Lodgings.
- 43 School house.
- 44 (GF) Lodgings, mainly if not entirely. (UF) State apartments.
- 45 Tower.
- 46 East bridge and gate.
- 47 Farm and other service buildings.



the accommodation afforded should emulate or exceed the sophisticated grandeur then becoming fashionable for the greatest European houses. Visits by the king and members of the royal family, with their travelling households, had long been customary, especially during sede vacante periods when the archbishop's manors reverted to the Crown whose escheators took possession to appropriate the revenues.

Warham's new palace remained in archiepiscopal hands for barely twenty years, for his successor Cranmer was compelled by Henry VIII to surrender it in 1537, with the entire manor and much else, in return for less valuable holdings. Thereafter, from 1541 to 1546 the king spent considerable sums on maintaining the property and altering the buildings to suit his tastes for their rôle as a royal palace, the most costly modifications (on which the documents are sadly not specific) being completed by 1543.¹³ The Crown expenditure came to an abrupt end with Henry's death in January 1547, and it is unlikely that much was changed except for the remodelling of the state apartments and the construction of an adjacent new gallery.

In the following account of the components of the palace as they were at that stage, they are located by reference in parenthesis to the key numbers used on the suggested plan (Fig. 1).¹⁴

THE INNER COURT (14)

This was Warham's vast extension, laid out on land believed to have been previously unoccupied by buildings and to have embraced the outer court of the pre-Tudor manor-house. His new courtyard measured 270 by 238 ft. (82 by 72.5 m.), far exceeding anything of the kind at Hampton Court, Croydon and other palaces existing around that time and approaching the size of the famous Tom Quad of Wolsey's Cardinal College, Oxford (later Christ Church). Such unashamed display compensated for the limits imposed by the moat, within which the tightly-packed buildings allowed little courtyard-space. The court was enclosed on three sides by galleried ranges and

¹³ Calendar of Letters and Papers, Foreign and Domestic, Henry VIII, xvi no. 971; xvii no. 258, no. 436, 128-9; xviii pt. 2, 119; xx pt. 1, 270-1.

¹⁴ Fig. 1 embodies the work of several people, to whom the writer is indebted. In 1980, P.E. Leach, assisted by the Otford and District Historical Society's Archaeological Group, undertook a professional survey of the complete site in order to provide an accurate basic plan showing only exposed and other tangibly located parts of the structure. On this the writer superimposed the remainder, for which he takes full responsibility, suggested by the documentary and all other available evidence. The resultant plan was drawn by Adela L.L. Wright.

on the fourth by the northerly arm of the moat. The extension as a whole was not rectangular but inclined westwards, not sufficiently to destroy the illusion of a right-angled enclosure yet enough to allow for a Base Court (1) on which the churchyard to the north-east did not encroach too much for a reasonably straight approach to the main entrance.

The north range was a symmetrical composition with the Great Gatehouse (2) as its central feature. This was in the familiar form of an entry-passage, doubtless vaulted between its outer and inner arches to carry the upper floor, flanked by angular-fronted twin towers three storeys high. Its walls were of brick with stone dressings, the parapets crenellated (at least between towers), and all three roofs leaded. There were altogether nine chambers, all with fireplaces. Turrets projecting south from both towers contained newel-stairs from ground to roof, recorded as having 'halpaces' (or halfpaces, small quarter- or half-landings) at entrances to upper chambers.

Adjoining the gatehouse towers east and west were galleries (3 and 4) of two storeys, the lower of brick and the upper timber-framed, 'contayning in length 80 fete in breadth 12 fete' (24.4 by 3.7 m.). If allowance is made for speres within entrances, these dimensions in the 1541 survey accord well with the one surviving gallery; other measurements quoted in the same document are thus acceptable as reasonably accurate. Despite the upper storeys being timber-framed, both lengths of galleries had leaded roofs.

