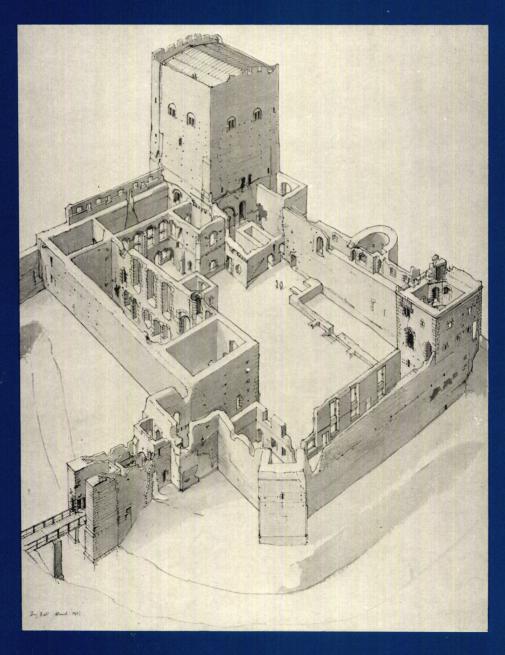
# Excavations at Portchester Castle

Vol. IV: Medieval, the Inner Bailey by Barry Cunliffe and Julian Munby

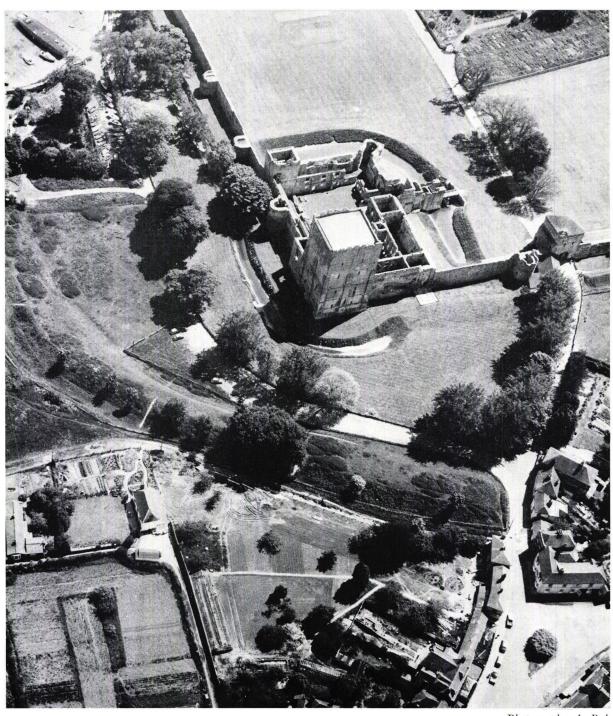


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In the fourth report on the excavations at Portchester Castle, the authors describe the buildings of the inner bailey, basing their account on the results of excavations undertaken in 1973–9 and detailed architectural recording of the standing buildings. The archaeological and architectural evidence is correlated with the numerous documentary records, and eight main phases of building activity, from c. 1100 to the early seventeenth century, are recognized. The documents, which include contemporary building accounts and surveys, are discussed in detail, and some texts published in full, and in a final chapter the Castle is considered in its regional setting. The illustrations include detailed drawings of the standing buildings and, as in the first three volumes, there is a full treatment by specialist contributors of the excavation finds and environmental evidence.

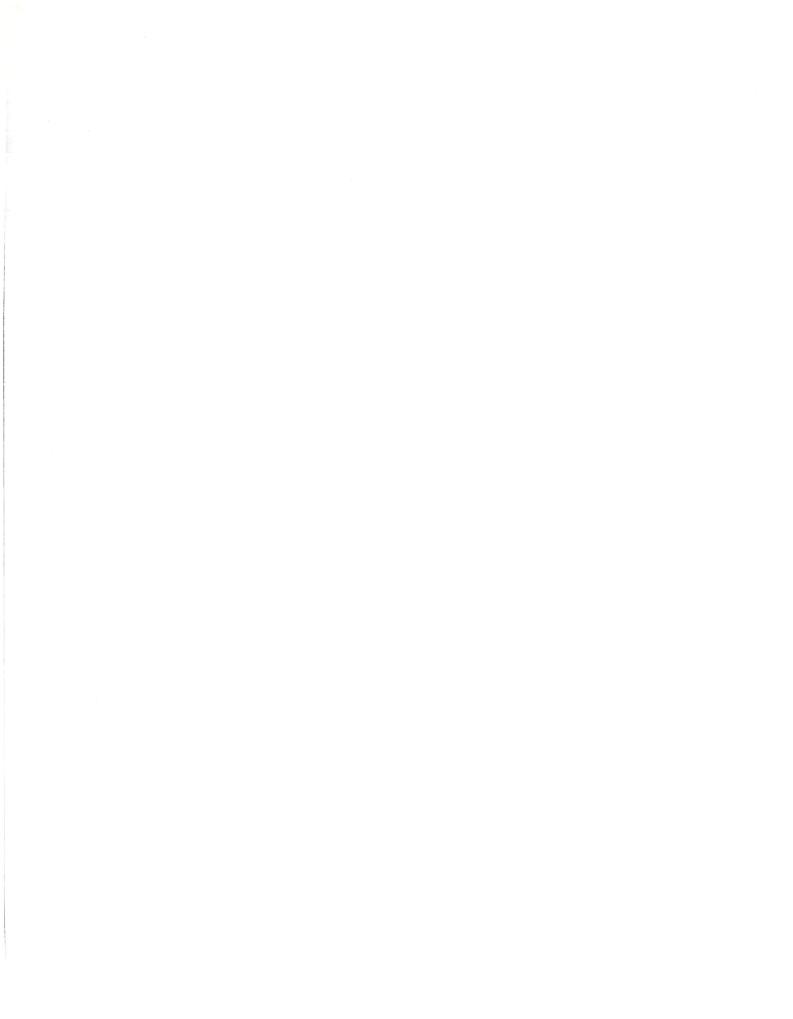
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# Reports of the Research Committee

of the

# Society of Antiquaries of London

No. XLIII

# Excavations at Portchester Castle

Volume IV: Medieval, the Inner Bailey

By

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Published by
The Society of Antiquaries of London
Distributed by
Thames and Hudson Ltd
1985

© The Society of Antiquaries of London, 1985 ISBN 0 500 99039 5

> PRINTED IN ENGLAND BY ADLARD AND SON LTD, DORKING

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### **ABBREVIATIONS**

B.L. British Library (formerly British Museum).

Book of Fees The Book of Fees, 3 vols., 1921-31. London.

Cal. Charter Rolls Calendar of Charter Rolls, 6 vols., 1903-27. London.

Cal. Close Rolls Calendar of Close Rolls, from 1892. London. Cal. Fine Rolls Calendar of Fine Rolls, from 1911. London.

Cal. Inq. Misc. Calendar of Inquisitions Miscellaneous, from 1916. London. Cal. Inq. P.M. Calendar of Inquisitions Post Mortem, from 1904. London.

Cal. Lib. Rolls Calendar of Liberate Rolls, from 1917. London. Cal. Pat. Rolls Calendar of Patent Rolls, from 1891. London.

Cal. S.P. Dom. Calendar of State Papers Domestic, from 1856. London.

D.B. Domesday Book, 1783. London. Also V.C.H., Hampshire, 1, and Morris, 1982.

D.N.B. Dictionary of National Biography.

Feudal Aids Feudal Aids, 6 vols., 1899–1921. London. H.R.O. Hampshire Record Office, Winchester.

L. & P. Hen. VIII Letters and Papers of Henry VIII, from 1864. London.

Plac. Abbrev. Placitorum Abbrevatio Richard I-Edward II, ed. G. Rose and W. Illingworth, 1811.

Record Commissioners, London.

P.R. Pipe Rolls.

P.R.O. Public Record Office. P.R.S. Pipe Roll Society.

R.C.H.M. Royal Commission on Historical Monuments.

Rot. Litt. Claus. Rotuli Litterarum Clausarum in Turri Londinensi asservati, ed. T. D. Hardy, 1833-44.

Record Commissioners, London.

Titch. Reg. Titchfield Register (Rememoratorium de Titchfield), B.L. MS. Loans 29/55.

V.C.H. Victoria County History.

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### **PREFACE**

THIS fourth report on the excavations at Portchester Castle covers work in the inner bailey of the castle undertaken each Easter from 1973 to 1979. The aim of the programme was simply to provide the archaeological context within which to consider the architectural history of the monument. The last campaign, in April 1979, represented the culmination of the Portchester project, which had lasted for nineteen years.

The small team who carried out the seven years of work in the inner bailey was drawn mainly from the staff of the Institute of Archaeology at Oxford, augmented by a number of other volunteers.

Our special thanks are due to Mike Rouillard who undertook much of the on-site drawing and photography, and to Sue Rouillard, Judi Startin, Barbara Westley, Debbie Westley, Cynthia Poole, Brendan O'Connor and Tim Ambrose for their willing assistance in a variety of ways.

The archaeological part of this report was completed by the end of 1979. Thereafter work has concentrated upon a programme of detailed architectural recording, together with the accompanying historical research. In this we have been particularly fortunate to have had the active collaboration of Terry Ball, Daphne Hart and Christine Sutton of the Ancient Monuments Branch of the Department of the Environment. Assisted by the Photogrammetric Unit of the University of York, they have prepared all the architectural drawings which illustrate this volume. Their attention to detail and a fine eye for unravelling structures have contributed considerably to our understanding of the monument: our discussions have been lively and creative. In examining the buildings, the site Custodians have given every assistance to work in all weathers.

The historical research has been speeded by the generosity of David Baker and George Watts in making available their unpublished materials. Investigation of the landscape has been helped by the involvement of Michael Coker, Andy and Barbara Negus, and Grahame Soffe. Roger Davey, Paul Harvey, Laurence Keen and George Watts kindly commented on an earlier draft of Section X, though none is responsible for its errors or opinions. Finally we would like to thank the staff of the Institute of Archaeology at Oxford for helping in so many ways; Alison Wilkins has prepared many of the drawings, Bob Wilkins and Nick Pollard have provided prints for the half-tone illustrations, while Lynda Smithson and Sally Ann Hoddell have worked tirelessly on producing successive drafts of the manuscript.

The programme of work at Portchester has involved the skills and enthusiasm of many: to all who have taken part we extend our sincere thanks.

Oxford, 12 April 1983

Barry Cunliffe Julian Munby The Society is grateful to English Heritage (the Historic Buildings and Monuments Commission for England) for a generous grant towards the publication costs of this volume, as to the Department of the Environment for grants towards the publication of volumes I–III.

### I. INTRODUCTORY SECTIONS

### GENERAL INTRODUCTION

In 1926 the structures of Portchester Castle were placed in the guardianship of the Office of Works (subsequently the Department of the Environment, now English Heritage (the Historic Buildings and Monuments Commission for England)). Until that time, following the abandonment of the castle as a prisoner-of-war camp after the end of the Napoleonic Wars, the buildings had been left derelict. Contemporary prints show that soil and rubbish had accumulated in the inner bailey to a depth of more than a metre, while the moats had been allowed to silt up and ivy covered the walls.

Consolidation work began almost immediately and a few years later, during the Depression of 1929 and 1930, gangs of out-of-work miners were employed to clear the inner bailey and the castle ditches, re-establishing a ground level which approximated closely to that of the late fourteenth century. As part of this programme trial pits were cut to examine foundations and, in the case of footings destroyed to below ground level, trenches were dug along them. No adequate records were kept apart from a few schematic drawings. Much of the pottery recovered during this time was stored in the chargehand's site hut, where it remained, having lost most of its labels, until it was rediscovered in 1961. Thus little information of value survived from the work of the 1930s.

The present programme of excavations, which commenced in 1961, began with the stripping of large areas in the south-west corner of the fort (Cunliffe, 1975, 1976, 1977). Work continued annually for several weeks each summer until 1972. During this time limited trial excavation was undertaken in the inner bailey. In 1962 six small trenches (C1-6) were cut to examine the structural relationship of the forebuildings. A little later Mr S. E. Rigold, of the Department of the Environment, carried out further trial excavation, this time in the eastern ranges (trenches C7-27), to clarify structural points prior to revising the guide-book: further work was undertaken by Mr D. Baker in the western ranges in 1968 (trenches C28-30).

In 1973, the main programme of excavation in the outer bailey having been completed, attention was turned to a more thorough examination of the inner bailey. Since then, until 1979, area stripping has been carried out annually on a scale designed not to interrupt the flow of visitors. As a result of this approximately 60 per cent of the inner bailey has been totally excavated.

As a general rule the excavation was taken down only to the top of the thick black clayey soil which represented soil accumulation in Roman and immediate post-Roman periods: these layers were left intact. Little evidence was found of early-mid Saxon occupation and even late Saxon pottery was rare. A note on the Roman and Saxon occupation is appended (pp. 67-71).

Late eighteenth- and early nineteenth-century activity, combined with the clearance work of the 1930s, has destroyed, either totally or substantially, large areas of the medieval ground surface (fig. 3). But in spite of this much remains and the general sequence of development is recoverable. The Napoleonic features and levels will be the subject of a separate report.

A brief word of explanation is required about the arrangement of this report. The problem has been how to present each category of evidence in an uncomplicated, but objective, fashion without anticipating discussions which follow later.

The approach adopted here has been first to set the scene with a brief summary of the history of the castle (pp. 2-4) and then to proceed to present in detail the structural evidence, derived from excavation, which allows the definition of eight major structural phases (pp. 5-71). Then follows a description of all the standing medieval buildings (pp. 72-119). In the next section these two sources of evidence are correlated and the dates of the phases are considered against the relevant stylistic and documentary evidence (pp. 120-33). The advantage of this approach is greatly to simplify references to specific buildings and building phases. Subsequent sections present the documentary evidence (pp. 134-209) and a description of the non-structural material remains found in the excavation (pp. 210-69). The main body of the report is concluded with a synthesis of all the evidence (pp. 296-308) after we have given an account of the region in which the castle was placed (pp. 270-95). While there is, necessarily, some degree of repetition in this kind of presentation it has the advantage of allowing the different types of data to be considered separately in their own right while at the same time obviating the worst excesses of circular argument.

### HISTORICAL OUTLINE

To provide the essential background against which the development of the castle buildings should be viewed it is necessary to give a brief summary of the history of the site. No attempt will here be made to discuss the individual building records in detail or indeed even to provide adequate references. These matters are reserved for a more thorough treatment below (pp. 134-209).

At the time of the Domesday survey, 1086, Portchester was a rural manor held by William Mauduit, and the survey makes no mention of fortifications. By the reign of Henry I (1100–35) the Mauduits were holding Portchester by 'serjeanty' of performing the office of chamberlainship of the Exchequer. When, in 1120, Robert Mauduit died leaving only an infant daughter, the castle passed to the King and remained under his direct control until c. 1128 when the daughter married William de Pont de l'Arche who, by virtue of the large dowry he had paid, acquired the lands and offices of the Mauduit family. The King, however, appears to have retained strict control of the castle. On the accession of Henry II (1154) the privileges of the chamberlaincy together, probably, with Portchester were restored to Robert Mauduit and remained with him until his death in about 1170. Thereafter the Crown took possession of the castle once more.

It was probably during the reign of Henry I, particularly in the years 1120-35, that the keep and the inner bailey defences were constructed. Stylistic considerations would suggest this (p. 74) and the fact that after 1174, from which date references in the Pipe Rolls occur, only comparatively small sums of money were spent on refurbishment implies that the major structures were already in existence. The works of this year, on wall, bridges, turrets and gatehouses, show that the King was putting the castle into defensive readiness in the face of the rebellion which had broken out in 1173. Further defensive works were undertaken in

1193 to meet the threat of invasion and once more the expenditure was on the ditches and the walls.

The early thirteenth century saw the improvement of the castle's domestic accommodation. John used it regularly while on hunting expeditions in the Forest of Bere, and it was at his instigation that quite large sums were spent on the 'King's house' in 1203-4 and on a 'chamber and a wardrobe' in 1211.

In June 1216 the castle was taken by Prince Louis of France but rapidly recovered. Its vulnerability, compared with the other coastal fortresses of Corfe and Dover, which managed to hold out, was evidently a cause for concern and in the following year the advisers of the young Henry III ordered its levelling by demolition and fire. The order was, however, rescinded and in 1218–20 new fortifications were undertaken and the keep releaded. The rest of the thirteenth century saw a continuous series of minor works — evidently the castle was being kept on a care and maintenance basis. Yet in 1274 the buildings were said to be unsuitable for residence. Nothing, however, seems to have been done about it until 1289, when limited sums were spent on repair.

Throughout the thirteenth century little interest was taken in the defensive qualities of the castle and gradually it sank into obsolescence. In 1296 the activities of Edward I, who was marshalling troops in the area, may have been the cause for repairs to be undertaken on the defences, but the work was of little consequence. By this time Portchester was thoroughly out of date.

Thus by the beginning of the fourteenth century Portchester had ceased to be of first-rate military significance. But it was still a secure place, on a vulnerable coast exposed to French attack. Moreover it was conveniently sited both as a residence for the Royal Household engaged in hunting in the neighbouring Forest of Bere and as a place of muster for troops about to embark on overseas expeditions. For these reasons it was maintained and frequently garrisoned throughout the century. Although upkeep called for almost continuous expenditure there were two major building programmes, the first begun by Edward II in 1320 and lasting for six years, the second by Richard II between 1396 and 1399. The first of these projects cost well in excess of £1,100 and involved much new building work in addition to the reroofing of existing buildings, the extension and modification of the castle gates, and the digging (or cleaning out) of defensive ditches. Yet in spite of this, a survey carried out some 10 years later could list defects whose repair was estimated at nearly £400, many of which seem to have been put right between 1336 and 1340. Further, not inconsiderable, sums were made available for residential buildings in 1346, 1351, 1356 and 1362. In all over £200 is recorded to have been spent on new constructions and on repairs during this period.

In 1369, renewed threats of attack from France led to repairs to the defences costing £95 and thereafter, for five years, the castle was fully garrisoned. Further work, mainly of a defensive nature, was undertaken in 1376-7 and again in 1385.

The last major building programme began in April 1396 and lasted until August 1399. During this time Richard II spent some £1,600 on providing a splendid new residential range for his own use in the western part of the inner bailey, as well as improving the gates and modifying the keep. The work was completed at just about the time when he was deposed and it is unlikely, therefore, that he ever enjoyed it.

The fifteenth century was a time of stagnation at Portchester. Henry V used the castle en

route to France and Agincourt in 1415, but a survey of 1441 describes the site as 'right ruynouse and fieble' and, although some repairs were carried out, nine years later the constable wrote to the King giving a vivid account of the sorry state of dilapidation into which the castle had fallen. Further minor maintenance works were undertaken occasionally throughout the late fifteenth and sixteenth centuries but it was not until the reign of James I that any major new construction programme was put in hand. It was at this time that the constable, Sir Thomas Cornwallis, rebuilt the east and south-east ranges at his own expense, the cost being estimated to have been in excess of £300.

When in 1609 John Norden surveyed the castle he noted the new work with approval, but as for the rest of the buildings, he found them 'for the most part very ruynous'; the lead had been stripped off the roofs, the timbers were decaying and the great hall of Richard II, though spacious, he considered to be 'darke and malincolye'. Nothing was done to improve

the situation and in 1632 Charles I sold the castle to a private owner.

# II. THE STRUCTURAL SEQUENCE: THE ARCHAEOLOGICAL EVIDENCE

By BARRY CUNLIFFE

### INTRODUCTION

In the period from the Norman Conquest until the early seventeenth century the buildings of the medieval castle, sited in the north-west corner of the Roman fort (fig. 1), were modified on a number of occasions. Major rebuilding programmes will have left their mark on the archaeological record while alterations to the superstructures, of which there were many, will have remained for study only in so far as the superstructure itself survives. At best the structural evidence, archaeological and architectural, is likely to reflect only the major alterations: minor works such as reroofings or refloorings will not be evident, yet work of this kind is frequently mentioned in the copious documentary record.

In presenting the evidence which follows we have decided to treat the archaeological and structural evidence separately from the documentary record and to present a scheme of development based entirely upon the observation of the remains. When that task has been accomplished all other sources of evidence — artefactual, comparative and documentary — will be used to extend and to calibrate the scheme (pp. 120–33). To facilitate the discussion, the structures comprising the inner bailey have been divided into three groups:

- (a) the defences, including the ditch, inner bailey wall and gatehouse;
- (b) the western complex of buildings, including the keep; the extension to the forebuildings (north-west range); the King's residential chambers (west range) and the great hall (south-west range);
- (c) the eastern complex of buildings, including the Constable's lodging (north range), and the two ranges of domestic buildings (east range and south-east range).

As the plan (fig. 2) will show, the eastern and western building complexes are physically separated from each other and were not related stratigraphically. Thus direct structural correlations are impossible. Similarly, the early stages in the development of the keep and forebuildings cannot be directly correlated with the early stages of the south-west and west ranges. Within each complex, however, the individual structures are intimately related and a relative building sequence can easily be defined.

To enable the reader the more easily to comprehend the complex building history of the castle, it is necessary to pre-judge the discussion of the archaeological and architectural evidence which follows by stating that eight major building phases can be recognized. It should be emphasized, however, that in defining periods the simplest explanation has always been preferred. This may have led to some conflation of different phases within a single period. These problems are discussed more fully in the descriptions which follow.