At the ends of these galleries were corner towers (5 and 6) three storeys high, of brick with stone dressings and having leaded roofs. Projecting from each in the outer angle with the adjacent north range galleries was a turret for the newel-stairs from ground to roof, again with 'halpaces' at entrances to upper levels of the towers and galleries. Larger square turrets on the south side of both towers housed windowed garderobes, internally partitioned to provide one shaft per floor. Within the angular walls of the towers themselves, a single heptagonal chamber with a stone fireplace occupied the whole of each storey. Excavation inside the remaining north-west tower in 1983 revealed that its ground floor had originally been surfaced with green glazed tiles.¹⁵

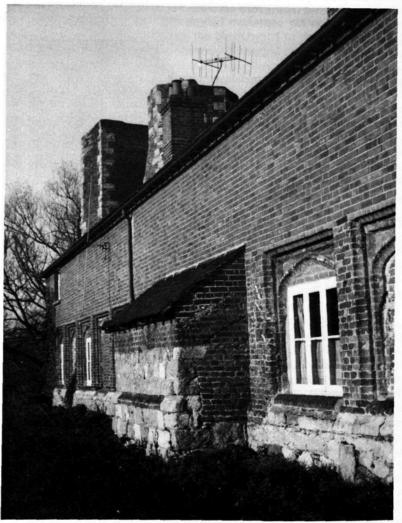
From the corner towers, two extremely long galleries passed southwards and their dimensions are specified in the 1541 survey. That on the west, described as leading to the 'Great Chambers' and a tower (38) within the moated area, was the Privy Gallery (7) and

¹⁵ Information from J.A. Pyke, under whose direction the excavation was carried out by the Otford and District Historical Society's Archaeological Group.



Otford Palace: Standing Remains of North Range of Inner Court from South-south-west.

PLATE II



Otford Palace: Surviving Length of North Gallery from South-east, showing Tudor ground-storey Wall with blocked Cloister-openings and modern Superstructure.

measured 304 by 11 ft. (92.6 by 3.4 m.). Along its western side were lodgings, containing twenty-one chambers with fireplaces, overlooking the pleasure garden (9); perhaps one of the chambers (8) had a gardeners' tool-store below, accounting for the odd number. Both galleries were double-storeyed, built of brick with stone dressings and roofed with tiles. The East Gallery (10) had nine windows in its outer wall facing the kitchen garden (11) and led eventually to another tower (45) within the moat. Its width was likewise 11 ft. (3.4 m.), but its length of 228 ft. (69.5 m.) meant that the gallery itself terminated well short of the moat and the continuation must have been by other passages (21), also of two storeys. This interruption was probably due to the presence of the Great Stable (12) measuring 80 by 40 ft. (24.4 by 12.2 m.) which, although not located with certainty, is likely to have stood hereabouts on the site of its predecessor; at that point the moat-stream today passes through an underground Tudor brick-andstone conduit, clearly intended to channel the water beneath buildings. The Privy Gallery, on the other hand, simply bridged the moat and a fragment of one of its stone-based walls still remains on the south bank.

At the north end of the Privy Gallery, the bonded junctions of its former walls with the tower garderobe-turret and with the inner corner of the north range are clearly visible and, between them, the line of the gallery's roof above. A feature here demanding interpretation is a westward extension of this roof-line well beyond the gallery's outer wall, crossing the full width of the turret as a nearly-flat lean-to slope: unquestionably, it implies the existence of a structure, attached to and accessible from the upper gallery, roofed but with no brick or stone outer wall of its own. Bearing in mind that the structure overlooked the pleasure garden, that the description of the latter shows that it was a knot garden characteristic of the period, and that to appreciate the intricate patterns in which these were laid out a high vantage-point was required, there can be little doubt that the structure was a wooden balcony (13) - a pleasant place to sit on summer evenings where the last rays of the setting sun could be enjoyed for longer than in the 'three lytle houses of pleasure with seats' in the garden below. Such a balcony would have provided convenient shelter, probably in the form of a porch, at a lower-gallery entrance beneath.

The standing buildings now remaining (Plate I) consist of the nearly-complete shell of the north-west corner tower (6) (Plate IV), with the ground-storey walls of the adjoining length of north-range gallery (4) and of the westerly tower of the Great Gatehouse (2) (Plate III). The brickwork of the towers and outer wall of the gallery is diapered with vitrified blue headers in diagonal patterns, playing

havoc with the English bond. That of the gallery's inner wall. however, lacks diapering but is enriched by a remarkable series of nine (originally eleven) closely-set cloister lights, now blocked, above a continuous stone plinth (Plate II). Each light is composed entirely of high-quality brickwork with a four-centred arch enclosed in a square surround, both inner and outer orders being hollowchamfered; there were never mullions, and it can confidently be taken that the openings were unglazed. Whether similar treatment was accorded to the ground storeys of the long galleries on the east and west sides of the Inner Court is unknown. Old mortar still adhering in all spandrels shows that the north range brickwork, at least, was covered with rendering.16 As this range, unlike the others, had timber-framed upper galleries (probably with a fine array of close-studding), it is likely that both the plastered daub infilling and the rendering below were white- or colour-washed to give contrasting distinction to the range as a whole.17

It was solely to achieve a court of unprecedented magnitude that the narrow side galleries were built to such gargantuan lengths. But as elsewhere they were doubtless a valued household amenity, much used for gentle exercise by those not wishing to venture outdoors, the open-cloistered walks being ideal in warm weather and the glazed-windowed ones on colder days, as is suggested by the phrase 'to walke in above and beneath' applied to the galleries of the north range in 1541. These corridor galleries, not usually cloistered, seem to have evolved from fifteenth-century examples bounding courts at such houses as Herstmonceux (East Sussex), Gainsborough Old Hall (Lincs.) and Knole; by Warham's time they had evidently become fashionable for most great courtyard residences, appearing at Hampton Court, Hengrave Hall (Suffolk) and many others. But only Croydon possessed one, now demolished, even approaching the length of Otford's Privy Gallery.¹⁸

THE MOAT

The presence of a moat surrounding the principal buildings of the pre-existing manor-house influenced Warham's plans for this part of

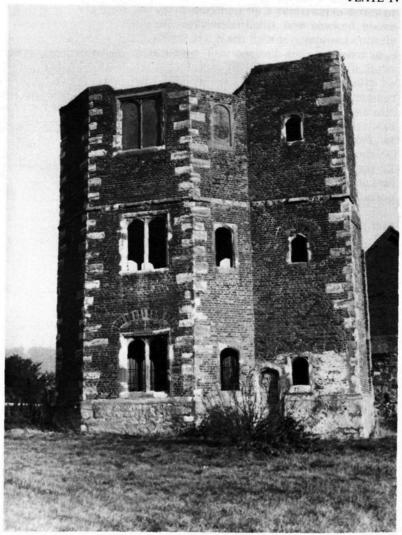
¹⁶ This was a not uncommon practice and is seen, for example, in the King's Court at Knole (1603–8).

¹⁷ The President's Gallery of Queen's College, Cambridge, (1540) is probably the best surviving parallel, though the ground-floor brick cloister is not now rendered. ¹⁸ P.A. Faulkner, 'Some Medieval Archiepiscopal Palaces', *Arch. Journ.*, exxvii (1971), 136-46.



Otford Palace: Base of Tudor westerly Tower of Great Gatehouse from South-east, with Roof of c. 1900. Exceptionally here, the doorway (right) inside the former entry-passage has a three-centred arch.

PLATE IV



Otford Palace: Shell of Tudor north-west Corner-tower from West, showing Garderobe Turret (right).

the site to some degree, as did his decision to retain the walls of the chapel and great hall. Most of the earlier wall-foundations forming the inner bank of its southerly arm, of great depth and massive thickness, were re-used; this produced a highly irregular façade contrasting with the Tudor symmetry of other new work. The moat, fed by nearby springs, was unusually wide: excavation in 1974 at the south-east corner showed its width to have been some 50 ft. (15 m.) there and perhaps as much as 68 ft. (20.5 m.) along its eastern arm. There was a bridged entrance to the house on each of its four sides by the fifteenth century, the main one on the north, and a moat of such width almost certainly implies the existence of bridge causeways as, for example, at Bodiam (East Sussex).

Warham was not, however, content to allow the northerly arm of the moat to remain unaltered, since it interfered with his proposals to extend beyond its bounds. As part of his works for the new Inner Court (14), the width of moat alongside was drastically reduced by constructing a brick retaining wall, only a few feet from the stone wall-foundations of its inner bank, so that the area of former moat behind could be reclaimed. The resultant narrow northern ribbon, the only stretch of moat still surviving, is thus seen today with brickwork forming its north bank and stonework its south.