In the table below, each building range is abbreviated with capital letters reflecting its

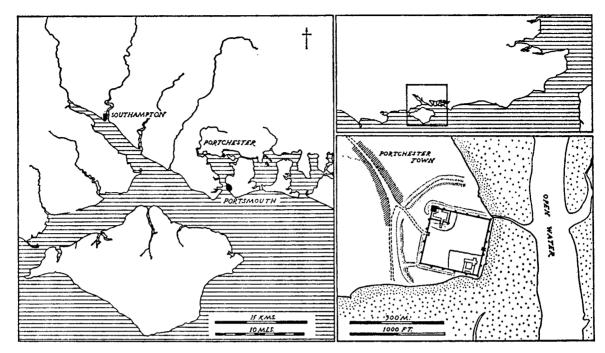


Fig. 1. Portchester Castle and its immediate environment

location, the abbreviation being followed by a number referring to the structural phase of the particular building: thus NW2 is the second major building to occupy the site of the northwestern range. It should be noted that the sub-phases of the keep and forebuildings in phases 1-3 are based solely upon a consideration of the standing structure (pp. 72-87) and are not reflected in the archaeological evidence.

References are given in the text to the code number of the relevant stratigraphical unit by trench and layer. Where these layers appear on published sections, the section number is also given. The sections will be found on figs. 18–22, following p. 50. A number of pits, features and hearths are mentioned in the text and are shown on the plans. Details of each will be found on pp. 53–71. A table of post-hole details appears on pp. 64–7.

#### THE DEFENCES

The Curtain Wall and its Ditches (fig. 4 and pls. XXIVb, XXV and XXVIII)

The defences of the inner bailey consist of a moat, now 55-75 ft. (16·7-22·9 m.) wide and 10 ft. (3 m.) deep, backed by a wall of ashlar-faced masonry 6 ft. (1·8 m.) thick and standing to a height of 31 ft. 6 in. (9·6 m.). The moat had largely silted during late medieval and post-medieval times but during the Napoleonic Wars its eastern arm appears to have been reopened and filled with water to provide a swimming pool for the French prisoners incarcerated in the fort. By the time that the Office of Works took over the castle in 1926 the pool was reduced to a muddy hollow.

TABLE I

Building Phases Summarized

Phase	Date	Кеер	Forebuildings NW range	S and W ranges	SE, E and N ranges	Defences
ı A	Eleventh century	Single-storey hall		-	-	Outer ditch
В	Early twelfth century	Two-storey keep	_			Inner ditch SW postern
$\mathbf{C}$	Early twelfth century	_	•	_	_	Curtain wall Gatehouse I
2 A	Mid twelfth century	Keep heightened Forebuildings	_		_	_
В	Mid-late twelfth century	•	<del></del>	$\begin{cases} W_1 \\ SW_1 \end{cases}$	SE1	_
C	Late twelfth century	Forebuildings joined	_	_	_	_
3 A	Early thirteenth century	Chapel rebuilt S forebuilding	NWı		Еı	_
В	Mid-late thirteenth century	_	_		-	Gatehouse IIa
4	Early fourteenth century	Keep top rebuilt	NW2	$\begin{cases} W_2 \\ SW_2 \end{cases}$	E2	$\begin{cases} \text{Gatehouse IIb} \\ \text{Posterns} \end{cases}$
5	Mid fourteenth century	_	$NW_3$	${ \left\{egin{array}{l} W_3 \ SW_3 \end{array}  ight\} }$	E3 SE unroofed N2	
6	c. 1380		_	·	Assheton's	Gatehouse III
7	1396–9	_	NW4	$\left\{ \begin{matrix} w_4 \\ sw_4 \end{matrix} \right.$	$egin{cases}  ext{Tower} \  ext{N3} \  ext{E4} \  ext{SE2} \end{cases}$	
	Fifteenth century	_	Windows in forebuilding	_	_	
8	Early seventeenth century	<del></del>	_	_	$\begin{cases} N_4 \\ E_5 \\ SE_3 \end{cases}$	Gatehouse IV

In 1929 trial trenches were dug in an attempt to establish the original profile of the moat, and thereafter the labour force cleared it out. To what extent the present profile corresponds to the original it is now impossible to say since all the relevant evidence will have been removed. One effect of the clearance has been to lower the berm, particularly along the south wall, exposing between 6 and 7 ft. (c. 2 m.) of roughly faced coursed flint and stone work below the regular ashlar facing of the inner bailey wall. In all probability this would originally have been covered by a sloping ramp of soil forming a continuous glacis with the moat edge. The workers of the 1930s were presumably unaware that they were destroying an integral part of the medieval defensive structure when they removed the layers of the ramp down to the original construction level.

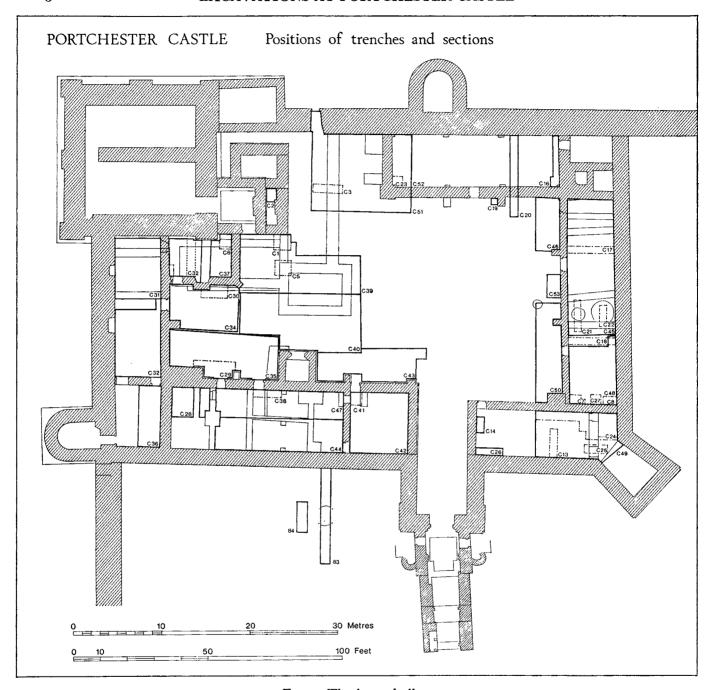


Fig. 2. The inner bailey

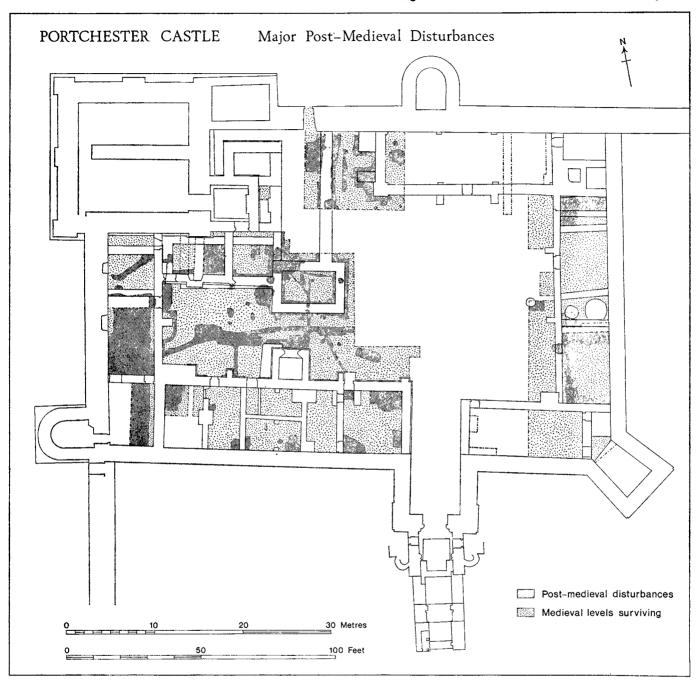


Fig. 3

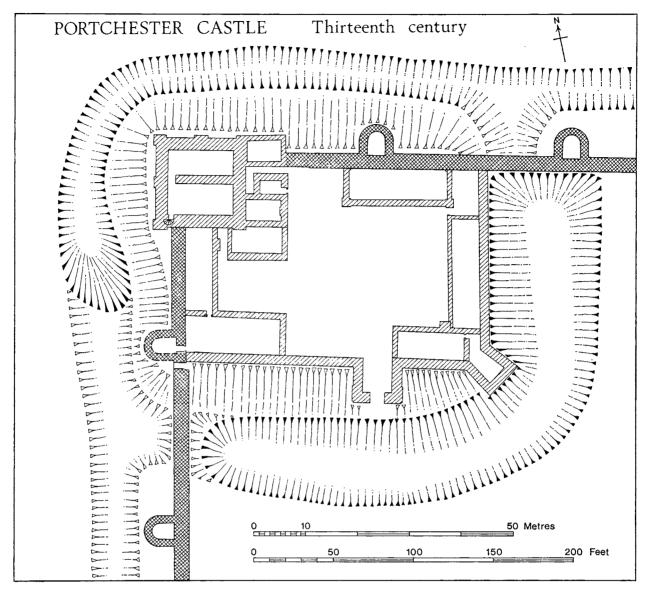


Fig. 4. The earthworks surrounding the inner bailey. Open hachures are interpretative

The somewhat irregular fit between the wall and the ditch has led some writers to suppose that two phases of defence were involved, the first represented by the ditch, either alone or backed by a palisade or rampart, the second by the wall.

In order to examine what remained of the stratigraphy on the artificial berm in front of the south wall two trial trenches were cut (trenches 83 and 84), one of which extended from moat to wall.

The main trench (trench 83: fig. 19, section 7) demonstrated that the original early Norman ground surface lay only 1 ft. (0.3 m.) beneath the present surface. It consisted of a

thick black turf-line (layer 4) which had accumulated above a pit containing late Saxon 'Portchester ware' (pit 124). Upon this ground surface was a 10 in. (0.25 m.) thick layer of redeposited coombe rock (layers 2, 3, 10, 11, 12, 13, 15) interleaved with lenses of soil, through the lower part of which the footing of the inner bailey wall had been cut. The truncated stratigraphy renders the evidence ambiguous. While the layers could represent the base of an early bank the total absence of such layers immediately within the curtain wall, both on the south side and on the east, would strongly argue that they accumulated whilst the wall was being constructed and that therefore they are likely to form the base of a rampart piled against the front of the wall rather than a bank preceding it. The slope of the layers implies that a patrol path about 9 ft. (c. 3 m.) wide may have flanked the wall some 16 ft. (4.88 m.) in front of it, leading from the phase 2 gatehouse to the sally port set in the west wall of the Roman fort.

The sally port consisted originally of a simple opening 4 ft. (1.2 m.) wide cut through the Roman wall, its quoins finished with neat ashlar work. At a later stage the door was partly blocked and a new opening only 2 ft. 6 in. (0.76 m.) wide was inserted into the gap, its sill 2 ft. 9 in. (0.84 m.) above that of the original door. Dating is difficult, but it is evident that the original doorway was constructed before the inner bailey wall was butted up to the Roman wall since it overlaps the ashlar finishing of the north side of the door. No great time difference between the two constructions is, however, necessarily implied. The later door is finished externally with mouldings similar to those elsewhere dated to the early fourteenth century.

The moat which cuts off the corner of the Roman fort, thus defending the inner bailey on its south and east sides, is only part of the overall defensive plan, for outside the Roman wall the original Roman ditch was completely redug in the Norman period so as to swing out around the now-projecting keep. The present profile is the result of recutting in the 1930s but is likely to approximate to its original, early medieval, condition. In all probability, however, the moat would have been more extensive, perhaps returning at both ends to join the fort wall thus to enclose the keep. Although no archaeological proof of this interpretation has been sought, the present contour of the land outside the fort wall to the south of the keep would appear to indicate that the ditch was more extensive than the 1930s redigging allows and that it swung round the now destroyed bastion to meet the fort wall at a point opposite the inner moat.

The inner bailey was enclosed on two sides by the original Roman fort wall and on the other two by a newly built length of curtain wall standing now to a height of 31 ft. 6 in. (9.6 m.). The wall is 6 ft. (1.83 m.) wide, built on a footing which projects about 6 in. (15 cm.) from each face. It was constructed of a coursed flint and limestone rubble core faced with a carefully tooled ashlar of Binstead limestone above ground surface. Those parts not intended to be seen, i.e. the face covered by the sloping rampart in front, were only roughly faced with flint and limestone. Internally the ashlar facing was taken down to the original ground surface, conforming exactly with its contours.

At the south-east corner a large, sharply angled projecting bastion was created, the concept of the projecting bastion being copied, no doubt, from the example presented by the Roman fort architecture. Except for recessed external corners it was plainly treated (p. 94).

The Gatehouse (figs. 58-60 and pls. XXVI-XXVII)

The gatehouse to the inner bailey is an impressive structure, of four separate periods, still

standing largely intact. For this reason, and because it has not been subjected to excavation, description will be reserved for more detailed treatment below (pp. 87–93). Here it is sufficient to record that the first gatehouse was created by turning the inner bailey wall outwards to create a courtyard entered through a single-arched doorway. Like the corner bastion, it was fitted with a timber platform at first-floor level, presumably reached by a ladder, to allow easy access to the narrow windows set in its three external faces, from which covering fire for the curtain wall could be provided. The second storey was reached by a spiral staircase set in the south-east corner.

In period 3B the gatehouse was extended southwards (Bay IIa) and modified in the next period (Bay IIb). A further extension was undertaken in period 6 (Bay III) and a final extension added in period 8 (Bay IV).

### THE KEEP AND THE WESTERN COMPLEX OF BUILDINGS

Periods 1-3: Early Twelfth to Early Thirteenth Century (fig. 6)

The exact relationship between the three major stages evident in the development of the keep and its forebuildings and the west range (which was built against the west wall of the inner bailey and abutted the keep) cannot be defined because all linking stratigraphy has been removed by subsequent rebuilding. The only indication of relative sequence can be gauged by considering the functional relationships between the different structures. The explanation preferred here is that the west range (W1) preceded the second extension to the keep forebuildings (NW1). The arguments are tenuous but will be developed in their relevant contexts below.

## The Keep, Phases I and 2 (pls. XVIII-XXIII)

The construction of the keep would have necessitated the demolition of c. 105 ft. (32 m.) in the length of the Roman wall, together with the corner bastion. The north and west walls of the keep lay wholly outside the Roman wall line; the rest, including much of the fore-buildings, lay within. While it is possible that the Roman wall footings were incorporated into those of the Norman structure, the inherent instability of such an arrangement, which could have led to differential settling, is likely to have been avoided by the creation of a single platform foundation to take the entire new structure. At only one point, against the south wall, was the footing examined. It consisted of a solid concrete mass of flints set in a hard white gritty mortar constructed in a foundation pit in excess of 6 ft. 6 in. (2 m.) deep.

In the architectural description to follow (pp. 72-87) it is suggested that the first phase is divisible into three sub-phases:

- 1A. The construction of a single-storey rubble-built hall.
- 1B. The encasing of the hall with ashlar masonry, thickening the walls to take an upper storey, the south forebuilding (the chapel) possibly being built at this time.

The inner bailey ditch was dug at this time and the 'postern' gate in the east wall was created to form the entrance to the inner bailey.

1C. The inner bailey wall was built.

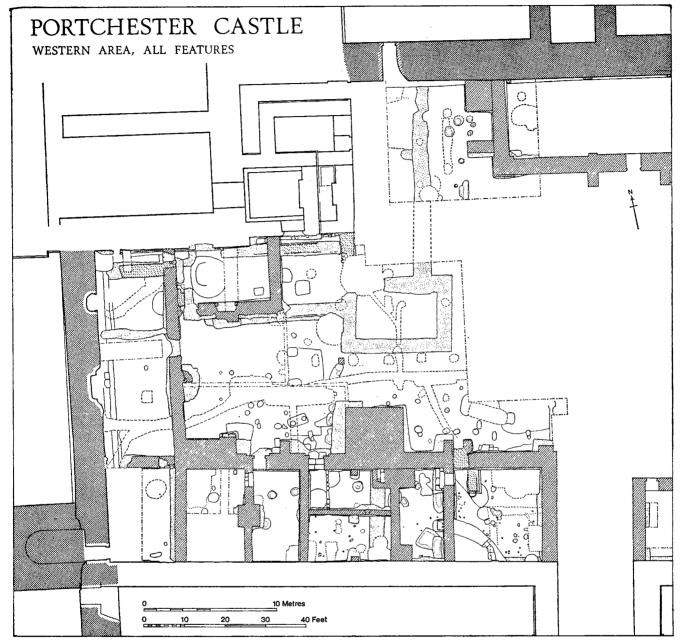


Fig. 5

The second phase is also thought to have been divisible into three sub-phases:

- 2A. The north forebuildings were added (and possibly the south) and the keep raised in height again.
- 2B. The domestic buildings NW1, SW1, SE1 and W1 were built.
- 2C. The space between the forebuildings was converted into a prison.

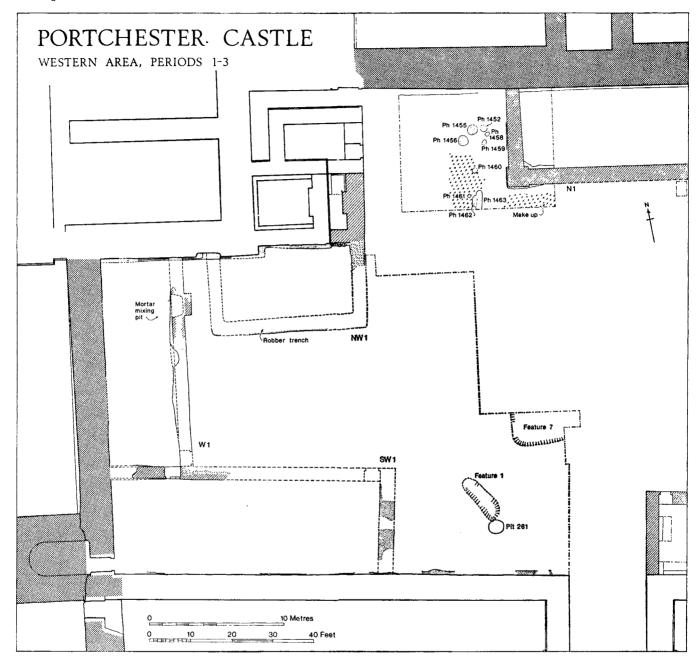


Fig. 6

There is comparatively little archaeological evidence relevant to a consideration of this phasing, but the following points may be made: (a) at the south-east angle of the keep the footing of the clasping buttress is one with the footing of the south wall of the chapel. This would argue that the chapel (south forebuilding) was integral with the outer facing of the

keep, and in the sequence offered above belonged to phase 1B. (b) The inner bailey wall is structurally later than the ashlar facing of the north side of the western postern (pl. XXVIIIa), but since the base of the postern relates to a ground surface equivalent to that of the ramp built against the outer face of the inner bailey wall it would seem preferable to assign the postern to phase 1C and to assume that it was designed from the beginning as a postern giving access between the external ramps on either side of the Roman fort wall (see also p. 73). (c) The angled wall which created the prison cell between the chapel and stair wall can be shown to butt against the north-east corner of the chapel, demonstrating that phase 2C is later than phase 1B.

The architectural arguments in favour of the sixfold division of the first two phases will be found set out on pp. 72-5.

#### Keep, Phase 3

The second major extension to the forebuildings of the keep entailed the enlarging of the chapel by the rebuilding of its east wall 6 ft. 2 in. (3 m.) further to the east, in line with the east wall of the remainder of the forebuilding. To accomplish this a substantial foundation pit was dug immediately east of the original chapel wall in which was constructed a foundation raft of limestone blocks set in a pinkish sandy mortar.

The superstructure of the new wall consisted, internally, of rough ashlar masonry, principally of limestone but with blocks of ferruginous sandstone as the quoins for a projecting internal buttress. Externally the wall was faced with well-cut ashlar (Binstead limestone) matching the style and coursing of the existing wall, to which the new work was bonded without an obvious joint. Internally the two walls were butted, at least below the contemporary floor level.

At the time of the extension the original east wall of the chapel was removed to below floor level and its external ashlar facing was completely robbed, no doubt for reuse in the new wall. The core of the original wall now survives above ground, disinterred from its surrounding stratigraphy in the 1930s. Between this core and the phase 3 east wall the ground level had been made up above the footings with loose mortar and builders' rubble derived from the phase 3 rebuilding.

# North-west Range (NWI) (fig. 6 and pl. Ia)

The phase 3 extension to the chapel was part of the same building programme which saw the construction of a new room, measuring 21 by 38 ft. (6.4 by 11.6 m.) externally, attached to the south side of the chapel and overlapping the south-eastern corner buttress of the keep. Little now remains of the structure due to extensive later robbing, but a short length of the east wall foundation survives, continuing south from the footings of the period 3 extension to the forebuildings. These footings were built of roughly cut limestone blocks and occasional flints set in a pinkish sandy mortar.

Elsewhere the walls, where not otherwise destroyed by later features, were totally robbed. The trench for the south wall was cut to a depth of 1 ft. 6 in. (0.46 m.) below the contemporary ground surface. A spread of hard white sandy mortar 1 in. (2.5 cm.) thick survived in the bottom but above that all the superstructure had been removed, the trench being refilled with mortary soil containing lumps of whitish mortar and chips of limestone. Little remained

of the west wall line, but a robber trench, much disturbed, could be traced in part immediately south of the keep wall at a point where its ashlar offsets had been cut away, presumably to facilitate the butting of the wall.

Construction and occupation levels within the room were totally removed by later work, but a thin spill of mortar c.  $\frac{1}{2}$  in. (1 cm.) thick was traced lying on the contemporary ground surface immediately south of the south wall.

Of the superstructure of the range there is little to be said. It is most likely to have been of one storey with a single-pitched roof attached to the south wall of the chapel below window level. Access would have been from the courtyard and in all probability an inner door, in the position later to be occupied by the fourteenth-century doorway, would have led into the cellar beneath the chapel. There may have been a door giving access from the chapel cellar to the cellar of the keep, but later reframing has destroyed all trace.