THE NORTH BRIDGE (15)

Although four bridges spanned the moat at entrances to the house, a strong hint that the principal one was something special is given by the fact that the 1541 survey specifies 'The Brige' under a heading to itself, one of only four in the description of actual buildings of the entire palace. Unfortunately, no details are stated other than its location and that it was of timber. Archaeological evidence remains visible in the form of three cutwater-shaped piers of finely-dressed stone projecting from the masonry of the moat's south bank and, facing them, the substitution of stone in the otherwise wholly brick retaining wall constituting the north bank. The length of this stonework, coupled with the spacing of the outer piers, shows that the parapet-to-parapet width of the bridge can have been barely less than 30 ft. (9.1 m.). A visitor arriving at the palace would have passed, in turn, over the Base Court (1), through the Great Gatehouse (2) and across the vast Inner Court (14), each highly-

¹⁹ Ward, *op. cit.* in note 4, plan facing p. 200; P.E. Leach, survey of complete site in 1980 for production of the plan (Fig. 1) now suggested.

impressive features in themselves, so that it is to be expected that the bridged entry to the principal buildings then reached would have been scarcely less striking. Its prodigious width may well have been roofed as a splendidly decorated porch.

Of the remainder of the house within the moat, only the Great Gallery, Chapel, and Great Hall are specified in the 1541 survey, followed by the sweeping-up phrase 'invironed aboute with Galeries and Towers and Turetts of Stone . . . and dyvers other houses of office bilded of Stone with leade and tyle wherein be 71 chambers with chimnyes whereof 18 selide (sealed) with waynscott and fower above with knotte gilt'. The other surveys deal with many of these buildings in a little more detail.

THE GREAT GALLERY (17)

This faced the Inner Court across the narrow northern arm of the moat and was 'well edified and bilded of free stone with large oute caste of bay windows after an uniforme plan', clearly another showpiece. The documents give no further illuminating details, but it is suggested that the bridged entry is likely to have passed first into a vestibule (16) with a staircase, possibly the grandest in the palace, to a guard room above, and that double-storeyed galleries on either side were known collectively as the Great Gallery. Passing east from them on the same alignment was the stone-built Little Gallery (22), likewise of two storeys overlooking the Inner Court, which led to the domestic offices and associated buildings. Indeed, the Great Gallery, with its presumed central vestibule and guard room, was the hub from which there was more or less direct access to the palace's other main components.

THE WESTERN COMPLEX

At the bridged entrance from the Sevenoaks road to the west was the Little Gatehouse (36) measuring 46 by 28 ft. (14 by 8.5 m.) with a tiled roof. Analysis of the medieval ministers' accounts establishes that immediately inside was the Great Chamber (37); it seems reasonable to assume that, following Warham's rebuilding, this upper-storey structure occupied much the same position.²⁰ The 1573

²⁰ Indeed, the 1541 reference to the Privy Gallery leading to the 'Great Chambers' may mean this building, the plural form used being either a surveyor's or transcriber's error or intended to include whatever lay in its ground storey, which is unknown.

survey shows that it had a leaded roof with chimneys and was in need of new posts under its flooring; adjoining it were three towers (38, 39 and 40) and lodgings north and south (42 and 41), likewise with leaded roofs. Also abutting on it by that time was a School House (43), for which possibly a part of the Little Gatehouse had become used. This reference to an educational establishment twenty-six years after the palace's abandonment is interesting; if, as is thought likely, the local school was earlier conducted in a room of the court hall (away to the north beside the parish church), it was evidently transferred to the decaying palace c. 1540–50 when the court hall was converted into a private residence.²¹

THE CHAPEL (33 and 34)

The stone walls of the building containing the first-storey Chapel at the south-west corner of the moated area were still those erected in the Decorated style of 1315, when a timber-framed structure was replaced. There were embattled parapets and in 1541 the roof was 'parte covered with leade' but mostly shingled, some idea of its considerable size being conveyed in 1440 when 2,000 shingles were bought for its south roof-slope alone. Specific reference is made to 'the choir', suggesting that this may have been structurally distinct, and to a lead-roofed porch. A corner tower (40), apparently adjoining its west end and of relatively small dimensions, probably housed the chapel's bells which had been blessed by Archbishop Arundel. Below were two ground-floor rooms mentioned in 1573: one was a hall (33) needing renewal of a window (remains of one on the south side are visible in the front-garden wall of no. 7 Bubblestone Road), while the other was a sacristy (34) with an 'altare' for the laying-out of vestments and described as 'the wardrobe . . . to be newe joisted, burded and a new prycke poste' (most probably a free-standing samson post).