In the area at the east of the forebuildings a layer of soil and clay was encountered (fig. 19, section 5: C51 layers 20 and 34) which consisted of redeposited brickearth and Roman occupation soil intermixed and spread to a thickness of 6–12 in. (15–30 cm.). The layer was presumably derived from the foundation trench for one of the phases of the keep construction, but which phase remains unknown. The layer sealed an irregular hollow which had been created in the Roman level and which had become filled with tips of occupation rubbish (section 5: C51 layer 23) containing animal bones, oyster shells and pottery of Portchester ware type. In all probability the hollow and occupation layer wholly pre-date the first construction phase of the keep, but the point is incapable of stratigraphic demonstration (see below, p. 38).

The Relationship between the Forebuilding Extensions and the West Range

No stratigraphical relationship exists between building NW1 and building W1 since the two structures avoid each other and the intervening levels have been totally destroyed. Only one detail of potential relevance survives: a mortar-mixing pit which preceded the wall of the west range (pl. Vb). The pit, measuring about 6 ft. (1.83 m.) in diameter and cut to a depth of c. 1 ft. (0.30 m.), was filled with hard white sandy mortar containing a few small flints. In consistency it is similar to the mortar of which range NW1 was built, but it is also closely comparable to the mortar used in the construction of the keep. If contemporary with the building of NW1 then clearly range W1 must post-date NW1, but if contemporary with the keep phases 1 or 2 the relationship of the two subsequent ranges remains undefined.

The plan is no more helpful. On the one hand it could be argued that had W1 been built first then NW1 would most likely have butted up to it, but an equally plausible alternative is that the builders of NW1 deliberately contrived to leave a space between the two ranges for ease of roofing and to avoid the roof of NW1 obscuring the first-floor window of the keep. (It may be that the narrow space was utilized as a latrine, but positive evidence is lacking.) On balance this latter explanation is to be preferred on the grounds that the hall range is likely to have been built early in the life of the castle (see also pp. 73-4) and that range NW1 may tentatively be correlated with a building account for the early thirteenth century (p. 124). The arguments are tenuous and the sequence remains unresolved.

West and South-west Ranges (WI and SWI) (fig. 6 and pls. Ib, Vb and VI)

At some stage after the keep and the inner bailey wall had been constructed an L-shaped

range consisting of two rooms was built along the west and south walls of the inner bailey. The southern range (SW1) measured 65 by 23 ft. (19.8 by 7.0 m.) internally: the western range (W1) 50 by 17 ft. (15.2 by 5.2 m.).

Of the west range little now survives except the foundations and the lowest courses of the superstructure; the upper part, above c. 3 ft. (c. 1 m.), was totally rebuilt in the fourteenth century. The foundations are shallow, having been dug to a foot or so (c. 0·3 m.) below the contemporary ground surface in order to reach the top of the natural brickearth. They consist of flints set in a crumbly yellowish mortar tipped without coursing into the foundation trench. Towards the southern end of the wall a layer of brickearth was interleaved with the flints and mortar. That part of the north wall of the south range (SW1) to survive was of identical construction, and in the westernmost length of wall footing a brickearth lens was again noted. Much of the wall and its footings was totally destroyed in the late fourteenth century, but part of the footing of the end wall (i.e. the eastern wall of the range) remained in situ, though much mutilated and obscured. Although the footing had been truncated it survived, cut into the natural brickearth to the depth of a foot (c. 0·3 m.), and must therefore originally have been approximately 2 ft. (c. 0·6 m.) deep below contemporary ground surface. In structure it consisted of flints set in the same yellowish chalky mortar.

The superstructure of the west range, built of roughly coursed flint-work, survives to a maximum height of about 3 ft. (1 m.) above the foundation level, above which it was extensively rebuilt. Although the junction between the original work and that of the four-teenth century is not everywhere apparent, it is unlikely that much of the early structure survived above the window sills of the later phase, except perhaps as refaced core at the northern end of the range.

The only structural detail to be recognized was the fireplace which lay in the northern part of the range (pl. Vb). The fireplace was later blocked with masonry and the chimney-breast pulled down, but the base of the responds on either side of the opening can still be seen and the hearth bears extensive traces of burning. Some carefully tooled blocks of ashlar masonry belonging to the lowest course of the breast survive in situ, set on a projecting footing built in one with the footing of the wall. The position of the doorway leading into the range from the courtyard cannot be identified with any degree of certainty but it probably lay at the south end of the range where the footings are less substantial. No trace of it can now be recognized in the upstanding masonry.

Of the south range (SW1) much of the east end was totally demolished during late four-teenth-century rebuilding, but considerable portions of its northern wall survive at the western end. A doorway led into the west range. Of this, part of the sill and most of the eastern jamb remain, built in well-set ashlar, together with the seating from which the covering-arch sprang. The rest of the wall to the west of the door was faced with flint and limestone rubble (pls. VIa and XXXIXb).

To the east of the door part of a finely ornamented wall arcade is still preserved in position (p. 98, fig. 44 and pl. XXXIb). Parts of two arches of a blind arcade can be seen enlivened with ornate Romanesque mouldings, the inner order of zigzag being supported on small columns (pp. 98-9). The base of the arcade is marked by a single course of ashlar masonry below which the wall face is of rough flint and limestone work. Above the arcade a patch of ashlar masonry of high quality survives.

The location of the door leading into the south range from the courtyard has not been identified, but a position towards the eastern end of the north wall would seem likely. It was probably in this period that a door was cut through the Roman wall at the head of the hall to give access to a chamber created in the base of the Roman bastion, though the present form of the arch belongs to the fourteenth century.

Nothing can be said of the floor surfaces within the west and south-west ranges, since all trace had been destroyed by fourteenth- and late eighteenth-century levelling which removed all internal layers, in some places to below the base of the footings.

It is probable that the two ranges were single-storey buildings roofed with single-pitch roofs supported on the Roman fort wall and inner bailey wall respectively. Such an arrangement would have ensured that the roof of the west range did not obscure the windows of the keep hall. It may, however, have been that the span of the south range demanded a double-pitched ridge roof. The roof covering would most likely have been of slate, fragments of which were found in contemporary layers in the courtyard. The purchase of slate is mentioned in 1180 (§2, p. 164).

The two chambers evidently form part of a single, interlinked complex and were probably used as in the later period, with the south range serving as the hall, the west range being a domestic chamber probably for the King's private use.

# The Courtyard in Periods 1-3 (pls. II-Va)

The courtyard area has been subjected to much disturbance during the medieval period and later. Simply stated, while the western part has been generally reduced in level, the eastern part has been raised. Moreover, the digging of pits and foundation trenches has greatly reduced the area where the original surface of periods 1-3 survived intact (fig. 3, p. 9).

Throughout periods 1-3 it would appear that the courtyard surface, here the top of the Roman turf-line, was simply allowed to wear with no attempt being made to provide metalling of any kind. Three artificially cut features can be assigned to this period:

Feature 7 consisted of a hollow of maximum depth 6 in. (15 cm.) cut into the top of the Roman turf-line. It was filled with a pebbly grey/brown soil, containing small fragments of daub, of a kind which could have accumulated as the result of weathering and erosion. The assignment of the feature to this early period is based upon the fact that it is sealed by a layer of cobbles which belongs to period 4. Thus, strictly all that can be said is that it pre-dates period 4 and may therefore belong to any of the periods 1-3.

Feature 1, an elongated hollow or gully cut to a maximum depth of 1 ft. (0.30 m.) below the contemporary ground surface, must be considered together with pit 261, a circular pit c. 3 ft. 6 in. (1.1 m.) in diameter cut to a depth of 1 ft. 3 in. (0.38 m.) below the contemporary ground surface. The lower filling of the pit (C42 layer 46) consisted of a thin lens of dark ashy soil. The upper part of the pit and the area around was covered with a tip of redeposited chalky marl (coombe rock), which around the pit attained a thickness of 3-4 in. (7-10 cm.). The layer (C44 layers 44 and 45) overlapped the edge of the gully and sloped down into it. Above this the gully was filled with black soil containing charcoal, lumps of marl and a quantity of occupation debris (C42 layer 43). Thus the sequence of these features and layers is as follows: pit 261 was dug perhaps at the same time as the gully; then the ashy layer

was thrown into the pit and the area around was levelled with a tip of marl; after this the gully was filled with occupation debris.

The exact position of these events in the structural sequence cannot be defined precisely but they must pre-date building period 4, as defined below, since the gully is cut by period 4 walls. It is a possibility (but an unproven one) that the marl layer was produced from the foundation trench for the east wall of range SW1, in which case the activity would more properly belong to period 1 or 2.

# Period 4: Early Fourteenth Century (fig. 7)

North-west Range (NW2) (pls. II and IVa)

The principal change to take place in period 4 was the almost total demolition of building NW1, with the exception of part of its east wall, which was retained for incorporation into the range built to replace it. Not only were the walls demolished but the footings were grubbed out and all usable stone and flint was removed.

The new building consisted of two long chambers, flanking the forebuilding along its east and south walls, with a third, smaller, chamber projecting beyond the corner angle. The footings alone survive. They were trench built, to a depth of 1 ft.—1 ft. 6 in. (0·30—0·45 m.) below the contemporary ground surface, and were composed of four courses of flints and rough blocks of limestone laid in a yellowish pebbly mortar. The top of the footing had been brought to a regular surface level with the contemporary ground surface which sloped from west to east. At one point on the south wall of the southern range the line of the face of the superstructure could be traced as an impression in the mortar.

The relationship of building NW2 to its predecessor is demonstrated by the way that its footing partly cuts away the robber trench of the earlier structure (pl. IVa), but at the point where the new masonry would have butted up to that part of the east wall of the old building which was retained a large Napoleonic disturbance has totally destroyed the evidence of the relationship. At its west end the footings for the south room butt up to the chimney-breast of the early west range and are integral with a patch of rebuilding associated with a new doorway to be described below (p. 100).

No distinctive floor levels survive. Within the corner room a thin discontinuous mortar spread (C39 layer 18), not exceeding 1 in. (2.5 cm.) thick, defined the building level. It was well developed along the inside of the north wall of the room but further south merged into a layer of mortary soil containing small chips of limestone. Above this builders' level a layer of occupation debris (C39 layer 17) some 3 in. (7 cm.) thick was allowed to accumulate (below, p. 22). No floor surface survives within the south range where late fourteenth-century and later levelling have removed all contemporary levels, nor does the contemporary floor surface or builders' level survive later levelling in the northern range. The only feature found here was a small foundation of flint and mortar, the function of which is obscure but which may have served as the pad for a vertical timber perhaps associated with an internal partition.

It was probably at this stage that the north curtain wall was breached to create a new postern gate leading directly into the north range. The entrance passage was lined with ashlar masonry and the mouldings of the door were of the type elsewhere in the castle assignable to the early fourteenth century.

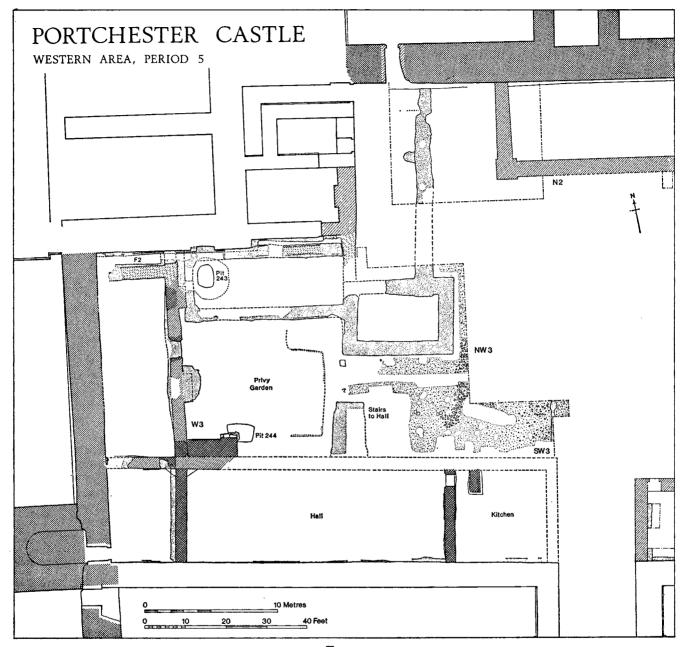


Fig. 7

The south and east ranges of building NW2 were probably roofed with single-pitched roofs of slate springing from the walls of the forebuildings and sufficiently low as not to interfere with the windows lighting the first floor. The corner chamber was probably provided with a pitched roof but no conclusive evidence survives.

Functionally it is difficult to see how the new structures were meant to be used in relation

to the forebuildings. They would, however, have provided an increased degree of security for the keep, not least in the protection they offered to the new northern sally port (see further below p. 86).

# West Range (W2) (pl. Ib)

The original west range (W1) remained largely intact throughout this period but suffered one minor modification. At the north end a new east—west wall was built across the range approximately 4 ft. (1.2 m.) from the face of the keep and parallel to it. The wall was built on substantial footings of limestone and flints set in a slightly pinkish pebbly mortar (pl. Ib): they were in excess of 5 ft. (1.5 m.) deep and were presumably therefore intended to take much of the weight of the roof. At the point where the footing joined the east wall of W1, the original wall had been cut away and the new work taken over the foundation, its easternmost face slightly overlapping the strengthening foundation added to the external face of W1 when building NW2 was constructed. Thus the construction of the new wall across W1 is contemporary with or slightly post-dates the building of NW2.

The function of the new cross-wall appears to have been to create a latrine opening from NW2 through a narrow doorway, set against the face of the keep, one jamb of which survives. The latrine was placed at the west end of this corridor in a recess (now blocked) cut into the Roman fort wall. The cesspit, which presumably drained out through the wall, was seen in excavation (pit 241: described below p. 54) but the area had been much disturbed by later fourteenth-century drainage works (p. 23) and by a substantial modern drainage pipe.

The rest of building W2 probably remained unchanged at this time with its original fireplace and doorway continuing to function. No evidence of contemporary internal structures or layers survives the later levelling.

# South-west Range (SW2) (pl. VIII)

The hall built in the south-west corner of the inner bailey continued in use unchanged except for an extension to its east end. The evidence for this is somewhat tenuous, consisting of a length of trench, cut through the earlier layers, and packed with redeposited brickearth (C42 layer 68). Only about a foot (0.3 m.) in width actually survives, the rest having been cut away by the trench-built footing of an east-west wall belonging to period 5 (below, p. 26). Sealing this trench but cut by the period 5 footing was a patch of make-up composed of patches of mortar, redeposited marl, soil and small lumps of greensand and flints all trampled together in a compact mass 4-6 in. (10-15 cm.) thick. It would appear to be builders' debris representing a construction phase. The simplest explanation for these observed features is that a wall of some kind occupied the position later taken by the period 5 wall and that the clay packing represented the filling of its foundation trench. That the wall is likely to have been of masonry is indicated by the range of debris in the builders' level.

One further piece of evidence supports the above interpretation. Immediately to the west of the supposed wall three soakaway pits were found (pits 265, 266, 276), two of which were aligned with the wall and can be shown to pre-date the later period 5 wall, which anyway incorporated improved drainage facilities (p. 26). The pits, described in detail below (pp. 58-9), were all deliberately filled with flints and large stone blocks, presumably to allow water, accumulating within the room, to drain away quickly.

Thus the nature of the structural activity beyond the east end of the original hall would suggest the addition of a new room, most probably a kitchen perhaps replacing an earlier timber kitchen. Whether or not the extension was undertaken as part of the same building programme as the construction of building NW2 must remain unknown, but the fact that the east walls of both almost exactly align might suggest a degree of contemporaneity.

#### The Courtyard

Areas of the contemporary ground surface between NW2 and SW2 have survived later levelling and building activity. Around the corner chamber of building NW2 a laminated layer of consolidated mortar droppings, c. 1 in. (2.5 cm.) thick, was found (fig. 18, section 2: C39 layer 24), identical to the mortar of the wall and to a similar lens found within the room itself (p. 19): this must represent the builders' spread. Further to the south the construction horizon gives way to a layer of water-worn flint pebbles and cobbles which were trampled into the top of Roman turf layer forming a hard and reasonably stable surface (sections 2, 3 and 4: C40 layer 19; C43 layer 33).

The inner courtyard or privy garden around which buildings SW2, W2 and NW2 were grouped appears to have been divided from the rest of the inner bailey by a fence of large timbers set upright in post-holes (nos. 1324, 1325, 1326, 1327, 1328, 1339, 1340, described below, p. 65), the spacing of which would indicate the existence of a gate towards the northern end. The post-holes were cut through a layer of mortar (C35 layer 14) which may be of period 4 or a little earlier, and were in turn cut by a footing of period 5. Thus they may be regarded as contemporary with the use of the period 4 buildings.

# Occupation Layers belonging to Period 4

The cobble layer, just north-east of the kitchen, was sealed by a thin lens of grit (C43 layer 32) which presumably accumulated as the result of traffic wearing the cobble surface. Further to the north, adjacent to the south wall of the corner room of NW2, the gritty lens gave way to a layer of broken slates increasing to about 3 in. (7 cm.) in thickness against the wall (sections 3 and 4: C40 layer 18; C43 layer 34). In places there were patches of oyster shells interleaved with the slate, the whole layer being densely packed. The slate may represent the collapse, either gradual or sudden, of the roof of NW2, the compacted nature of the layer resulting from continual traffic across the debris. Alternatively it could represent a phase of reroofing. A similar layer of slate, 1-2 in. thick (2·5-5·0 cm.), but less consolidated and mixed with grey silty soil, extended over the area north and east of the corner room of NW2 (section 2: C39 layer 22). From this level a pit (pit 254, but unexcavated) was cut down into the underlying layers.

Within the corner room of NW2, and sealing the builders' spread, a layer of occupation debris consisting of grey soil 3 in. (7 cm.) thick had been allowed to accumulate. In the south-east corner of the room it contained considerable quantities of oyster shells (section 1: C39 layer 17), thrown into a heap.

The area immediately to the east of the kitchen of SW2 produced evidence of a thin discontinuous lens of occupation rubbish barely  $\frac{1}{2}$  in. (1 cm.) thick (C42 layer 40) which lay immediately upon the builders' make-up layer. This was sealed by a layer 1-2 in. (2.5-5 cm.) thick composed of mortary soil with patches of clay, grit and slate (C42 layer 39).

Further to the west, and possibly of one period with this make-up, was an extensive spread of marly clay, containing flints and lumps of greensand, up to 6 in. (15 cm.) in thickness (C42 layer 36), which was laid in a slight hollow apparently to level up the ground. Although it could not be demonstrated with certainty that this layer belonged to period 4 rather than period 5, it remains a possibility that the material was derived from the footings trenches for the period 4 buildings and dumped in a convenient hollow to level up the land hereabouts.

Elsewhere within the ranges themselves and in the courtyard west of the gate late four-teenth-century and more recent levelling have combined to destroy the period 4 levels.

# Period 5: Mid Fourteenth Century (fig. 8)

North-west Range (NW3) (pls. II and IIIb)

The north-western range, constructed in period 4, continued in use throughout period 5 with only one observable alteration — a new wall was built within the southern room parallel to the south wall of the keep and forebuilding abutting the keep. The wall consisted of a trench-built footing varying in depth from 1 ft. to 1 ft. 6 in. (0·30–0·46 m.) composed of flints set in a hard white sandy mortar. In places the lowest course of the free-standing super-structure, also flint-built, survived. The footings abutted the footings of the period 3 wall (the surviving fragment of NW1) to the east and the period 4 footings to the west: no contemporary construction or occupation levels survived.

The building of the wall carries with it the implication that the roofing of the range was at this stage modified, the most satisfactory explanation being that a ridged roof now replaced a single pitch. The alternative, that the wall was built to support the upper ends of the rafters which had hitherto been attached to the keep and forebuilding, though possible, seems less likely.

One effect of the reconstruction was to block the doorway which had led from the north-west corner of the range to the latrine; the floor of the narrow passageway was now dug out to form an open gully 4 ft. (1.2 m.) deep running parallel to the keep wall and presumably emptying out through the fort wall. Such a gully would have been necessary to drain off rainwater accumulating in the roof valley between the south range of NW3 and the fore-building and keep. To compensate for the loss of the latrine it was probably at this stage that a new cesspit (pit 243) was dug in the north-west corner of the south range (for details see p. 54). How long the pit remained in use is uncertain, but it had clearly been abandoned and its sides were allowed to erode at the top, undermining the adjacent wall footings, by the time that the rebuilding work of period 7 was undertaken.

# West Range (W3)

The original west range, together with the south-west range, was now extensively renovated, the principal improvements being the addition of a second storey throughout and the creation of a new kitchen at the east end of the hall. Such sweeping changes necessitated the thorough reorganization of the ground plan.

In the west range the original doorway, which probably lay in the south-east corner, would have been blocked by the addition of a mass of masonry to take the passageway leading between the hall and the first-floor chamber in the west wing (p. 25). It was therefore

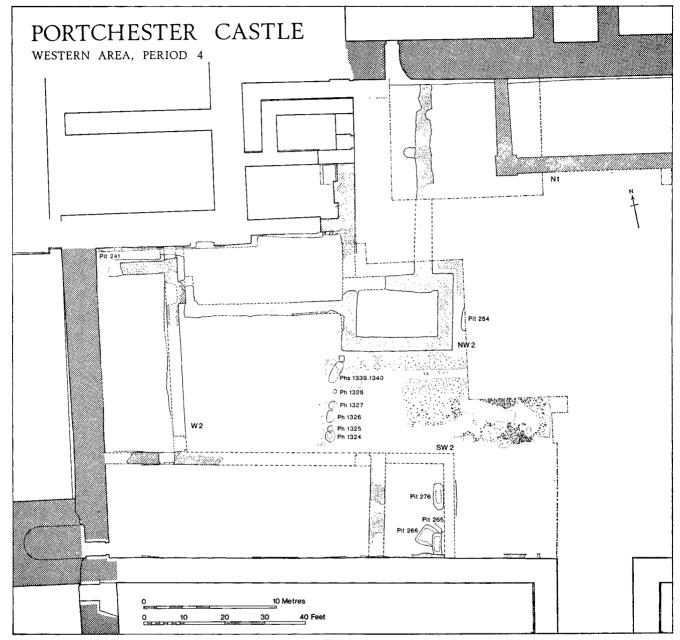


Fig. 8

necessary to insert a new door towards the centre of the range to provide access to the ground-floor chamber. The doorway incorporated several blocks of Bembridge limestone and was rebuilt in period 7 using greensand in the upper part (p. 100). It was also at this stage that the original fireplace was blocked and a new one cut to the south of the door, necessitating the building of a chimney-breast (now demolished), projecting out into the courtyard, based on a footing of flints set in yellow mortar.