Within the Chapel itself, Archbishops Courtenay and Chichele had executed improvements and much enrichment: coloured glass windows were installed by William the glazier, a new aumbry was made, the stonework of both floor and wall-benches was re-laid, and a reredos and set of wall-panels were fitted using thirty boards of imported Baltic timber free from knots – clearly so as to be suitable for carving of the highest quality. Unfortunately, Warham's embellishments and any later changes are apparently unrecorded.

²¹ Anthony D. Stoyel, Otford's Medieval Court Hall (1980), 13, 24-5.

THE SOUTH RANGE

The stone southern façade overlooking the moat was built, as already noted, substantially on earlier footings so that, compared with the Tudor symmetry of other ranges to the north, the effect must have been a contrasting expression of medieval nonchalance. Adjoining the south side of the chapel were lodgings (35) mentioned as having a flat leaded roof and a turret; the base of the latter may be that still visible in the front garden of no. 9 Bubblestone Road with possible traces of a newel-stair, clearly a poorly bonded addition to preexisting walling. East of this was a gatehouse (26), timber-framed with a tiled roof, and its position at the bridged entrance from the Great Park (27) explains why it was flanked on both sides by stables (28). Next eastwards was a small courtyard with 'open galleries' (doubtless cloistered) and further lodgings (29). Finally, at the south-east corner of the site within the moat stood a large square tower (30) three storeys high, containing incorporated newel-stairs and garderobes, the foundations of which were excavated in 1974.22 In the 1573 survey, this tower with the aforementioned open galleries and lodgings are combined as a single item estimated at £200 (a sum exceeded by only one other item) for repairs to 'the leades ruffes gutters and pypes vent and creste shaftes of chymneis halpaces underpynninges of particions levelynge of flowers plasteringe and other necessarys'.

THE GREAT HALL (18)

Like the chapel, the hall was undoubtedly of considerable size for Warham to have been content to spare its existing walls in his ambitious rebuilding plans for virtually everything else. These walls were the work of Archbishop Courtenay in 1382 and may thus have retained early-Perpendicular features. Although the hall's location is demonstrated by the documents with a high degree of certainty, its dimensions are unrecorded and some idea of them can be deduced only by interpreting indirect evidence.

In 1315, 8,000 shingles had been bought, half of them to clad the roof of the earlier hall and the rest for that of 'the granary', so it may reasonably be inferred that the two were then of roughly similar size. None of the Tudor surveys mentions any granary, but that of 1548 specifies a barn 160 by 40 ft. (48.8 by 12.2 m.) and that of 1573 a barn

²² Ward, op. cit. in note 4.

104 by 40 ft. (31.7 by 12.2 m.), at least one of which was probably a granary. The width of these barns is equalled in the great halls of Hampton Court – slightly shorter in length than the smaller barn – and Christ Church, Oxford, – a little longer. It seems, therefore, quite possible that Courtenay's hall, replacing one of already adequate size (apparently a casualty of Peasants' Revolt damage) on a cramped site, was built on the earlier foundations; there was ample scope for him to achieve further magnificence by heightening the walls and re-roofing. Thus, there is reason to suppose that the hall retained in the Tudor palace measured approximately 104 by 40 ft. (31.7 by 12.2 m.); archaeological evidence suggests that it can scarcely have been longer.

Courtenay's walls were of stone brought from Tonbridge, with crenellated parapets, and are recorded in 1573 as having four buttresses along the south side. In Warham's reconstruction the timber roof was clad with lead, some of which had been removed by 1548 and the gaps were subsequently patched with both tiles and shingles. A 'beame and ankers' to secure the west wall and its window, prescribed in 1573, was doubtless a makeshift tie-beam repair and no indication is given of the form of the rich roof crowning the soaring walls.

Clearly the higher class buildings of the palace occupied the western part of the site and the lower the eastern, an arrangement epitomized in the hall by the dais to the west and the screen-passage to the east. Between the two, the hall is likely to have been warmed by a central open hearth before and after the Tudor changes, as was Henry VIII's rebuilding at Hampton Court completed in 1536.²³

THE DOMESTIC OFFICES AND COMPONENTS OVER THEM

There is no record of the capacious beer- and wine-cellars essential to so great a household, presumably because no repairs were needed at the dates of relevant documents. They may well have been below the hall itself, necessitating a mezzanine, the water-table here being so high as to render underground cellars most improbable. This position is paralleled at Hampton Court, where other arrangements associated with the hall bear marked similarities. As there, the domestic offices in general (19, 23 and 24) lay north of the lower end (not in the more-usual situation behind the screen-passage), separated from it only by the servery (20) invariably called the 'surveyinge place'. From

²³ Pevsner, op. cit. in note 11, 80.

this distribution point, servants could conveniently carry the food and drink along a presumed corridor (23 and 25) to the dais and also through the screen-passage to the main body of the hall. The surveys mention the great kitchen, alongside it the privy kitchen, the buttery, the pastry, two wet larders, three dry larders, the pantry and the scullery. All had tiled floors and were on the ground storey, with components of a quite different character above.