The original doorway which led through the south wall of the range into the hall was now blocked with masonry and a new doorway was cut further to the west, against the wall of the fort, in order to provide access to a new chamber created, in the south-west corner, by erecting a blocking wall across the end of the original hall. The new room thus became part of the west range and there was no longer access between the west and the south-west ranges at ground-floor level. The cross-wall was built on a foundation of flints set in cream-coloured mortar, the superstructure consisting largely of flints, frequently iron-stained, used in conjunction with smaller amounts of limestone rubble.

# The Linking Passage between Buildings W3 and SW3 (pl. IVb)

In the external angle between the west and south-west ranges a solid block of masonry was erected within which was constructed the first-floor passage leading from the hall (in the south-west range) to the chamber in the west range. The external angle of this structure was built out over an open pit (pit 244), the footing being built up from the pit bottom in courses of flints and slabs of limestone set in a hard white sandy mortar: the pit was then refilled with tips of redeposited brickearth and grey soil interleaved with mortar (see below, p. 55). The structure is curious but was presumably occasioned by the accident of there being a freshly dug pit in the way when the time came to erect the masonry base for the passage. The rest of the footing was of the usual trench-built construction but with a course of stone slabs in the north-east corner projecting as an offset at the original ground level. Later levelling has taken the surface lower, exposing both the offset and some of the footings beneath. As is described more fully below (p. 100), the contemporaneity of the passage and the blocking wall across the hall is demonstrated by the arrangements provided at first-floor level. A door led from the passage into a spiral stair built in the widened north end of the blocking wall. The stair was blocked and partly dismantled in period 7.

# South-west Range (SW3) (pl. VIII)

Building SW3, which constituted the hall and its kitchen, was so extensively rebuilt later, in period 7, that there is little that can be said of its earlier superstructure, but its plan, at least, is now tolerably certain. The north wall of the original single-storey hall (SW1-2) was retained and the loss of floor area at the west end (cut off by the cross-wall and added to the west range) was compensated for by an addition of comparable size at the east end extending across the area thought to have been occupied by the period 4 kitchen. Thus the dimensions of the hall remained much the same as before. These changes, however, necessitated the construction of a new kitchen at the east end which extended the range as far as the west side of the gate of the inner bailey. It will be shown below that most of the north wall of the range and the entire eastern wall were removed and replaced by a more substantial structure in period 7. This fact, combined with the lowering of the floor surface of the chamber below the hall, has removed virtually all trace of the hall and kitchen of period 5 with the exception of the wall which divided the kitchen from the hall; areas of stratigraphy surviving within the kitchen; and the foundation for an external staircase, together with the associated cobble metalling in the courtyard. Sufficient survives, therefore, to provide a clear indication of the general arrangement of the rooms.

The hall itself, which now measured internally 63 by 23 ft. (19.2 by 7.0 m.), would have

been reached by an external staircase, presumably built of masonry, contructed on a foundation of large limestone blocks and flints set in soft yellowish mortar. The foundation survives but is partially obscured by the masonry of the later period 7 porch: the form of the original staircase is beyond recovery, but the shape of the footing might suggest that the flight was set at right-angles to the wall. Nothing survives of the ground-floor plan, but the greensand corbels set in the walls to take the joists of the hall floor showed that the lower chamber had about 8 ft. (2·4 m.) of head-room. It probably served for storage and for accommodation.

The wall which divided the hall from the kitchen remains largely intact, though with some later modifications (pl. VIII). It was built of flints and limestone masonry on a trench-built footing of similar material set in a yellow chalky mortar. A single doorway provided access from the kitchen to the basement beneath the hall. In front of the door was a footing composed of limestone blocks, levelled with slate and set in yellow gritty mortar. The footing, presumably once bonded to the north wall of the kitchen, is best explained as the support for a flight of timber steps which would have led from the kitchen to a doorway set above the ground-floor door, giving direct access to the hall. The kitchen would have been open from floor to roof. It was probably entered from the courtyard by a doorway in the north wall, the exact position of which cannot now be defined.

The stratigraphy within the kitchen is, in places, well preserved. Sealing the foundation offset of the stair foundation wall was a 6 in. (15 cm.) thick layer of heavily burnt chalky marl containing flints and rough blocks of greensand presumably representing debris accumulating in the construction phase (C42 layer 32); it was sealed by a lens of cream-coloured mortar (C42 layer 29) dropped on to the surface when the superstructure of the stair foundation wall was being completed. This was, in turn, sealed by a thin lens of trampled clay  $\frac{1}{2}$  in. (c. 1 cm.) thick (C42 layer 28) which could be traced as a more or less continuous layer over the north-west corner of the room: it overlay the foundation trench fill of the wall erected between the kitchen and the hall.

Over much of the rest of the kitchen, particularly in the south-eastern corner, a layer c. 4 in. (10 cm.) thick of burnt material had accumulated (C42 layers 31 and 30). It contained broken burnt daub, flints, patches of chalk, and flecks of charcoal: in places within it distinct but localized trampled surfaces could be identified. This layer is likely to have accumulated over a period of time and must represent the results of continuously lighting the kitchen fire in this corner of the room. On some occasions the flames were so fierce that the face of the inner bailey wall was scorched and discoloured. Meanwhile in the north-west corner of the room thin lenses of occupation material were allowed to accumulate. A layer of trampled soil and ash (C42 layer 27) up to 2 in. (5 cm.) thick developed, followed by thin lenses of clay (C42 layer 26) and chalky mortar (C42 layer 25) which were sealed by a further layer of trampled soil and ash (C42 layers 24 and 22) within which lay a discontinuous lens of greensand chips, the entire accumulation (layers 27 to 22) amounting to no more than 6 in. (15 cm.) in thickness. Thus, while the fire in the south-east corner was tending to reduce the level of the floor, the gradual accumulation of trampled debris was raising the level in the north-west corner.

#### The Courtyard in Period 5

From the north-east corner of the kitchen an edging composed of a single course of flints set

in a white sandy mortar was laid to revet the cobbles of the pathway which led into the inner bailey from the gate (C43 layer 49). This construction lay above a spread of cream-coloured sandy mortar (C43 layer 28) which covered much of the area north of the kitchen and hall wall and attained a thickness of 4 in. (10 cm.) along much of its southern edge where it would have abutted the wall of the range. There can be little doubt that the mortar represents builders' sloppings dropped on the contemporary ground surface when the kitchen was being constructed. Above the mortar and butting up to the flint edging was a spread of hard-core, 3-6 in. (7-15 cm.) in thickness (section 4: C43 layer 27), composed largely of hard-packed gravel derived from the sea-shore with patches of flints and greensand blocks mixed up with it. The layer spread north to flank the corner room of building NW3 (section 2: C39 layer 21; C40 layer 17) and in places attained a thickness of 1 ft. (0.30 m.).

The courtyard metalling is thickest in the east, but extends westwards to within the constricted space between the corner of building NW3 and the external staircase leading to the hall. A single block of greensand laid on the surface close to the projecting corner of NW3 may be related in some way to a timber construction, possibly a gate, dividing the privy (western) garden from the main court.

The western part of the courtyard, which was almost entirely enclosed by buildings, served as a privy garden. Although the westernmost part suffered from levelling in period 7, sufficient of the stratigraphy survived to show that the central part of the enclosure had been dug, presumably more or less continuously for many years, resulting in a layer of thoroughly mixed garden soil, in some places reaching as much as 15 in. (38 cm.) in thickness (C34 layer 9; C35 layers 12 and 13; C40 layer 24). The soil was black, highly organic and contained a number of small abraded potsherds, no doubt derived from household rubbish thrown on to the garden from time to time. The small fragments of slate mixed with it lay at all angles in the soil and were not infrequently vertical, providing a further indication of the mixed nature of the layer.

In two places the edge of the garden-digging could be readily determined (fig. 8), the disturbed soil contrasting in an easily recognizable manner with the adjacent undisturbed layers. The edges thus planned show that a pathway of varying widths was retained in front of the buildings, the entire central area being dug over. This period 5 garden-digging destroyed all earlier layers including the upper Roman levels.

#### Occupation Layers

We have already considered above (p. 26) the accumulation of thin lenses of occupation debris within the kitchen. Elsewhere floor levels within the ranges have been destroyed by later levelling, with the exception of the corner room of building NW3 within which a layer of flints in grey soil some 6 in. (15 cm.) thick (fig. 18, section 1: C39 layer 16) was allowed to accumulate.

On the gravel surface of the courtyard there developed a layer c. 4 in. (10 cm.) thick of grey silty soil containing fragments of slate and occupation debris including oyster shells (fig. 18, sections 2 and 3: C39 layer 20; C40 layer 16). Towards the top the layer became more slaty, no doubt as the surrounding roofs shed their covering. The layer would therefore seem to represent the churned-up mud on the courtyard surface, the slate lens on top indicating a period of lesser activity.

# Period 6: c. 1385

No buildings or layers relating to the building activity of 1385 have been recognized in the western range. The occupation layers described above continued to form throughout this period until work began on the period 7 rebuilding.

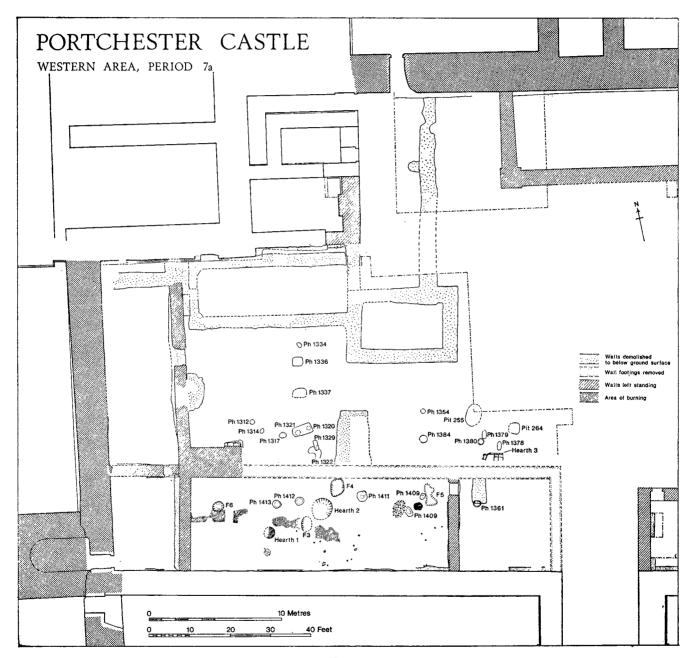


Fig. 9

# Period 7: Late Fourteenth Century (figs. 9 and 10)

Period 7, the last major phase of rebuilding in the western part of the castle, gave rise to the structures which now dominate the site. Most of the principal walls were rebuilt, in many cases on newly constructed foundations, and extensive levelling was undertaken to create, for the first time, a level site. The clearance work of the 1930s removed much of that accumulated

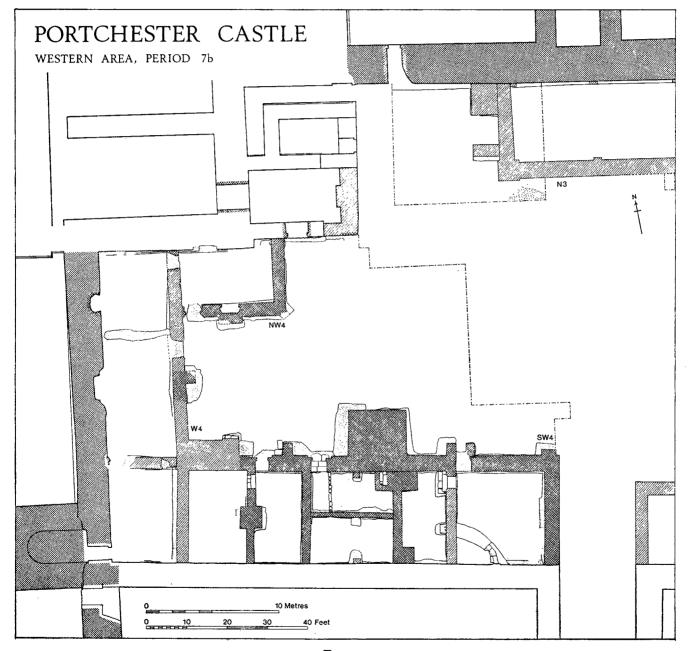


Fig. 10

later and re-created this level to within a few inches. Thus the buildings are now viewed in the environment in which they were meant to be seen.

Although the order in which the various acts of this ambitious building project was undertaken can be reconstructed with some degree of assurance, we will here consider the evidence for each range in turn before viewing the project as a whole.

North Range (NW4) (pls. Ia and IIIb)

The original building, NW3, was totally demolished to the level of the top of its footings and the site cleared and levelled, thus exposing once more the original walls of the fore-buildings. The ragged corner created at the south-east corner of the chapel was made good in ashlar work to match the original. It was probably at this stage that the present doorway into the basement below the chapel was inserted and a wide opening was cut from this basement into the undercroft of the keep, which was now reroofed with a ribbed barrel-vault. A new room of two storeys (NW4) was then erected, occupying the western part of the original footing. New footings, of flints in white sandy mortar, had to be laid, however, to take the projecting chimney-breast and the east wall of the room which now returned to join the south wall of the chapel close to the corner of the keep.

No floor levels survived the disturbances of the Napoleonic period but the ground surface of the earlier garden to the south remained intact and upon it was found a layer of roof slates up to 2 in. (5 cm.) thick in places (C35 layer 7; C34 layer 6). In all probability this represents the area in which the demolished slate roof was stacked during the progress of the building work. Stone and flint from the old walls would also have been retained and stockpiled for reuse.

Details of the superstructure of the new building will be reserved for discussion later (pp. 105-8).

West Range (W4) (pl. VIb)

The façade (i.e. the east wall) of the west range (W3) was demolished to within 3 ft. (c. 1 m.) or so of the foundation level, leaving the lower blocks of the door jambs in position; the chimney-breast was also pulled down, together with the wall which ran east—west across the range at its north end. In the south-west corner, however, much of the earlier masonry was retained largely intact, including the walls which defined the room at the south end of the range and the masonry containing the passageway leading from the hall to the west range.

The east wall was now rebuilt, the fireplace being blocked, its chimney-breast removed, and a new buttress put up in its place. It was at this stage that the range was divided by an east—west wall (the flint footings of which survive), thus creating two separate rooms, one entered through the original doorway from the courtyard, the other through a new doorway communicating with NW4. Both rooms were provided with fireplaces cut into the Roman fort wall. No contemporary floor or occupation layers survived the later levelling activities.

Details of the superstructure will be considered below (pp. 105-8).

South-west Range (SW4) (pls. IVb-Va and VII-VIII)

The hall and kitchen range was extensively rebuilt. With the exception of the westernmost

walls and the dividing wall between the hall and the kitchen the rest of the structure was totally removed, even to the extent of the original footings being dug out. At the same time the floor of the basement below the hall was lowered by the removal of about 2 ft. (0.6 m.) of soil, exposing the Roman levels throughout. This newly exposed surface formed a working yard in the early stages of the rebuilding operations (figs. 9 and 21, p. 52, section 20).

The line of the original north and east walls was exactly followed by the new and more massive footings of the period 7 hall. These consisted of flints laid in a hard white sandy mortar and set in a foundation trench of undefined depth and of irregular outline. The free-standing walls built upon them were composed of flint and limestone rubble incorporating much reused material. The foundation for the new porch, built in one with the main foundations, made use of the footings for the external staircase which had once led to the earlier hall.

Within the hall range there is evidence of extensive burning on the freshly exposed surface. associated with two well-defined hearths: hearth 1 (fig. 9), measuring c. 2 ft. 5 in. (0.74 m.) in diameter and cut to a depth of 1 ft. (0.30 m.), and hearth 3, some 5 ft. (1.52 m.) across, and 6 in. (15 cm.) deep. Both contained lead fragments and lead was found in surrounding layers. There can be little doubt, therefore, that the interior of the hall was used as a workshop by the plumbers casting the lead sheets for the roof and roof-fittings. The fragments of lead recovered were either strips or other lumps ready to be melted down, or were consolidated blobs deriving from the melting process. Of the other layers contemporary with this shortlived phase there is little to be said. A shallow and irregular hollow, feature 5, 8 in. (20 cm.) deep and filled with grey soil, stones and slate fragments, could well belong to this phase (C47 layer 3). An isolated patch of burnt clay (C47 layer 5) was found close by with a small area of pebbly clay (C47 layer 21) next to it. Both were laid only after the levelling had been undertaken and before the superstructure of the hall was complete. In the area of hearth 2 a layer of ash and charcoal 1-2 in. (2.5-5.0 cm.) thick (C44 layer 24) sealed the hearth and the burnt surface. This layer also sealed a shallow scoop or pit, feature 3 (C44 layer 26), which had been cut to an unknown depth below the basement floor. The feature had been almost totally removed by a later period 7 wall-footing. While it could represent the lower part of a pit truncated by the levelling, it is more likely to be related to a building phase. The same problems are posed by another scoop, feature 4, cut to a depth of 1 ft. (0.3 m.) below floor level in the northern part of the hall. It had been filled with flints, lumps of chalk and limestone blocks mixed with grey soil and some slate (C47 layer 12) and was cut by the north wall of the hall. Although it could pre-date period 7, it too is most likely to have been caused by some activity during the rebuilding process.

After the phase of activity, the basement floor was levelled with spreads of marly clay (C<sub>44</sub> layer 22; C<sub>47</sub> layer 16) and with building rubble (C<sub>44</sub> layers 12 and 21). These layers varied between 1 and 3 in. (2·5 and 7·5 cm.) in thickness and were laid to level up irregularities in the underlying surface. A thin spread of greensand chippings (C<sub>44</sub> layer 13) on top of the levelling presumably represents a late stage in the building process when the masons were preparing the dressings for the doors and windows.

The construction of the north wall of the hall would have required elaborate scaffolding. A number of post-holes have been found in the vicinity of the range, both inside and out, which in all probability supported the main timber uprights (fig. 9). In each example it is possible to demonstrate that the post had been uprooted and the void filled with mortary

rubble. Once the main wall had been erected, or largely so, the three north-south partition walls, which divided the ground floor and supported the main hall floor, were put up. A little later the east-west partition wall was added and finally the concrete foundations, taking the greensand pads which supported timber pillars beneath the screens passage, were laid. At some stage late in the process the steps leading down from the kitchen to the western bay of the hall basement were added.

In the kitchen the building sequence was less complex. While the north and east walls were being built a layer of mortary rubble (C42 layer 17) was being deposited within the hall. The layer consisted of coarse white sandy mortar, mixed with lumps of limestone, pebbles, flints, oyster shells and slates and accumulated to a maximum thickness of 1 ft. (0·3 m.). Against the inner face of the north wall a layer of clean brickearth (C42 layer 18) was deposited while rubble make-up was being laid, but this was probably just a localized tip. The stratigraphy survives well in the north-west corner of the kitchen, but over much of the rest of the area it had been removed by Napoleonic disturbances.

After the floor of the kitchen had been raised a culvert was constructed leading in a curve across the corner of the room from a sump, set within the basement beneath the hall, to a drain cut through the inner bailey wall (for details, fig. 20). The culvert was built in a trench cut through the floor to the required level. Its base consisted of flat slabs of greensand upon which side-walls of flint and limestone had been laid to support capping stones of limestone and greensand, the entire structure being packed around with mortary rubble (C42 layer 16) and sealed with a mixture of flint, limestone fragments, mortar and redeposited coombe rock (C42 layer 9), filling the trench to the level of the top of the make-up. The sump, which lay at the head of the culvert, immediately to the west of the wall which divided the kitchen from the hall, now survives as a slab of greensand, slightly dished to encourage the water to flow away. Originally it would have been edged with a surround of stone blocks set upon the base to form a drain-head.

After the drain had been laid through the kitchen, the floor of the kitchen was wholly or partially floored with limestone sets laid in mortar, of which a few remain in position against the inner bailey wall (pl. VIIb). From the level of this floor surface, against the inner bailey wall, a drain led down into the culvert below (fig. 20). The floor was probably laid in such a way that it sloped towards the drain, thus allowing surplus water, or water used in washing the floor, to be swilled away. Since practically all the floor had been removed the precise position of the kitchen fire cannot be ascertained, but lack of burning on the walls suggests that it was centrally located within the room.

Details of the well-preserved superstructure of the hall and its kitchen are reserved for an extended discussion below (pp. 101-5).

#### The Courtyard (figs. 9 and 10)

Immediately to the north of the kitchen and hall, and between it and the corner of the now demolished NW3, the level of the courtyard was deliberately raised. The first layer to be deposited was an extensive tip of brickearth mixed with slate (section 4: C43 layers 9 and 21; section 3: trench 40 layer 15b) which was spread over much of the area, reaching a maximum thickness of 1 ft. (0·3 m.). At one point a hearth (hearth 3) of limestone blocks set in marly clay was built on it (C43 layer 18), presumably to serve some temporary function during the

rebuilding programme (pl. VIIa). From its position it is most likely to have been constructed against the north wall of the period 5 kitchen before it was finally demolished. In front of the hearth, to the north, was a layer of intensely burnt clayey soil and charcoal c. 1 in. (2.5 cm.) thick (section 4: C43 layer 18) containing amorphous lumps of iron and thus suggesting the possibility that the area had been used as a smithy where iron fittings for the new building were produced. A further lens of burnt clayey soil also containing lumps of iron (C43 layer17) represents a local patch in the workshop floor. The possibility that a temporary timber structure was erected around the working area is indicated by a number of post-holes found in the vicinity (fig. 9).

After the temporary smithy had been removed the entire area was levelled with a tip of mixed grey soil (fig. 18, section 4: C43 layer 16 and section 3: C40 layer 15a) 4-6 in. (10-15 cm.) thick containing masses of oyster shells, lenses of slate, particularly at the bottom, and finely pulverized greensand chippings, the last suggesting that masons were now at work carving the greensand mouldings. A small pit (pit 264) was cut down through this layer and filled with occupation rubbish. Whilst this work was in progress a 2 in. (5 cm.) thick layer of chalk (C43 layer 15) was spread to form a hard surface and above this, and extending south up to the wall-line, there accumulated a further layer of finely crushed greensand chippings (C43 layer 14) sufficient in extent and thickness to suggest that it represented the site of the principal masons' working yard. When this activity was at an end a thin trample of grey silty soil up to  $\frac{1}{2}$  in. (1 cm.) thick accumulated (C43 layer 13).

It was at this stage that a soakaway pit (pit 255) was dug and filled with greensand blocks, no doubt to provide drainage for this part of the courtyard. Then followed a further phase of levelling with a tip of mortary rubble mixed up with grey soil (C43 layer 12; C40 layer 22) which was sealed by a 2-4 in. (5-10 cm.) thick layer of trampled chalk (fig. 18, section 4: C43 layers 7, 11; section 3: C40 layer 13). Upon this lay a 3 in. (7.5 cm.) thick layer of greensand chippings (C43 layer 8), representing continued masons' activity, and finally another lens of trampled chalk (C43 layer 7). Further to the north, over the area occupied by the now demolished range NW3, the ground was levelled with tips of soil and rubble up to 6 in. (15 cm.) thick (C39 layers 11 and 39). The period 7 courtyard surface could be recognized as a thin trampled lens of gravel (fig. 18, section 2: C40 layer 14) merging to a hard-packed stony surface (C40 layer 21; C39 layer 19) and the chalky lens (C40 layer 13) noted above.

Further to the west, and in the southern part of the area occupied by the former privy garden, up to a foot (c. 0.3 m.) of soil had to be removed to create a continuous level surface throughout. In this area a number of post-holes were recorded, some of which were probably for scaffold posts, but three (nos. 1320, 1336, 1337) were more massive and were not sensibly placed for scaffolding: their function remains unknown.

The sequence of building operations involved in the erection of the period 7 structure was evidently complex, but the main phases in the operation can be reconstructed with some degree of certainty and compared with the documentary evidence (pp. 156-8). The first stage must have seen the demolition of those parts of the older structures no longer required and the stockpiling of the building material ready for reuse. But demolition need not have been systematic or orderly. At an early stage thick deposits of clay and rubbish probably derived from the lowering of the hall basement floor were spread out in the courtyard to raise the level. After this had been done a temporary smithy was set up against a remaining part of the

north wall of the old kitchen, while within the hall plumbers were at work melting down scrap lead. The next stage seems to have been the erection of the north wall of the hall while the masons had set up their working yard over the now demolished smithy. By the time the wall had reached first-floor level it seems likely that work had begun on the basement partition walls: it would have been logical, and in the interests of stability and efficiency, to complete the lower storey first and to insert the hall floor before proceeding with the second storey. While this work was in progress the west range and the north-west range were probably being put up.

The kitchen seems to have been the last structure to have been completed since the working area to the north appears to have made use of its original north wall. When, finally, demolition was completed the mortar and rubble was thrown into heaps within the room, the good building stone and flint being selected for reuse in the new walls. Masons at work on the greensand details re-established their yard once more immediately to the north. Inside the kitchen the mortary rubble was spread out to raise the level, and finally the culvert was constructed and the new floor laid.

When the major stages of the work had been completed the courtyard was finally levelled and a surfacing of chalk and gravel was spread to consolidate the softer patches.

#### Period 8: Early Seventeenth Century

After the total reconstruction of the buildings in the western part of the inner bailey in period 7 no further activity can be recognized until the eighteenth century. In only two areas do layers representing this period survive. Over the soakaway pit (pit 255) the filling had slumped, creating a hollow in which mortary soil accumulated, eventually developing into a layer of stone-free turf (fig. 18, section 3: C40 layer 12; section 4: C43 layer 6). Elsewhere, in the angle between the south wall of the chapel and the east wall of NW4, another stone-free turf layer developed (C39 layer 3). It extended along the south side of building NW4 (C34 layer 4) and must represent an area where disturbance caused by traffic was at a minimum.

#### THE EASTERN RANGES

(figs. 11-17)

Periods I and 2: Early to Mid Twelfth Century (fig. 12)

The two buildings, SEI and NI, which are demonstrably the earliest structures to be erected in the eastern part of the inner bailey, cannot be structurally related to each other except in so far as the wall which creates the period 3 range joins the two together and is thus later. For this reason both ranges are described together here. Their phasing in relation to the broadly contemporary buildings of the western part of the courtyard is not precisely defined.

South-east Range (SE1) (pl. XIV)

Building SE1 was erected in the south-east corner of the inner bailey immediately adjacent to the south wall and incorporating within itself the space within the corner tower. The range, 20 ft. 6 in. (6.25 m.) wide overall, was divided into two unequal parts by a cross-wall

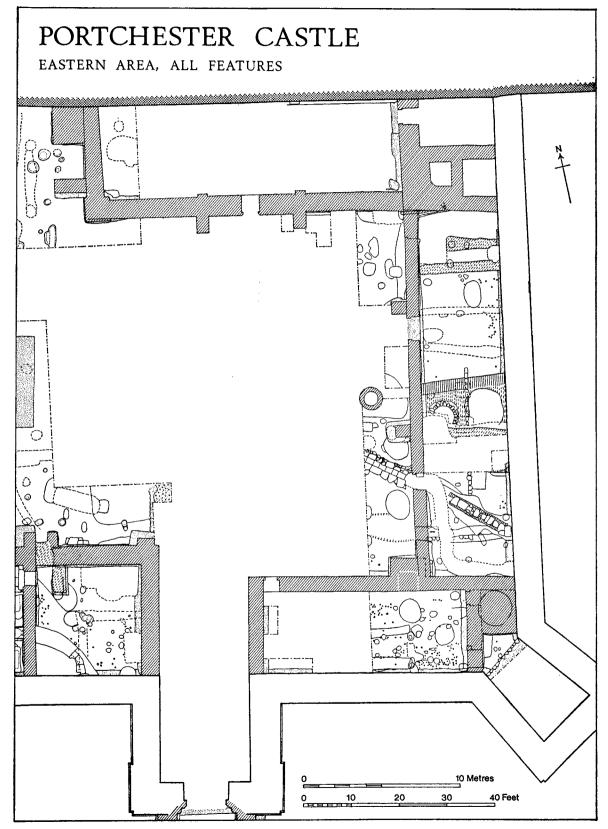


Fig. 11

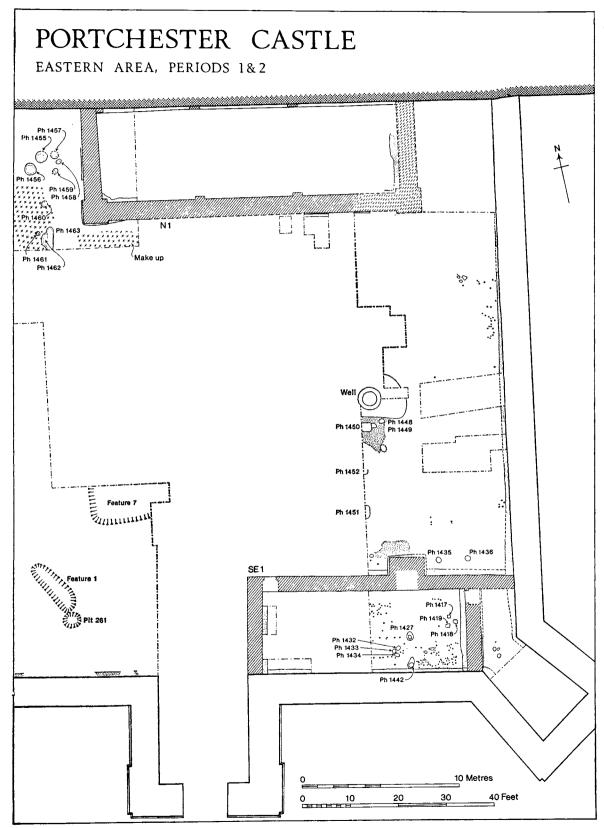


Fig. 12

through which a door, later partially demolished and blocked, provided access between the two rooms. The principal chamber, 17 ft. 3 in. by 43 ft. (5.26 by 13.10 m.) was probably entered through a door in the north-west corner. This area has not been excavated but it seems likely that the surviving door, which was rebuilt in the early seventeenth century, occupies the position of the original structure. In the north wall of the range a fireplace had been constructed, the chimney-breast for which projects beyond the wall line to the north. Subsequent blocking of the fireplace has rendered its details obscure, but the surround was built in limestone ashlar and part of the inner curve of the chimney still survives higher up embedded in later masonry.

The range was subjected to extensive modification and rebuilding. The west wall was rebuilt from foundation level in the seventeenth century, much of the north wall was rebuilt, or at least refaced, from the late fourteenth-century ground level, while the eastern part of the north wall and the cross-wall were, after modification, demolished to within 2 ft. (0.60 m.) of their footings probably in the eighteenth century.

The surviving masonry shows the original range to have been built in roughly coursed limestone rubble and flint set in a cream-coloured chalky mortar. The corners and door jambs were completed in ashlar. A sequence is apparent in the process of building. It would appear that the foundations for the north wall and of the chimney-breast were laid in one and some of the superstructure of the wall erected, at which time a lens of mortar, probably builders' sloppings, was spread on the nearby ground surface. The footings for the chimney-breast were then raised by about 9 in. (23 cm.) before its superstructure, of finely jointed ashlar limestone, was erected, bonded with the north wall. These slight differences in phasing do not imply a significant change in plan during building.

The floor of the range has been subjected to intensive wear accompanied by periodic repatchings, but the earliest surface, of which only isolated areas exist, was of trampled chalk marl between 1 and 2 in. (2.5 and 5.0 cm.) thick. Since, however, the layer is in no place physically related to the footings it is impossible to say if it represented the floor of the range or a building-spread contemporary with the construction of the inner bailey wall. The former is more likely. All the post-holes shown on the plan (fig. 12) were cut through the chalk marl spread. Many of the stake-holes were in a similar relationship to it.

# North Range (NI) (fig. 12 and pl. XXXII)

The north range, measuring internally 19 ft. by 62 ft. (5.8 by 18.9 m.), was constructed against the Roman north wall. The interior was totally cleared by the Office of Works down to the truncated Roman level, and the rubble of the wall core has been largely reset in modern concrete. This treatment, combined with extensive fourteenth- and early seventeenth-century rebuilding, has obscured much of the detail of the earliest structure, but the form of the building is tolerably clear. It was constructed as a hall above a vaulted undercroft, the basement floor of which was set approximately 3 ft. (1 m.) below the contemporary ground level.

The lower part of the west end survives largely unchanged. The superstructure was built of coursed flint rubble set in white gritty mortar, while the corner was strengthened with shallow clasping buttresses faced with finely jointed ashlar of Binstead limestone. The external faces of the wall were built free-standing in a foundation trench all trace of which has

been removed by an exploratory trench of the 1930s dug along the wall face, effectively isolating the wall from the adjacent stratigraphy. The original east end of the range has been totally removed by fourteenth-century rebuilding but part of the foundation of the Norman work survived, showing the approximate position of the end wall. In the reconstruction offered here we suggest that the south-east corner was treated in a style similar to the south-west. Much of the south wall was rebuilt in the fourteenth and seventeenth centuries and little of the original work is now visible. Internally, evidence for a three-bayed vault survived (for details see p. 110).

We may assume that the first-floor hall was reached by an external staircase, built against the west end wall, which would have given access to the hall doorway at first-floor level and then continued upwards to a door set within the curtain wall, which in turn leads to the wall-walk. At this stage the stairway is likely to have been built of wood but was later reconstructed with masonry supports (p. 47). Although later building activity has destroyed much of the original ground surface, several post-holes of the early period have been identified (nos. 1455–1463), some of which may have been part of the stairway support.

Since trenches of the 1930s have removed the relationship between the building and the adjacent stratigraphy it is impossible now to say which layers were contemporary with the early building, but the layer of brickearth and redeposited Roman soil (section 5: C51 layers 20 and 34), thought to have been thrown out when the forebuildings of the keep were constructed (p. 16), quite possibly pre-dates range N1, unless of course the soil was derived partly from the digging of its undercroft. It was through this layer that post-holes 1460–1463 were cut.

# Area between the South-east and North Ranges

The area between the ranges was, in periods 1-2, an open unmetalled space into which a few post-holes had been dug. Those close to the north wall of the range were probably for scaffolding related to the building phase. The three large, square post-holes (nos. 1450-1452) between the south-east range and the well may, however, belong to a timber structure of which nothing else is known. Post-hole 1450 is cut through a mortar spread (fig. 20, section 8: C50 layer 24) which probably belonged to the construction phase of the well: all three were sealed by flint cobbling of period 3 date (C50 layer 16).

The well, which can be shown to have been built not long before the construction, in period 3, of the east range, may be assigned to period 2 though it need not have been exactly contemporary with the building of the south-east range. The upper six courses, comprising 4 ft. (1·2 m.), were rebuilt in about 1930, the accompanying construction pit having destroyed all the adjacent stratigraphy. Originally it would appear that a rectangular excavation had been made, the masonry-lined well being constructed in the western part of the hole while the eastern part was filled with rammed clay, chalk marl and flints (fig. 20, section 9: C50 layer 23) which subsequently slumped and were levelled with a layer of greensand chippings (C50 layer 30) before the wall of the east range was built. It remains a distinct possibility, however, that the well originally occupied the eastern part of the pit and was resited 7 ft. (2·1 m.) to the west when the decision was taken to build the east range, the original pit being filled with the clay and marl. Because of the destruction wrought by the 1930 rebuilding, and the proximity of standing structures, which would have rendered deep excavation unsafe, the

problem remains unresolved. One observation in favour of this explanation is that the mortar layer (fig. 20, section 8: C50 layer 23) which may be related to the original well construction is sealed by the clay marl (C50 layer 23), a sequence which would allow (but not prove) the existence of two distinct phases.

The well itself is lined with carefully cut ashlar masonry for the full depth of 30 ft. (9 m.) below the present ground surface. It was maintained in use throughout the life of the medieval castle and was still the principal source of water in the early nineteenth century. No record survives of the clearance work carried out in 1930.

# Period 3: Early Thirteenth Century (fig. 13)

# The South-east Range

The south-east range remained in use largely unaltered during this period. Only within the corner tower can any change be recognized. Here a foundation of flint and mortar edged with blocks of ashlar was laid on the original ground surface: the upper levels were totally removed in the late eighteenth century. The reason for the addition is unclear. Within the principal chamber of the room the floor continued to be worn and patched.

# The North Range

No change was observable in this period.

# The East Range (E1) (pls. X and XII)

It was in period 3 that the east range was constructed by the simple expedient of joining the corner of the north range to the north wall of the south-east range by a wall set parallel to the inner bailey wall. The junction with the south-east range can clearly be seen but the relationship between the new wall and the corner of the north range has been totally destroyed by later rebuilding and remains a matter of speculation.

The east range was an insubstantial structure, in all probability of only one storey and with a single-slope slate roof resting against the inner bailey wall. Its walls were of flint and lime-stone rubble set in a white gritty mortar. In general the foundations and the lower courses were built of flint, the limestone rubble being more frequently used in the upper courses. The northern half of the main wall of the range was later demolished to within a course or two of the foundation level but the southern half survives largely intact, except where later doorways and windows were inserted, up to original roof height.

The range was divided into two unequal parts by a cross-wall. The northern room, entered through a door in its south-west corner, was floored with a layer of trampled chalk (pl. XIIb). It would appear to have been without natural light and is therefore likely to have been a store-room or stable. The southern room, much larger and without apparent internal divisions, was used as a kitchen. It was entered from the courtyard through a single door set towards its southern end and was no doubt once provided with windows giving light from the west.

Soon after the range was built it would appear that a problem was created by surface water, which ponded up in the angle between the east and south-east range — the lowest point in the

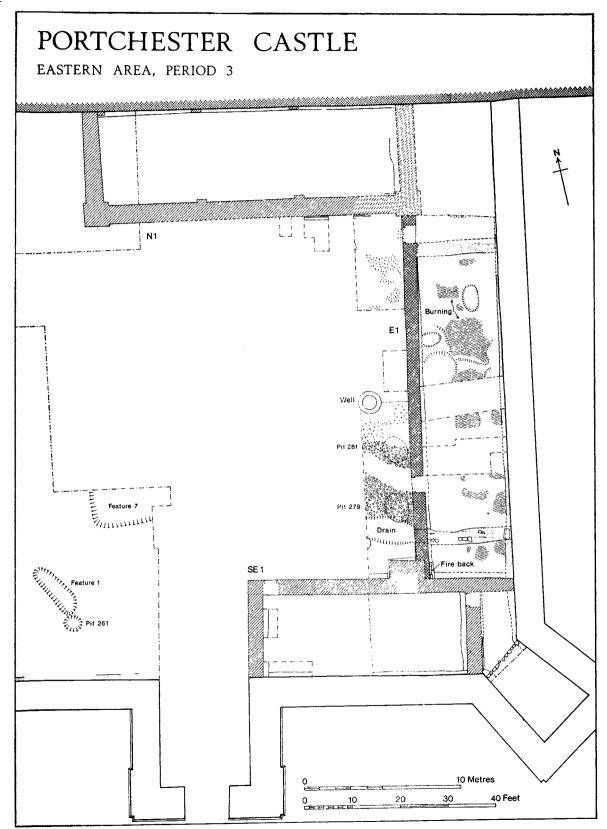


Fig. 13

inner bailey. One of the solutions adopted was to construct a drain beneath the floor of the room to channel the water away. This entailed cutting a hole through the base of the east wall and another through the inner bailey wall. The drain itself (fig. 20, section 11) was probably constructed of planks set within a trench 1 ft. 6 in. (0.45 m.) deep and 2-3 ft. (0.6-0.9 m.) wide, the space between the planks and the trench side being packed with flints and soil (C48 layer 41). Capstones were provided where the drain passed through the walls and it is possible, though by no means proven, that the drain was stone-capped over its entire length. At the time of construction the southern part of the room was floored with a layer of brownish gritty mortar laid on a base of chalk, flints, and occasional limestone lumps (fig. 20, section 16: C48 layer 39), the total thickness varying between 2 and 9 in. (5 and 23 cm.). That the northern part of the room was not so floored might suggest that a timber partition divided the room just north of the entrance. The relevant stratigraphy has, however, been totally destroyed by eighteenth-century disturbances.

The entire range shows signs of heavy burning, particularly in its northern part where continual fires of considerable intensity have scorched the earth, the combination of the heat and raking giving rise to deep hollows which were filled with ash and lenses of baked clay. The fires were at their most intense in the centre of the range, but they were also built along the inner bailey wall, which shows a cracking and reddening of its ashlar which could only have been caused by very high temperatures. The southern part of the room, where the mortar floor had been laid, also showed signs of fires, some of which had shattered the facing of the north wall of the south-east range.

Only one structure associated with the fires survives and that is the layer of marly daub and greensand blocks which had been set against the face of the west wall of the range in the southwest corner, giving the appearance of a fire-back. Elsewhere the fireplaces were devoid of permanent fittings.

Clearly the range was used over a considerable period for domestic activity. The complete absence of industrial waste such as slag would suggest that it probably served as a kitchen.

#### The Courtyard

The problem of drainage in the south-east corner of the courtyard has already been mentioned. It seems that the first solution attempted was the digging of two large soakaway pits on either side of the door (pits 279 and 281), each measuring an average 4–6 ft. (1·2–1·8 m.) in diameter and in excess of 3 ft. (0·9 m.) in depth below the contemporary surface. They were not excavated to the bottom but their upper fillings consisted entirely of masses of loosely packed flint nodules. The area over the pits was raised, and to some extent levelled, by the creation of a wide pathway, built of smaller flints, leading to the doorway (fig. 20, section 8: C50 layer 16). To the north of the path the heavy flint metalling gave way to a thinner layer of flints which consolidated the surface around the well. Along the southern edge of the path a shallow gully was dug to collect surface water from the courtyard and to channel it to the drain which led beneath the floor of the range.

The north-east corner of the courtyard, which was about 1 ft. (0.3 m.) higher than the south-east corner, was without special make-up, but a thin layer of chalk (C46 layer 19) had been spread to consolidate the surface in front of the door (fig. 13).