The first-floor Green Gallery (23) partly adjoined the north side of the hall above the service corridor and then turned northwards to reach chambers (24) over some of the domestic offices. On the same level, lodgings are recorded at the turn (above the servery, scullery and pantry) and at the gallery's west end (25). Reference is made to the roofs being leaded, and in some cases to lead gutters between them.

THE SOLAR AND STATE APARTMENTS

Attached to the upper end of the hall was the Solar (31) with an adjacent gallery (32), both of stone with timbered roofs. The second was probably linked with the service corridor beneath the Green Gallery (23) to provide covered ground-floor access to the hall from the main-entrance vestibule (16), also serving lodgings mentioned as existing below some of the state apartments. There is archaeological evidence of a length of gallery taking this course.

The state apartments (44), all of them upper-storey, must have occupied most of the remaining space in the middle of the moated area. Security demanded that all comers should pass through the guard room (16), whence access was almost certainly by no other means than from the Great Gallery (17) and from a closed-ended offshoot, overlying the northerly stretch of a ground-floor corridor, called in 1548 the New Gallery (32). It is likely that Henry VIII's alterations were concentrated on these suites and the name of the latter gallery strongly hints that it was added to the palace during its short-lived royal guise rather than in the time of the archbishops; the solar, on the other hand, was an earlier appendage of the hall. The apartments named in the surveys are quoted in the following paragraph, but one can only guess their precise whereabouts and undoubtedly there were other chambers, with a network of anterooms, lobbies, wardrobes, closets and garderobes. All were of stone with glazed windows and leaded timber roofs; although chimneyed fireplaces are specified for only two of the chambers there was certainly a profusion of them, being standard luxuries in rooms of such quality.

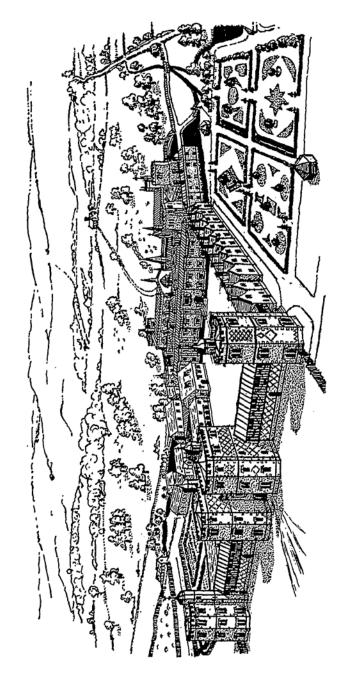
The King's Privy Chamber and the Great Chamber of Presence, normally adjacent, had two stair-turrets from 'sundry lodgings' beneath them, probably the quarters of Henry's equerries. The Queen's Privy Chamber was attached to another lodging, likely to have housed her ladies-in-waiting and other more personal servants. Further apartments were described in 1548 as 'My Ladye Mary's Chamber' and 'My Lady of Southfolk's lodging'. The Pages' Chambers also mentioned were unquestionably close at hand, for these young men were on call at all times.

The names employed in the surveys suggest that royalty used the accommodation relatively frequently. The best-known visit was that by Henry and Queen Catherine of Aragon in 1520, on their spectacular progress to the Field of Cloth of Gold with a retinue estimated at between 4,500 and over 5,000. But this was no more than an overnight stop and, despite the king's personally expressed preference for Knole, there can be little doubt that he, his gueen of the day, and members of the royal family and circle made other, more prolonged, stays than the several for which there is documentary evidence. It is almost inconceivable that Henry did not come while his principal alterations of 1541–43 were in progress or following their completion. His sister Princess Mary (after whom was named his famous flagship, Mary Rose, which in 1982 was raised from the sea bed of the Solent) was at Otford with her household for about a month in 1532 and nearly two months in 1533, but otherwise her visits are apparently unrecorded, as are those of Catherine Brandon, Duchess of Suffolk (Dowager Duchess from 1545). The names of the apartments of these two ladies in 1548, however, speak for themselves.