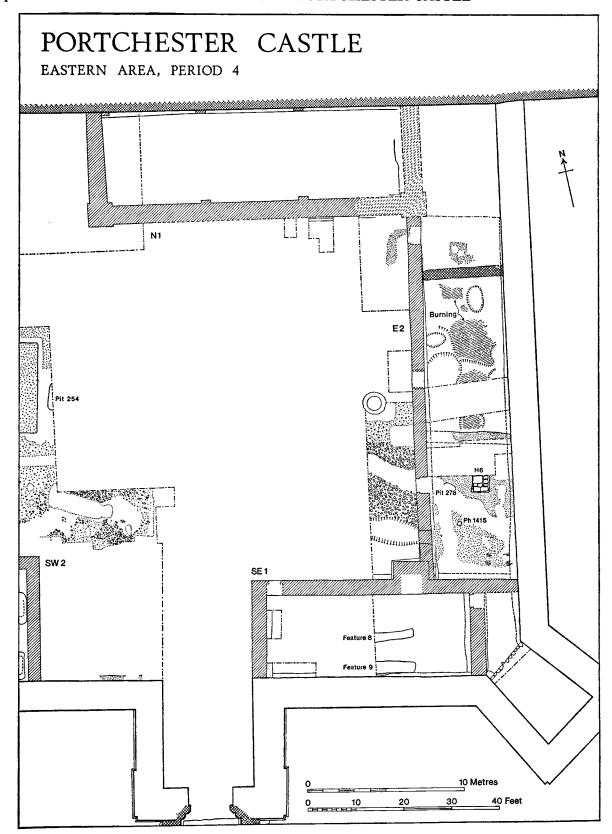


Fig. 14

# Period 4: Early Fourteenth Century (fig. 14)

#### The South-east Range

The south-east range continued in use largely unaltered, the only sign of activity being the digging of two shallow gullies through the floor of the main room (fig. 20, section 10). Each was flat-bottomed, some 3 in. (7 cm.) deep: later they became filled with grey/brown silty soil (feature 8: C49 layers 12, 13, 44; feature 9: C49 layer 15), the fill of both containing quantities of roof slates. The purpose of the gullies is uncertain: while they could have have been emplacements for timber beams (perhaps floor joists) there is no positive evidence for this. It is equally likely that they served a drainage function associated with some kind of domestic activity. After the silting had taken place a discontinuous layer of mortary rubble (fig. 20, section 10: C49 layer 11) formed or was laid, consisting of small lumps of limestone and degraded mortar giving the appearance of having derived from the erosion of a neighbouring wall. Although the evidence is slight it could be that the roof had been removed from the range by this stage (hence the roof slates in the features) and the wall tops were exposed to weathering. Positive proof is, however, lacking.

The North Range

No observable change.

The East Range (E2) (pls. X, XII and XIIIb)

The second phase of occupation in the east range saw the removal of the original cross-wall and the insertion of two new dividing walls, both of limestone blocks and flints set in a yellowish sandy mortar. The overall effect was to divide the range into three rooms of approximately equal size. The two original doorways functioned for the north and south rooms, but a new doorway had to be cut to serve the newly created central room.

Little is known of the flooring of the north room since late fourteenth-century rebuilding and late eighteenth-century pit-digging have destroyed most of it, but a thin layer of trampled greensand chippings (fig. 22, p. 53, sections 21 and 22: C45 layer 33) can be traced in places and can be seen to seal the footings of the demolished period 3 cross-wall. The same layer can be traced running through the doorway and out into the north-west corner of the courtyard (C46 layer 17).

The middle room remained in use much as before. Without a floor surface the constant wear of feet and the continuous lighting of fires created deep hollows, heaps of ash and areas of intense burning: no permanent installations were recognizable.

In the southern room the drain remained in use but appears to have been relined with timber. Additional packing of limestone blocks and mortar was provided along both sides and the floor level raised by several inches (fig. 20, section 11: C48 layer 36) before a layer of hard white gritty mortar (C48 layer 35) was spread to surface the make-up. The mortar topping was continuous across the top of the drain in such a way as to imply that it had been laid across the plank capping to the drain. The drain subsequently clogged with silt (fig. 20, section 11: C48 layers 42 and 40) and as the timbering rotted so the mortar floor slumped over the soft fill leaving voids in places.

The room continued to be kept in good repair whilst fires were lit along the inner bailey

wall. After a thin occupation layer, consisting mainly of charcoal and ash, had formed (C<sub>4</sub>8 layer 3<sub>4</sub>) a new floor surface of gritty white mortar ½-2 in. (1-5 cm.) thick was laid (C<sub>4</sub>8 layer 3<sub>1</sub>). Once more fires were lit along the inner bailey wall and further lenses of occupation debris were allowed to accumulate within the room (fig. 20, section 16: C<sub>4</sub>8 layers 28, 26, 21, 20). It was during this time that a rectangular hearth (hearth 6) was built opposite the door. It was composed of large slabs of greensand fitted tightly together and set within a matrix of fine white mortar. The hearth (pl. XIIIb) was framed with glazed tiles set on edge (fig. 20, section 16: C<sub>4</sub>8 layers 2<sub>3</sub> and 2<sub>7</sub>). Whilst in use a thin lens of mortar was spread in the immediate vicinity of the hearth (C<sub>4</sub>8 layer 2<sub>4</sub>), no doubt to consolidate the surface. Elsewhere within the room the only other features were a post-hole (no. 1415), a small patch of limestone blocks, heavily burnt (C<sub>4</sub>8 layer 3<sub>3</sub>), contemporary with the mortar floor (layer 3<sub>1</sub>), and a pit (pit 2<sub>7</sub>8) which had been cut through the mortar around the hearth (layer 2<sub>4</sub>). Only the edge escaped destruction by later features but it appears to have been dug down into the Roman soil below and was packed back with the material derived from its digging.

The final-phase flooring in the southern room consisted of a layer of clay and marl (fig. 20, section 16: C48 layers 19 and 22), in places reaching 6 in. (15 cm.) in thickness, which was spread over the area in front of the door (sealing the hearth) and along the insides of the wall. The localized extent of the spread suggests that it was laid to take the wear at the entrance and to compensate for slumpings in the earlier surfaces which by this time had caused cracks and unevenness in the area close to the east wall. A further thin layer of occupation material, mainly charcoal and ash, lay above this final flooring (fig. 20, section 16: C48 layer 18).

# Courtyard

In the south-east corner of the courtyard soil, composed partly of occupation debris, partly of mortar eroded from the adjacent wall faces and partly of silt washed in from elsewhere in the courtyard, began to build up, reaching, in some places, a depth of 10–11 in. (25–28 cm.) (fig. 20, section 8: C50 layers 15, 17, 18, 22): it eventually filled the gully and spread across the metalled area in front of the door, by which stage the drain can no longer have been functioning. No new metalling was laid, but around the well a thin layer of cobbles was spread to consolidate the ground surface (fig. 20, section 8: C50 layer 21).

In the north-east corner, apart from the thin spread of greensand chippings mentioned above (p. 43), there was no further make-up of any kind.

# Period 5: Mid Fourteenth Century (fig. 15)

#### The South-east Range

Occupation layers continued to form within the south-east range but there is now clear evidence of industrial activity. Two large hearths were carefully dug into the floor and lined with clay: both were used to melt lead, some of which had flowed into cracks in the clay base and still remained in position (p. 64). Elsewhere, against the inner bailey wall a considerable but localized fire had occurred, shattering the ashlar of the wall face, and it was probably during this phase that a number of post-holes were dug into the floor together with a larger hole (feature 10) of unknown purpose. A gully (feature 11) was cut into the floor of the eastern room at this time. The impression given by these activities strongly suggests that

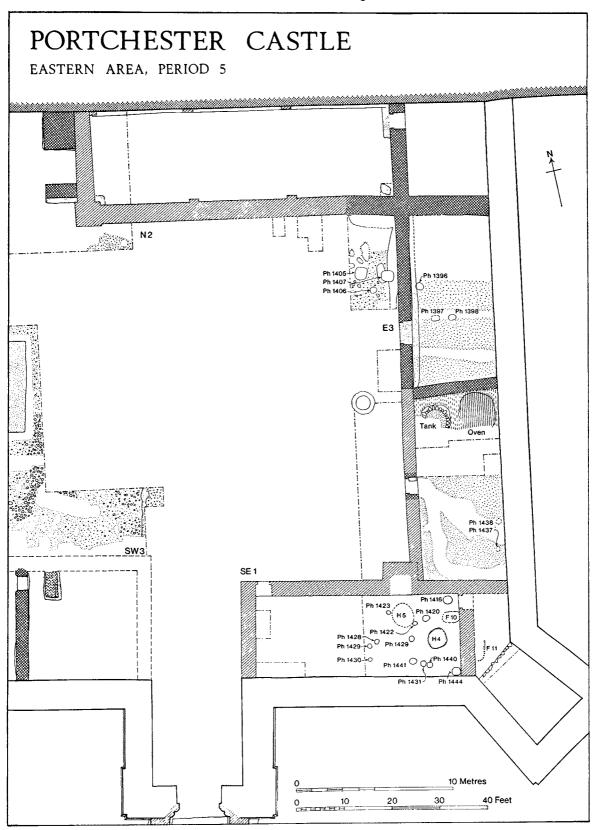


Fig. 15

the range was no longer inhabited and if, as we have suggested above, it had already lost its roof then the shell of the old structure was now being used as a convenient shelter for a variety of workshop activities.

Throughout this time a layer of occupation rubbish including ash and charcoal mixed with fine grey soil (fig. 20, section 10: C49 layer 10) accumulated along the inner bailey wall. The layer sealed the lower part of the burnt wall face.

To some extent the division of occupation within the south-east range into three distinct periods, 3, 4 and 5, is arbitrary. It is simpler to regard the use of the building throughout this time as a continuous process uninterrupted by any major structural event.

# The East Range (E3) (pls. IX and XII)

In period 5 the internal arrangements of the east range were once more reorganized. The two cross-walls were demolished and two new walls inserted. The north wall, of flints set in a soft yellow mortar, divided off a small chamber in the north-east corner which now communicated with the north range. The southern wall divided the remainder of the range into two approximately equal halves (fig. 22, section 21 wall layer 23). It was a slight structure built, without foundation, of limestone slabs bonded together with clay. At this time the floors of the range were raised by 1 ft.-1 ft. 6 in. (0·30-0·46 m.) to correspond with the rise in the courtyard level (see below, pp. 47-8).

In the northern room irregular tips of redeposited Roman soil and brickearth (C45 layer 39) were dumped over the thin layer of marl (layer 41) which represented the building spread contemporary with the construction of the partition wall. Above these dumps the ground was made up to the required level with tips of building rubble (C45 layer 22) including layers of roof slate, some of which were complete, and loose mortary rubble of the kind that remains after a wall has been demolished and the reusable flints and stone removed. The make-up debris is most likely, therefore, to derive from the demolition of a building and the simplest explanation is that it was the immediately adjacent part of the east range that was now pulled down. That this was actually so is clearly demonstrated by the fact that the northern half of the west wall of the range had been demolished to within a course or two of its foundations and the make-up debris layer spread across the stump of the demolished wall (fig. 22, section 21: the original footings are layer 32).

The rebuilding of the wall followed soon after (though how long after is uncertain). A wide but shallow foundation trench was dug approximately, but not everywhere, down to the earlier core and the new superstructure (pl. XIIb), of flints set in a rather soft yellow mortar, was erected. Both of the earlier doors were abandoned but a new door, related to the new floor level, was incorporated. Its mouldings were in greensand (fig. 22, section 21).

Within the northern room three post-holes were discovered (nos. 1396-8), two of which might possibly relate to a timber partition dividing the room. No distinct floor surface was laid, the surface of the mortar make-up presumably being regarded as sufficiently stable to suffice. Within the room a thin layer of grey soil (C45 layer 17) 1-2 in. (2.5-5 cm.) thick accumulated while the range was in use.

The floor of the southern room of the east wing was also raised to the new level: this necessitated the reconstruction of the original doorway. Since this section of the west wall remained largely intact, the old door frame was removed down to the new floor level and a

new sill and frame of greensand inserted, leaving the earlier structure buried beneath its sill. Within the range the floor level was raised with tips of flint and mortary rubble (fig. 20, sections 14 and 16: C45 layer 47 and C48 layer 16). In the northern part of the room two structures were built, a tank and an oven (pl. IX). The tank (sections 14 and 15), originally circular and some 4 ft. (1·22 m.) in diameter, was set into the floor to a depth of 1 ft. 6 in. (0·46 m.). Its walls were built of roughly squared limestone and greensand blocks set in a yellowish mortar: it was floored with a thin layer of puddled chalk. Immediately adjacent to it lay a large circular oven of which only the floor, of hard baked clay, survived. Both structures were built together at the time when the floor level was being raised.

In functional terms it is possible that the large oven was for baking and cooking while the tank may have served as a water container: it was conveniently situated in relation to the well. Alternatively the fittings could have been for brewing. Significantly, it was at about this time that the hall, in the south-west corner of the inner bailey, was provided with an adjacent kitchen of its own, apparently for the first time. No other structures were found in the southern room with the exception of two post-holes.

#### The North Range (N2)

The north range appears to have undergone extensive renovation at this time, but how much of the superstructure was rebuilt must remain unknown: all that can be said, on the surviving evidence, is that a length at the eastern end of the south wall was rebuilt, from the level of the footings, in roughly coursed limestone rubble-work. It is through this end wall that a small doorway, comparable in style to those of the east range, gives access to the small dark room in the north-east corner. This wall was totally rebuilt in period 5 on the footings of the earlier Norman wall which can still be seen beneath the yellowish mortar spilled when the new period 5 wall was erected. The foundation pad upon which the south-eastern corner rib was based was of a similar yellow mortar.

It may have been as part of the same phase of rebuilding that the timber stairway at the west end of the range was replaced with a new flight of steps, presumably of masonry, resting upon two massive masonry bases. The foundations for these bases, in depth exceeding 2 ft. (0.6 m.), were constructed of rough limestone blocks and flints set in a gritty white mortar, while the free-standing structure of the northern foundation was of undressed limestone blocks but with a squared quoin of Binstead limestone. Nothing of the superstructure of the southern foundation survived.

Between the masonry foundations a layer of redeposited brickearth and coombe rock mixed with charcoal and grey soil had been deposited (C51 layer 19). It was 6 in. (15 cm.) thick and may represent material derived from the pits for the foundations. Unfortunately the exploratory trenches of the 1930s have destroyed the relationship between the layer and the walls. To the south of the south-west corner a hard-packed layer of chalk marl 4 in. (10 cm.) thick (fig. 19, section 5: C51 layer 22) and burnt on the surface may have been laid at this time as part of the refurbishing. Once more the stratigraphical relationships have been destroyed by the trenches of the 1930s.

#### The Courtyard

The level of the courtyard was deliberately raised with tips of soil, rubble and hard-core of

varying types. In the south-east corner the material utilized consisted of mortar and slate (fig. 20, section 8: C50 layer 14) and flints and soil with a thick lens of greensand chippings (C50 layers 11, 12) which together raised the surface by, on average, 12–15 in. (30–38 cm.). The new surface was clearly defined by a discontinuous patch of mortar (fig. 20, section 8: C50 layer 13) ½—1 in. (1–2·5 cm.) thick which had been slopped on to the ground while wet, presumably whilst a neighbouring building was being renovated. In the north-east corner (fig. 20, section 13) the make-up consisted of discontinuous tips of flint and limestone rubble (C46 layer 12) together with chalk (layer 16) and clay (layer 14). A mortar spread integral with the rebuilding of the south-east corner of the north range sealed the make-up.

The three large post-holes recorded in the north-east corner of the courtyard (trench C46) cutting through the make-up layers probably belong to the extensive rebuilding operations undertaken in this corner either in period 5 or, more likely, in the succeeding period 6 when Assheton's Tower was built. The contemporary surface is also pitted with hollows and shallow scoops.

# Period 6: c. 1385

The North-east Corner-Assheton's Tower (fig. 16)

After the alterations of period 5 had been completed the room in the extreme north-east corner of the inner bailey was remodelled and converted into the structure now known as Assheton's Tower. Since the new structure was substantially higher than the preceding building it was necessary for the footings to be greatly strengthened. To accomplish this, without disturbing the vaulted undercroft of the north range, was a difficult task but it was

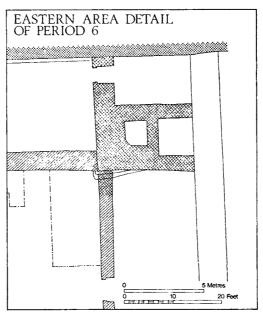


Fig. 16 (cf. fig. 11 for alignment)

achieved by leaving the east wall of the north range largely intact while removing part of the south wall and inserting a massive foundation of flints and limestone set in a hard white sandy mortar (fig. 22, section 22: trench C45, layer 34). Upon this foundation the south-west corner of the tower was taken up. A relieving-arch sprung between the corner and the inner bailey wall took the weight of the south wall, while the east wall was supported on the the original east wall of the north range, which appears to have been thickened internally to take the extra weight. The north and east walls were built directly upon the Roman wall and the inner bailey wall respectively. Once the tower had been erected the gaps between it and the adjacent walls caused by its construction were made good.

The superstructure and plan of the tower are described in more detail below (p. 112).

#### Period 7: Late Fourteenth Century

No structural refurbishment assignable to period 7 can be detected in the buildings of the eastern complex.

#### Period 8: Fifteenth to Early Seventeenth Century (fig. 17)

The final alterations made to the buildings lining the eastern half of the inner bailey were considerable, since these ranges were now converted into the principal residential apartments of the castle.

# The South-east Range (SE3) (pl. XIV)

The south-east range had by now become largely derelict. Over the earlier occupation layers a tip of gravelly soil and rubble had been thrown, heaped up against the walls (fig. 20, section 10: C49 layer 9). It contained blocks of limestone, slates, bricks and glazed tiles and might well represent builders' debris accumulating, perhaps, whilst alterations were being made to the superstructure. It was at this time that the original fireplace was blocked and extensive alterations were made at the east end which included blocking the original door in the east wall, cutting a new opening further to the south against the inner bailey wall and inserting the masonry foundation for a large circular oven in the small room to the east. Presumably the oven, the base of which was c. 2 ft. (0.61 m.) above the contemporary floor level, opened westwards into the main chamber: its chimney was recessed into the inner bailey wall. If, as seems likely, these structural alterations were made at the time when the rubble layer was deposited then they must date to the late fifteenth or early sixteenth century (see below pp. 234-6).

The use of the renovated room, presumably as a kitchen, is represented by the accumulation of a thin occupation layer (fig. 20, section 10: C49 layer 8; section 17: C59 layer 46) containing a mass of food debris including oyster shells and numerous bones of fish and birds (pp. 260, 267-9).

The second stage in the period 8 occupation of the range entailed the raising of the floor level by up to 2 ft. (0.61 m.), with a make-up layer (fig. 20, section 10: C49 layer 7; section 17: C59 layer 40) composed of loose mortary rubble derived from a demolished building after usable building stone had been removed. The presence of numerous fragments of Roman tile

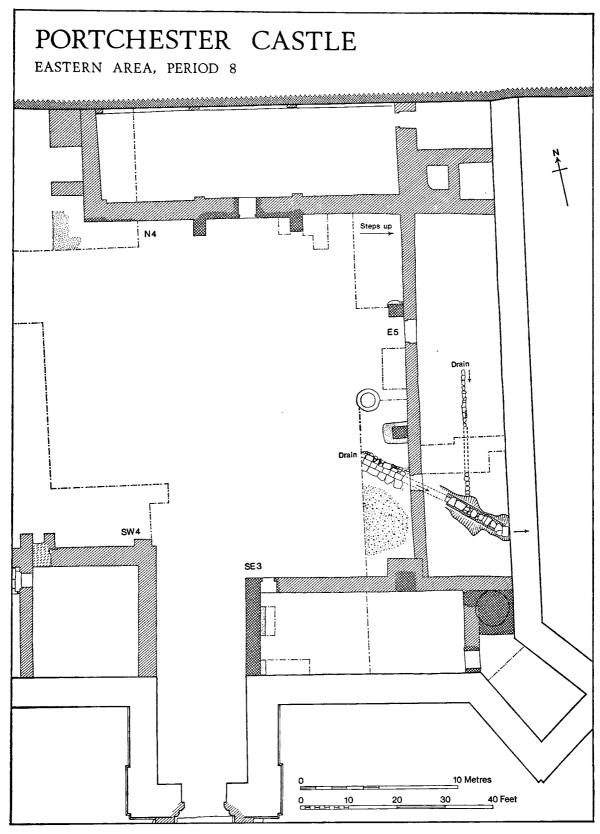
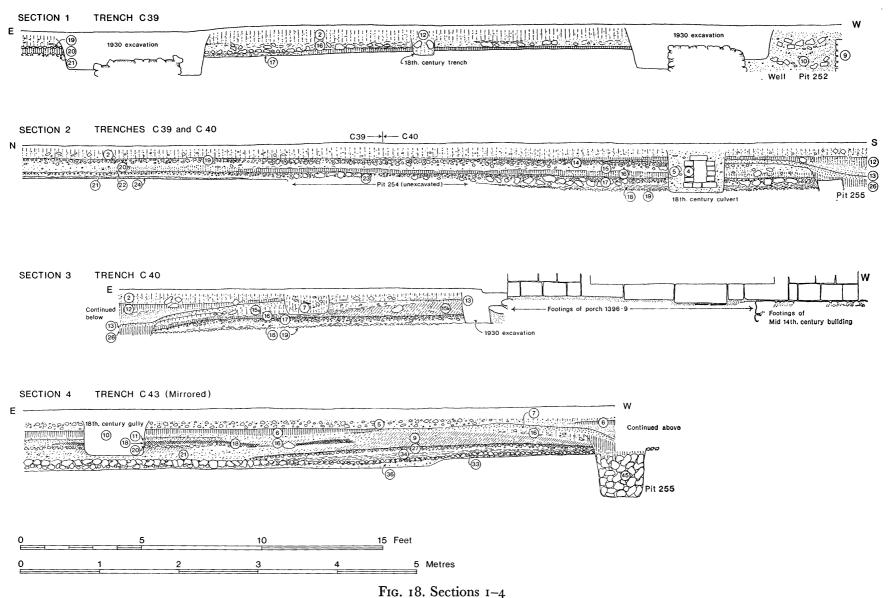
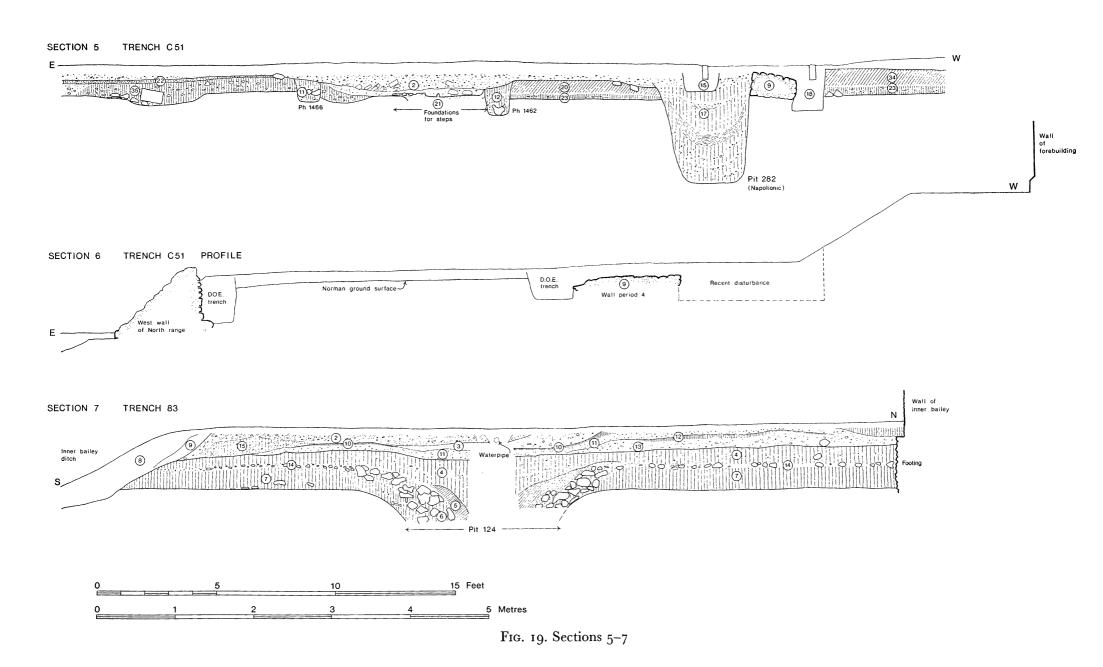


Fig. 17





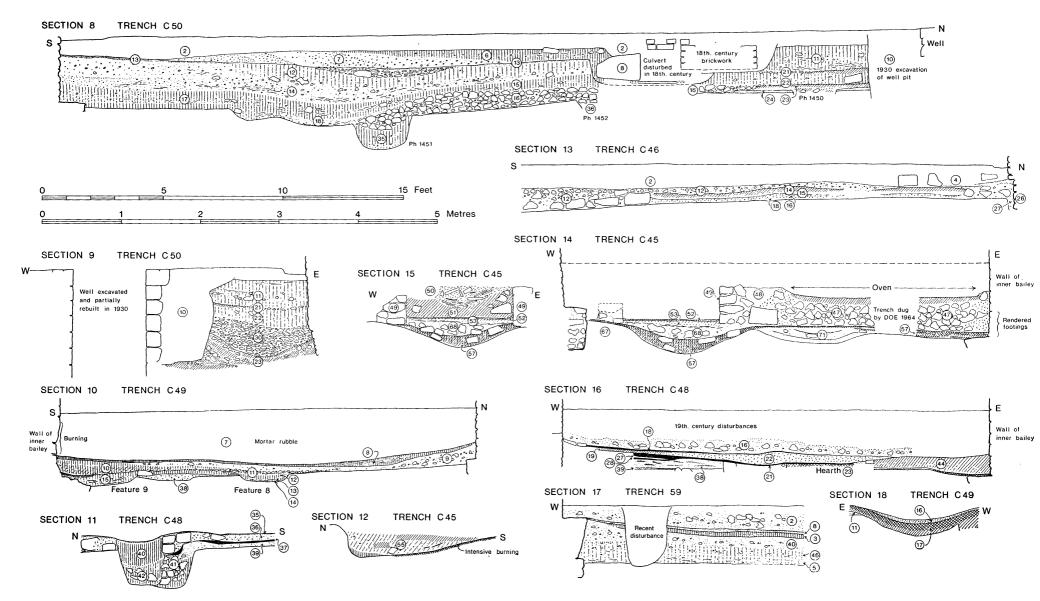


Fig. 20. Sections 8-18

suggests that the demolished structure may have been part of the Roman fort wall. After the mortar make-up layer had been spread work began on the renovation of the superstructure of the range. The west wall was pulled down and totally rebuilt from the level of the footings while the north wall was heightened to accommodate an upper storey, new windows and a doorway being inserted at ground-floor level. The eastern wall was also in part removed but the oven appears to have been left undisturbed. The superstructure of the range will be discussed below (pp. 117–19).

### The East Range (E5) (pls. XI, XIII and XLI)

The east range was completely renovated. The cross-partition was pulled down and the floor levelled with flints and mortar rubble (C45 layers 18 and 19). The original doors were left in position but the old windows were pulled out and new ones inserted. The principal change, however, was the addition of first-floor rooms built in ashlar masonry. The increased height of the west wall necessitated the addition of two buttresses, each of which was erected on a footing composed of limestone slabs set in clay. The buttresses were butted to the earlier wall at ground-floor level, but bonded with the new work at first-floor level. The foundations of an external stairway were found at the north end of the range. The details of the super-structure will be discussed below (pp. 116–17).

As part of the reorganization a new drainage system was inserted comprising a main drain, which runs diagonally through the south door across the range to the opening in the inner bailey wall used by the earlier medieval drain, and a subsidiary drain of smaller proportions leading to it. The main drain varied in structure (pl. XIII). Outside the range it was built of massive limestone blocks set in a white gritty mortar, forming the sides, while the floor was composed of thin limestone flags. The capping had here been removed when the drain was renovated in the late eighteenth century. Within the range the flag base continued but the side walls were built of 2 in. (5 cm.) bricks piled four high. Here the original capstones, of varying types of limestone, survived. The drain had completely silted with fine grey crumbly soil (C48 layer 43).

The subsidiary drain was of smaller proportions. Its base was formed by reused limestone roofing slabs, the sides were of 2 in. (5 cm.) bricks set on edge and the capstones were slabs of limestone bonded in soft yellow sandy mortar. It sloped southwards to meet the main drain, some 2 ft. (0.61 m.) above its base, at which point a vertical shaft, built of reused limestone blocks set in soft yellow sandy mortar, gave access to the main drain below.

### The North Range $(N_4)$

The north range was refurbished in this period, the principal surviving alterations being the addition of two buttresses to the south wall of the hall and the substantial reconstruction of the wall between, including the insertion of a new central doorway leading into the undercroft. The south-west angle was also rebuilt, presumably at this time. The old clasping buttress was dispensed with and the south wall face was rebuilt in flint masonry. It seems probable that the external staircase was once more rebuilt, using the period 5 supporting foundations but with an additional masonry foundation of gritty white mortar extending to the south. (It is, however, possible that this footing also belongs to period 5 since no significant

stratigraphical relationships survive.) The stone steps remained in use until at least the early eighteenth century, appearing on a drawing of 1733 (pl. XV).

### The Courtyard

In the south-east corner the courtyard level was raised, just to the south of the southern door to the east range, with a tip of shingle up to 6 in. (15 cm.) thick (fig. 20, section 8: C50 layer 7) above which a discontinuous silty occupation layer (C50 layer 6) accumulated.

In the north-east corner no stratigraphy of this period survived the clearing activities of the eighteenth and nineteenth centuries with the exception of a layer of large limestone blocks (fig. 20, section 13: C46 layer 4) in the extreme north-east corner. These may have been related to the external staircase which gave access to the rooms above the east range.

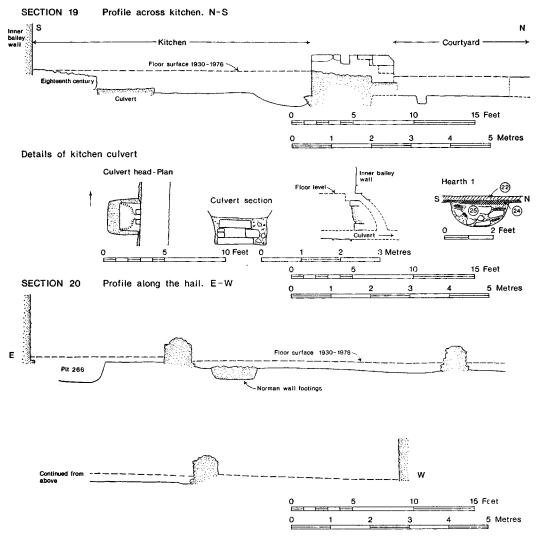


Fig. 21. Sections and profiles

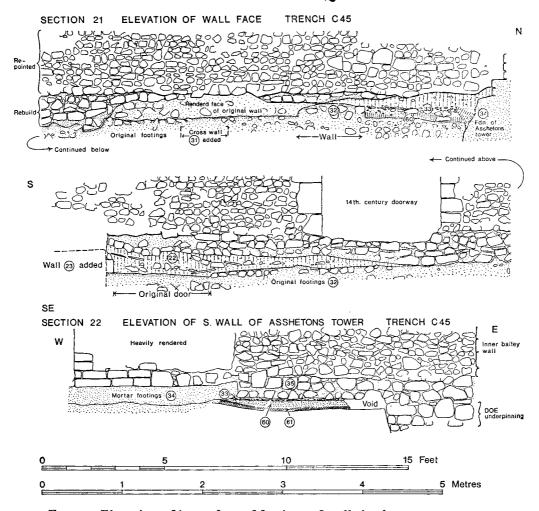


Fig. 22. Elevation of inner face of footings of walls in the east range

#### PITS AND OTHER FEATURES

In the section which follows brief descriptions are given of all pits, post-holes, hearths and other features. All are shown (but not numbered) in relation to each other on the two general plans, figs. 5, p. 13, and 11, p. 35. Identifications are given on the relevant phase plans, figs. 6–10, 12–17. All pit plans are published with north to the top.

For each pit a brief summary is given of the pottery which it contained, together with a listing of the animal bones. The number following the name of the species is the percentage of the total number of fragments identified excluding ribs and skull fragments but including upper jaws with teeth present and horn cores. Where no percentage is given the species forms less than 0.5 per cent of the total. The percentages are corrected to the nearest whole number. Where no percentages are given for a pit it was considered that too few fragments were found

for such an analysis to be meaningful. The order of species given for each pit is their order of importance in that pit.

#### Pits

Pit 241 (PC 73, trench C31, layer 20) (fig. 23)

Rectangular pit cut in the angle between the south wall of the keep and the Roman fort wall, measuring 4 ft. 6 in. by 5 ft. (1.37 by 1.52 m.). Cut to a depth of at least 6 ft. (1.83 m.) below the contemporary ground surface and undercutting the Roman fort wall.

The filling consisted of greenish soil containing fragments of greensand and flints but the filling was mixed and disturbed by a modern drain-pipe. The pit was only partially examined.

Pottery: 3 sherds of coarse-gritted cooking pots; 3 glazed pitcher sherds.

Animal bones: 21 fragments identified (including 10 ribs). Sheep, pig, ox, fish, small mammal and badger.

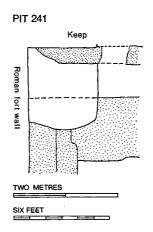


Fig. 23. Section not drawn

Pit 243 (PC 73, trench C32, layers 11 and 12) (fig. 24)

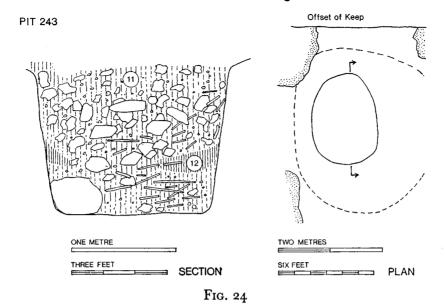
Sub-rectangular pit measuring 6 ft. by 4 ft. 3 in. (1.83 by 1.29 m.) but with the upper part of the sides eroded outwards. Cut to a depth of c. 5 ft. 6 in. (1.68 m.) below the contemporary ground surface.

The filling was largely homogeneous, consisting of a sticky grey soil incorporating lumps of mortar and large quantities of rubble including ashlar blocks, flints and slates lying at all angles and extending from top to bottom. At one level, however, the rubble was interrupted by a discontinuous lens of fine brown crumbly soil (layer 12) representing cesspit fill.

The pit was cut after building NW1 had gone out of use and was apparently contemporary with NW3, but this relationship could not be defined precisely because later Napoleonic disturbance has removed the stratigraphical evidence.

Pottery: 33 sherds of coarse flint-gritted cooking pots of which 3 are illustrated (nos. 72-5); 12 sherds of glazed pitchers.

Animal bones: 410 fragments identified (including 111 ribs and 32 skull fragments). Dog, 46; pig, 21; small mammals, 4; sheep, 3; bird (p. 265); ox, 3; fallow deer; cat. The bones in this pit included the remains of two neo-natal pigs and a large number of dog bones, probably the remains of two individuals.



Pit 244 (PC 69, trench C29, layer 6; PC 73, trench C35, layers 8 and 9) (fig. 25)

Rectangular pit measuring 6 ft. 6 in. by 4 ft. (1.98 by 1.22 m.) cut to a depth of c. 2 ft. (0.61 m.) below the contemporary ground surface. For whatever function the pit was dug, it was open and uneroded at the time when the masonry structure was built to take the passageway leading from the hall to the west range, since the footing projects into the pit and the spill of mortar contemporary with the building phase lies on the pit bottom. Above this the pit was deliberately refilled, presumably immediately after the footing had been completed, with redeposited natural brickearth (layer 9) containing mortary lenses and grey mortary soil with wads of clay (layer 8).

Pottery: 120 sherds of coarse flint-gritted cooking pots and 60 sherds of finer but still flint-gritted cooking pots of which 4 are illustrated (nos. 140-3); 61 sherds of glazed pitchers (nos. 146-8 illustrated); two bowls (nos. 149-50 illustrated); one chimney.

Animal bones: 30 fragments identified (including 3 ribs and 1 skull fragment). Pig, ox, sheep, bird.

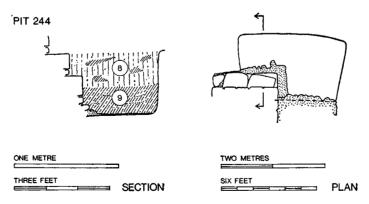


Fig. 25

### Pit 254 (PC 75, trenches C39, layer 23 and C40) (not illustrated)

Pit of undefined size measuring at least 6 ft. 6 in. (1.98 m.) in length. Unexcavated (fig. 19: section 2). Cut through the building spread and cobbles contemporary with building NW2 (period 4) and sealed by a cobble layer (C39, layer 22 and C40, layer 17) which belongs to period 5.

# Pit 255 (PC 75, trench C40, layer 26; PC 76, trench C43, layer 45) (fig. 26)

Oval pit 4 ft. by 5 ft. 6 in. (1-22 by 1-68 m.) cut to a depth of 2 ft. 9 in. (0-84 m.) below the contemporary ground surface. Filled with large flints and occasional greensand blocks loosely packed with air spaces between to form a soakaway for the courtyard. Towards the top the interstices have become filled with fine grey silt. The pit was sealed by a layer of chalk (trenches C40, layer 13, and C43, layer 7) which represents the courtyard level in period 7. The filling has compacted and the layers above have slumped into the top of the pit.

Pottery: no pottery recovered.

Animal bones: no bones recovered.

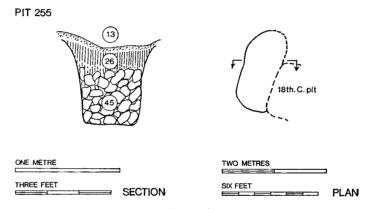


Fig. 26

# Pit 256 (PC 75, trench C39, layer 15) (fig. 27)

Pit of uncertain shape measuring 2 ft. 6 in. (0.76 m.) across in one direction and cut to a depth of 2 ft. (0.61 m.) below contemporary ground surface. The pit had cut into the edge of the footings of the chapel (period 1) but was cut by a wall in NW3 belonging to period 5 and by the wall of NW4 (period 7).

The filling was uniform, consisting of crumbly brown soil with mortar flecks, oyster shells and some medium-sized flints.

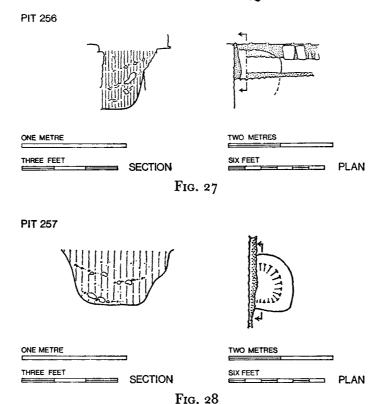
Pottery: 5 sherds of coarse flint-gritted cooking pots; 3 sherds of more sandy ware cooking pots; 2 sherds of glazed pitchers.

Animal bones: no bones recovered.

# Pit 257 (PC 75, trench C39, layer 27) (fig. 28)

Approximately circular pit measuring 3 ft. 6 in. (1.07 m.) in diameter and cut to a depth of 1 ft. 8 in. (0.51 m.) below contemporary ground surface. The sides slope in towards the bottom.

The filling is uniform, consisting of grey soil containing mortar and medium-sized flints.



The pit is cut by the wall of NW4 (period 7).

Pottery: 5 sherds of flint-gritted cooking pots; 9 glazed pitcher sherds.

Animal bones: 5 fragments identified. Ox, bird, pig.

# Pit 261 (PC 76, trench C42, layers 44, 45 and 46) (fig. 29)

Oval pit 3 ft. 9 in. by 3 ft. 3 in. (1·14 by 1·0 m.) with sloping sides cut to a depth of 1 ft. 3 in. (0·38 m.) below the contemporary ground surface. The lowest filling (layer 46) consists of a layer of dark ashy soil c. 1-2 in. (2·5-5 cm.) thick. This is sealed and the pit filled by redeposited marl (coombe rock) which is continuous with a layer spread over the adjacent area (layers 44 and 45).

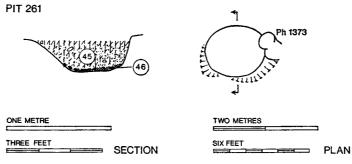


Fig. 29

Pottery: 29 sherds of flint-gritted cooking pots of which one, no. 31, is illustrated.

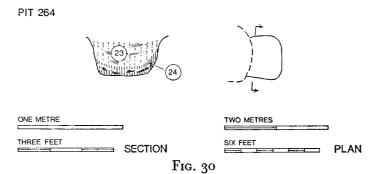
Animal bones: 108 fragments identified (including 34 ribs and 2 skull fragments). Sheep, 53; pig, 24; ox, 24.

### Pit 264 (PC 76, trench C43, layers 23 and 24) (fig. 30)

Circular pit 2 ft. 9 in. (0.84 m.) in diameter cut to a depth of 1 ft. 3 in. (0.38 m.) below the contemporary ground surface. The lower filling (layer 24) is of grey soil mixed with ash and charcoal. It is sealed and the pit filled with a deposit of mortar, daub and clay (layer 23).

Pottery: no pottery recovered.

Animal bones: no bones recovered.



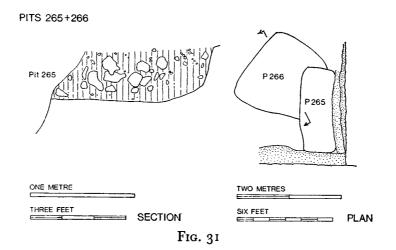
Pit 265 (PC 76, trench C44, layer 3) (fig. 31)

Rectangular pit measuring 5 ft. 3 in. by 2 ft. 3 in. (1.60 by 0.69 m.) and cut to a depth of 2 ft. 4 in. (0.71 m.) below contemporary ground surface. The filling was uniform, consisting of large flints and limestone blocks thrown in to create a soakaway. The interstices have become filled with soil.

The pit cut the filling of pit 266 and was cut by the edge of the footing for the period 5 wall immediately adjacent to it.

Pottery: no pottery recovered.

Animal bones: 194 fragments identified (including 34 ribs and 14 skull fragments). Bird, 36; pig, 18; ox, 16; fish, 15; sheep, 12; small mammals, 3.



### Pit 266 (PC 76, trench C44, layer 6) (fig. 31)

Sub-rectangular pit measuring 5 ft. by 4 ft. 6 in. (1.52 by 1.37 m.), cut to a depth of 1 ft. 6 in. (0.46 m.) below the contemporary ground surface. The uniform filling consisted of flints and large limestone blocks, thrown in to create a soakaway, mixed with grey clayey soil.

Cut by pit 265.

Pottery: no pottery recovered.

Animal bones: 55 fragments identified (including 8 ribs and 3 skull fragments). Ox, sheep, pig, bird, small mammal, red deer.

### Pit 276 (PC 77, trench C47, layer 4) (fig. 32)

Elongated pit 2 ft. 6 in. (0.76 m.) wide by more than 5 ft. (1.52 m.) long. Cut to a depth of 4 ft. (1.22 m.) below the contemporary ground surface. The filling was uniform, consisting of large flints and limestone blocks with grey clayey soil washed into the spaces between. The pit was evidently dug as a soakaway.