THE FARM AND OTHER ANCILLARY BUILDINGS

Adjoining the lower end of the great hall was a leaded-roofed gallery (21) of two storeys, passing alongside the moat between two corner towers (30 and 45). Its ground floor flanked the domestic offices on one side, while on the other the eastern bridged entrance (46) provided their essential link with the farm and other service buildings (47) outside the moat.

The latter structures mentioned in the pre-Tudor ministers' accounts include the ox-house, the sheep-house, the poultry, the dovecot, the cart-house, the straw-house (new in 1355 and roofed with 6,000 locally made tiles, an indication of the size of some of these relatively lowly buildings), the great grange and adjoining 'chamber of the knights', a granary (presumably supplementary, new



Otford Palace: Conjectural Reconstruction, c. 1546, viewed from North-west. Details such as the main-entrance bridge and knot-garden designs are simplified for clarity.

in 1391), and the hospice or almshouse with a chamber for its steward and its own porched hay-grange. The roof of 'the granary' (perhaps the great grange and possibly including the knights' chamber) was tiled by 1382, having previously been shingled. The hospice, on the other hand, was straw-thatched in 1322. Probably in the same vicinity were the carter's house, the coal-house (doubtless for charcoal), the wood-house, the workhouse (workshop), and the butchery (slaughter-house). It seems likely that many of these buildings survived Warham's reconstruction of the palace itself, although the subsequent surveys refer only to the poultry, the coal-house, and the two large barns already mentioned in relation to the great hall. There was also an associated wood-yard.

The palace water-supply came principally from Becket's Well, as it had for 200-400 years previously. Remains of this still exist on private land about 250 vds. (230 m.) to the east in the form of a stone-lined sunken reservoir fed directly by springs, with foundations of a surrounding wall, and it was described in 1573 as 'the conduyte house or well conteyning in length 36 foote and in breadeth 19 fote' (11.3 by 5.8 m.).24 A sluice-gate enabled a considerable head of water to be built up, probably to supply at least the domestic offices and to flow through the palace sewers; doubtless improved arrangements, not specified, had been made since 1440-41 when an underground lead pipe and series of covered wooden gutters were installed, apparently for those purposes. The overflow, and water from springs elsewhere, passed into the nine fishponds (of which seven remain) and thence into the moat. Away to the north, Tudor stone footings in the front garden of Moat Cottage, Station Road, have been identified as those of the 'lytle lodge' mentioned in 1541, standing at the Pilgrims' Way entrance to the pond yards. Some distance to the south towards Sevenoaks, there were two further lodges, of which nothing survives, in the Great Park, the earliest and largest of the palace's three parks.

CONCLUSION

Almost all of the buildings within the moat had leaded roofs, buttressed stone walls and glazed windows, with a great number having chimneyed fireplaces. Brickwork is not once mentioned, so that the few standing buildings which remain from Warham's vast

²⁴ F.R.J. Pateman *et al.*, 'St. Thomas à Becket's Well, Otford', *Arch. Cant.*, lxx (1956), 172–7, gives a full description in an account of excavation by the Otford and District Historical Society. The doubt expressed as to the identification of the well chamber with the 1573 conduit house is, in the writer's opinion, not justified.

northward extension are by no means representative of the palace as a whole; undoubtedly, however, their features were to some extent mirrored in other now-lost ranges bounding the Inner Court.

As has been demonstrated, Warham's sweeping changes of 1514–18 produced an enormous house which, with nine recorded towers and its many other splendours constituting the work of some of the nation's leading craftsmen, was unparalleled in England until rivalled by Hampton Court soon afterwards. The impact of the Crown takeover in 1537, although far less extensive, had a marked structural effect on the heart of the complex and is reflected in the suggested plan (Fig. 1). In Fig. 2, the writer has conjecturally illustrated the possible appearance of the palace towards the end of Henry VIII's reign.

Following Henry's death in 1547, decay began immediately and was allowed to continue apparently unchecked thereafter, though some four centuries elapsed before all but the present standing remains had entirely vanished. The long and tragic story of the

palace's decline is outside the scope of this paper.