It was earlier than the adjacent period 5 wall and was partly cut away by the foundation for a flight of steps belonging to period 7.

Pottery: 3 sherds of flint-gritted cooking pots; 5 sherds of glazed pitchers.

Animal bones: 38 fragments identified (including 10 ribs and 2 skull fragments). Pig, sheep, bird, fish, small mammal and ox.

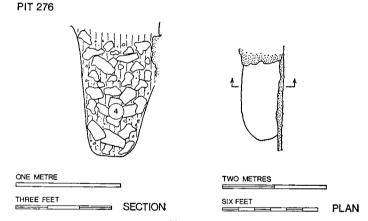


Fig. 32

# Pit 278 (PC 78, trench C48, layer 25) (fig. 33)

A segment of a pit survives, the rest having been cut away by the seventeenth-century drain. It measures at least 8 ft. (2·44 m.) in length but cannot have exceeded 4 ft. (1·22 m.) in breadth. Dug to a depth in excess of 2 ft. (0.61 m.), but the bottom was not reached. The pit was filled with redeposited black soil from the Roman level mixed with redeposited brickearth. It was cut through a mortar spread (layer 24) and sealed by an occupation layer (layer 21).

Pottery: 3 sherds of cooking pots; 1 glazed pitcher sherd.

Animal bones: no bones recovered.

# Pit 279 (PC 78, trench C50, layer 19) (fig. 34)

Oval pit measuring 6 ft. by 5 ft. (1.83 by 1.52 m.) dug to an undefined depth below the contemporary

PIT 278

Drain Drain TWO METRES

Fig. 33. Section not drawn

SIX FEET

PIT 279

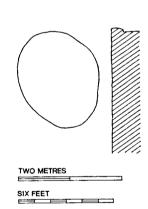


Fig. 34. Section not drawn

ground surface. Excavated to an arbitrary level 14 in. (40 cm.) below the upper edge. The filling consisted of large flint nodules and lumps of limestone packed loosely with air spaces between, which, at the top, had become filled with fine grey silt. It had evidently been dug as a soakaway pit. Cut through the pre-medieval ground surface and sealed by a layer of flint cobbles (layer 16) which was essentially one with the filling.

Pottery: no pottery recovered.

Animal bones: no bones recovered.

# Pit 280 (PC 78, trench C50, layer 23) (fig. 35)

Pit complex which includes the medieval well. The destruction wrought by the rebuilding of the well top in 1930, together with the limited nature of the excavation, renders the full interpretation of this

**PIT 280** 

Pit 280

SIX FEET

TWO METRES

Fig. 35. For section see fig. 20

feature impossible. In all probability two pits were involved, an eastern pit some 5 ft. (1.52 m.) in diameter and a western pit in which the well now sits. One interpretation, favoured here, is that the eastern pit contained the first well, which was moved some 6 ft. (1.83 m.) to the west when the east range was built, the old pit being packed back with chalk and clay (C50 layer 23) continuous with the packing around the stone-lined well. The filling subsided rapidly, the hollow thus formed being filled with greensand chippings (layer 30) through which the footings for the wall of the east range were cut (fig. 20: section 9).

The well was lined with well-cut blocks of ashlar masonry extending down to its bottom at a depth of 30 ft. (9 m.) below the present ground surface. The upper six courses, 4 ft. (1.22 m.), were reset in 1930, the pit dug to facilitate the work having destroyed all adjacent stratigraphy.

Pottery: 20 sherds of cooking pots of which three are illustrated (nos. 10-12); 72 sherds of glazed pitchers of which one is illustrated (no. 9).

Animal bones: 12 fragments identified (including 1 rib). Ox, sheep and pig.

# Pit 281 (PC 78, C50, layer 31) (fig. 36)

Oval pit, 6 ft. by 4 ft. 6 in. (1.83 by 1.37 m.), of unknown depth. Excavated to an arbitrary level 8 in. (20 cm.) below contemporary ground surface. The filling consists of large flint nodules and some blocks of limestone packed loosely together. This filling is continuous with the layer of cobbles (layer 16) which seals it.

Pottery: no pottery recovered.

Animal bones: no bones recovered.

#### **Features**

# Feature 1: gully (PC 75, trench C41, layer 6; PC 76, trench C42, layer 43)

Gully, within kitchen of south-west range, measuring approximately 12 ft. (3.66 m.) long by a maximum of 4 ft. (1.22 m.) wide. Cut to a depth of 1 ft. 3 in. (0.38 m.) below the contemporary ground surface. Filled with dark grey soil mixed with occupation rubbish including pottery, animal bones, charcoal and lumps of marl.

Broadly contemporary with pit 261 and dating to somewhere within the range of periods 1-4.

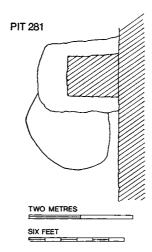


Fig. 36. Section not drawn

### Feature 2: gully (PC 73, trench C31, layer 21)

Gully cut along the south wall of the keep, between it and the period 4 wall in the west range, possibly to drain the rainwater away from the roof valley between the period 5 north-west range and the chapel. Filled with clayey brown soil containing chips of greensand, mortar and some flints.

### Feature 3: hollow (PC 76, trench C44, layer 26)

Within the south-west range. Shallow scoop or bottom of a truncated pit 3 ft. (0.91 m.) in diameter. Excavated to a depth of 6 in. (15 cm.) below the surviving ground surface. Filled with grey soil. Cut by footing for a period 7 wall.

Its date is unknown: it could pre-date period 7 or it may be related to the activities of the construction phase.

### Feature 4: hollow (PC 77, trench C47, layer 12)

Within the south-west range. Shallow scoop of diameter in excess of 4 ft. (1.22 m.), cut to a depth of 1 ft. (0.30 m.) below the surviving ground surface. Filled with flints, limestone and chalk blocks and slates mixed with grey soil. Cut by the wall of the hall (period 7) but otherwise undated. Probably belongs to the construction phase of the period 7 hall.

### Feature 5: hollow (PC 77, trench C47, layer 3)

Within the south-west range. Irregular hollow cut to a maximum depth of 8 in. (20 cm.) into the Roman surface. It was filled with grey soil incorporating small stones and fragments of slate together with some pottery. The feature cannot be related to the construction sequence but must pre-date or be contemporary with the period 7 construction phase.

### Feature 6: bowl-shaped depression (PC 69, trench C28, layer 11)

Within the south-west range. Bowl-shaped depression 2 ft. 9 in. (0.84 m.) in diameter cut to a depth of 1 ft. 10 in. (0.56 m.) below the surviving ground surface. It was filled with soft yellow silty clay showing no trace of burning, although it appears to have been associated with the phase of activity consequent upon the construction of the period 7 south-west range.

### Feature 7: hollow (PC 76, trench C43, layer 36)

Within the courtyard just north of the kitchen of the south-west range. Shallow hollow of unknown size, but exceeding 17 ft. by 8 ft. (5·18 by 2·44 m.), cut to a depth of 6 in. (15 cm.) into the top of the Roman turf-line. It was filled with a pebbly grey-brown soil, containing fragments of daub, of a kind which could have accumulated as the result of weathering and erosion (fig. 19: section 4). Sealed by cobbles of period 4 date.

### Feature 8: gully (PC 78, trench C49, layers 12, 13, 14)

Shallow flat-bottomed gully, within the south-east range, cut to a maximum depth of 4 in. (10 cm.) below the contemporary ground surface. Filled with grey-brown silt and a lens of roof slate (layers 12-14) and sealed by a layer of mortary rubble (layer 11).

### Feature 9: gully (PC 78, trench C49, layer 15)

Shallow flat-bottomed gully, within the south-east range and parallel to Feature 8. Cut to a maximum depth of 6 in. (15 cm.) below the contemporary ground surface. Filled with grey soil and slate (layer 15) and sealed by a layer of mortary rubble (layer 11).

### Feature 10: gully? (PC 65, trench C52, layer 14)

Large post-hole or gully within south-east range cut into the floor, against the face of the east wall, to a depth of 9 in. (23 cm.). Filled with flints mixed with black soil. Sealed by trench C49, layer 9.

### Feature 11: gully (PC 65, trench C53, layer 4)

Gully within the east room of the south-east range. Cut along the face of the cross-wall to a depth of 1 ft. (30 cm.) below the contemporary surface exposing the footings of the wall. Filled with grey mortary soil containing lumps of building stone and slates. Cut by the footings of the period 8 oven.

#### Other Features

# Hearth I (PC 76, trench C44, layer 25)

Within the south-west range. Circular bowl-shaped hearth 2 ft. 5 in. (0.74 m.) in diameter cut to a depth of 1 ft. (0.30 m.) below the contemporary ground surface. Lined with clay and heavily burnt.

The hollow was filled with blocks of burnt limestone mixed with clay and ash (layer 25) and sealed by a lens of charcoal and ash (layer 24). Lumps of lead were found within the clay base. Cut by a crosswall of period 7 within the hall. The hearth belongs to the construction phase of period 7.

# Hearth 2 (PC 77, trench C47, layer 13)

Within the south-west range. Roughly circular hollow 5 ft. (1.52 m.) in diameter, cut to a depth of 6 in. (15 cm.) below contemporary ground surface. The bottom is heavily burnt. The hollow was filled with fine gritty shingle incorporating lumps of lead. The shingle had been intensively burnt. The hearth belongs to the construction phase of period 7.

# Hearth 3 (PC 76, trench C43, layer 48)

Just north of the kitchen of the south-west range. Hearth constructed of limestone blocks 4-5 in. (10-13 cm.) thick set in marly clay. The blocks had been heavily burnt. Contemporary with layer 18, partly sealed by layer 16. The hearth belongs to the construction phase of period 7.

### Hearth 4 (PC 78, trench C49, layer 17)

Within the south-east range. Circular hollow approximately 5 ft. (1.52 m.) in diameter and cut to a depth of 6 in. (15 cm.) below the contemporary ground surface (fig. 20, section 18). Lined with a thick layer of clayer marl which has become heavily burnt, particularly on the surface. Within the marl was found a mass of lead which had dropped into fissures while it was being melted and had consolidated. The hearth was cut through layer 11 and was sealed with a thin layer of grey ashy material (layer 16) which was in turn sealed by gravelly soil and rubble (layer 9).

The hearth probably belongs to phase 5 or 6.

### Hearth 5 (PC 78, trench 49, layer 39)

Within the south-east range. Roughly circular hearth approximately 5 ft. (1.52 m.) in diameter cut to a depth of c. 6 in. (15 cm.) into the Roman surface and lined with a 4 in. (10 cm.) thick layer of clayey marl. The hearth contains consolidated masses of lead. Sealed by layer 9 and thus approximately contemporary with hearth 4.

### Hearth 6 (PC 78, trench C48, layer 23)

Hearth within east range measuring 3 ft. 6 in. by 3 ft. 8 in. (1.07 by 1.12 m.). Composed of slabs of upper greensand of varying sizes fitted tightly together and set in a fine white gritty mortar. Around the edge of the hearth, set on edge, was a border of glazed tiles of the kind described below (p. 239). Period 5.

#### POST-HOLES

All the medieval post-holes found in the inner bailey are listed below in table II, giving brief details of their physical characteristics. Measurements are in inches. In the column marked 'location' the range within which the posts are found is noted: those found in the courtyard are divided between those found in the western part, C(W), those found in the east, C(E), and those in the north-west, C(NW). An indication of the phase to which the post belongs is given in the final column.

#### PRE-MEDIEVAL FEATURES

Trial trenches dug before 1972 within the inner bailey were usually taken down to the level of the natural brickearth. The results of this work suggested that late Saxon occupation in the area was very slight and that the Roman deposits where they survived consisted of little more than a soil accumulation averaging 12–15 in. (30–40 cm.) in thickness devoid of significant internal stratification. When the main programme of excavation began in 1972 it was decided therefore to test the Roman stratigraphy in an area excavation against the west wall of the Roman fort, but elsewhere to stop the excavation at the top of the Roman level, recording its appearance in the base of the excavations and in the sides of the innumerable features which were cut through it.

# THE STRUCTURAL SEQUENCE

TABLE II

Medieval Post-holes in the Inner Bailey

Post-hole (ph.) no.	Trench/layer	Depth (in.)	Diam. (in.)	Characteristics	Location	Phase/structure
1304	C34 ph. 4	12	24		C(W)	Uncertain
1306	C34 ph. 1	10	16	Slate infill	C(W)	Uncertain — medieval
1309	C35 ph. 17	7	8		C(W)	Uncertain — ?Roman
1310	C35 ph. 16	6	16	<del></del>	C(W)	Uncertain — ?Roman
1311	C35 ph. 15	10	18		C(W)	Uncertain — ?Roman
1312	C35 ph. 10	7	16		C(W)	Uncertain — ?period 7
1313	C35 ph. 14	9	30×18	Irregular	C(W)	Uncertain — ?Roman
1314	C35 ph. 9	9	12	_	C(W)	Uncertain — ?period 7
1315	C <sub>35</sub> —	6	IO×12	_	C(W)	Uncertain
1316	C <sub>35</sub> —	7	10 × 12	Irregular	C(W)	Uncertain — ?Roman
1317	C35 ph. 8	16	20		C(W)	Uncertain — ?period 7
1318	C35 ph. 13	6	14×10	Irregular	C(W)	Uncertain
1319	C35 ph. 12	7	10 × 12	<del></del>	C(W)	Uncertain
1320	C35 ph. 6	15	12	Two posts together	C(W)	Uncertain ?period 7
1321	C35 ph. 7	15	15	in one pit	C(W)	
1322	C35 ph. 2	6	38		C(W)	?period 7 construction
1323	C <sub>35</sub> —	18	18+	Squarish	C(W)	Pre-period 7 footing
1324	C35 ph. 1	18	20 × 14 ]		$\mathbf{C}(\mathbf{W})$	
1325	C35 ph. 3	10	16×12 (	All eroded to funnel at top	C(W) (	Period 4 fence
1326	C35 ph. 4	20	18	pre-period 6 footing	C(W)	renod 4 lence
1327	C35 ph. 5	16	24		C(W)	
1328	C <sub>35</sub> —	8	10		C(W)	Period 4
1329	C35 ph. 11	10	10 × 12	Square	C(W)	?Period 7
1330	C31 layer 36	12	10	Cuts Roman wall	W	Uncertain
1334	C40 layer 29	3	15 × 12	<del>-</del>	C(W)	Uncertain ?period 7
1336	C40 layer 30	16	$26 \times 24$	Squarish	C(W)	Period 7
1337	C40 layer 31	16	30×?	Squarish	C(W)	?Period 7
1339	C40 layer 27	18	24	In same ph.	C(W)	Period 4 fence
1340	C40 layer 27	18	12	in same pii.	C(W)	1 criod 4 ichee
1352	C40 ph. 13	6+	10	<del></del>	C(W)	Uncertain
1353	C40 ph. 12	2+	10	<del></del>	C(W)	Uncertain
1354	C40 ph. 3	3	12	_	C(W)	?Period 7
1359	C40 ph. 10	4	10	<del></del>	C(W)	Uncertain
1361	C42 layer 21	10	18	<del></del>	sw	Period 7 construction
1362	C42 layer 20	10	12×24	<del></del>	sw	Period 7 construction
1364	C42 layer 48	5+	12×15]			
1365	C42 layer 49	2+	12			
1366	C42 layer 50	4	9×12			
1367	C42 layer 51	3+	12			
1368	C42 layer 52	2+	8			
1369	C <sub>42</sub> layer 53	4	6×8			
1370	C42 layer 54	6	6 (	All within kitchen (SW). Cu		
1371	C <sub>42</sub> layer 55	10	م 12	with construction and/or use	of the period	l 5 kitchen
1372	C42 layer 56	11	18			
1373	C42 layer 57	11	12 × 24			
1374	C <sub>42</sub> layer 58	9	14			
1375	C <sub>42</sub> layer 59	2	8			
1376	C <sub>42</sub> layer 60	4	5×9			
1377	C42 layer 61	10	15×18			
1378	C43 layer 25	10	12 × 20	←	C(W)	Period 7 construction

# TABLE II—continued

Post-hole		Depth	Diam.			
(ph.) no.	Trench/layer	(in.)	(in.)	Characteristics	Location	Phase/structure
1379	C43 layer 26	10	12×20		C(W)	Period 7 construction
1380	C43 layers 29, 30	12	16	<del></del>	C(W)	Period 7 construction
1381	C43 layer 37	9+	20 × 14		$\mathbf{C}(\mathbf{W})$	Period 4 occupation
1382	C <sub>43</sub> layer 38	10	18×18		C(W)	Period 4 occupation
1383	C43 layer 39	12	14		$\mathbf{C}(\mathbf{W})$	Period 4 occupation
1384	C43 layer 41	10	22		$\mathbf{C}(\mathbf{W})$	Period 4 occupation
1385	C43 layer 42	5	12		$\mathbf{C}(\mathbf{W})$	Period 4 occupation
1388	C43 layer 46	3+	12 × 24		$\mathbf{C}(\mathbf{W})$	Period 4 occupation
	C45 layer 26	10	24		E	Period 7
1396	C45 layer 27	10	24 24	_	Ē	Period 7
1397	C45 layer 28	10	_		Ē	Period 7
1398			24 19 × 04		E	Period 7/8
1399	C45 layer 29	3 6	18×24		E	Period 7/8
1400	C45 layer 30		12 × 18	_	E	
1403	C45 layer 73	5	20	_	E	Period 4
1404	C <sub>45</sub> layer 74	7	10	<del></del>		Period 4
1405	C46 layer 9	14	34		C(E)	Period 7 construction
1406	C46 layer 10	6	18		C(E)	Period 7 construction
1407	C46 layer 11	16	$26 \times 34$	<del>-</del>	C(E)	Period 7 construction
1408	C47 layer 6	12	12 × 14		SW	Period 7 construction
1409	C47 layer 7	17	20 × 32	<del>-</del>	SW	Period 7 construction
1411	C47 layer 11	15	30		SW	Period 7 construction
1412	C47 layer 14	16	30		sw	Period 7 construction
1413	C47 layer 15	10	30	_	SW	Period 7 construction
1414	C <sub>4</sub> 8 layer 30	3	10 × 12		${f E}$	Period 6
1415	C48 layer 32	3	8×10	_	E	Period 6
1416	C49 layer 19	9	21	_	SE	Period 7
1417	C49 layer 20	7	8 ]		SE	Period 5?
1418	C49 layer 21	19	10 }	Square post voids	SE	?Period 5
1419	C49 layer 22	17	10 × 12		SE	?Period 5
1420	C49 layer 23	12	16	_	SE	?Period 7
1421	C49 layer 24	3	10		SE	?Period 7
1422	C49 layer 25	3	10×12	_	SE	?Period 7
1423	C49 layer 26	5	10 × 12	_	SE	?Period 7
1424	C49 layer 27	9	9		SE	Period 6
	C49 layer 28	14	10	_	SE	Period 6
1425	C49 layer 29	15	12×15		SE	Period 6
1426	C49 layer 30	18	12×9	Packing and square void	SE	Period 5
1427	C49 layer 30	.0	(18×24)	ruoming una square voice	2.2	J
0	C49 layer 31	_	12	Stone packing	SE	?Period 7
1428	C49 layer 32	5	12	Stone packing	SE	?Period 7
1429	C49 layer 32	9	0×10	Stone packing	SE	?Period 7
1430	C49 layer 33	4	9	Stone packing	SE	?Period 7
1431	C49 layer 44	10	15	<del>-</del>	SE	
1432	C49 layer 35	11	12	_	SE	?Period 7
1433	C49 layer 36	7	10		SE SE	Period 5
1434	C49 layer 36	5	10 × 12	Elina manlina		?Period 7
1435	C48 layer 45	6	12×14	Flint packing	E	Could be late Saxon
1436	C48 layer 46	5	12	Flint packing	E∫	
1437	C48 layer 47	8	12×14	<del>-</del>	E	Period 6-7
1438	C48 layer 48	8	15	<del></del>	E	Period 6-7
1439	C49 layer 49	5	8×18	Stone packing	SE	Period 5
1440	C49 layer 50	16	15		SE	?Period 7
1441	C49 layer 51	14	16×24		SE	Period 7

TABLE II—continued

Post-hole (ph.) no.	Trench/layer	Depth (in.)	Diam. (in.)	Characteristics	Location	Phase/structure
1442	C49 layer 52	25	15×24		SE	?Period 7
1443	C49 layer 53	5	15	Flint packing	SE	Period 7
1444	C49 layer 54	6	23	<del>-</del>	SE	?Period 7
1445	C49 layer 55	6	20		SE	?Period 7
1446	C49 layer 56	3	9×10	<del>-</del>	SE	Period 5-7
1447	C49 layer 57	5	9	_	SE	Period 5-7
1448	C50 layer 32	10	12	<del></del>	C(E)	
1449	C50 layer 33	4	12	<del></del>	C(E)	
1450	C50 layer 34	6	24	<del></del>	<b>C</b> (E) {	Dec period 4
1451	C50 layer 35	6	24	<del></del>	C(E)	Pre-period 4
1452	C50 layer 36	18	32		C(E)	
1453	C50 layer 37	2	21	_	C(E)	
1454	C49 layer 58	4	6	_	SE	Period 5-7
1455	C51 layer 4	13	24	Flint packing	C(NW)	
1456	C51 layer 33	12	26	Flint and greensand packing	C(NW)	
1457	C51 layer 31	4	20	-	C(NW)	
1458	C51 layer 30	4	10	<del>-</del>	C(NW)	
1459	C51 layer 29	3 6	12		C(NW) >	Period 2-3
1460	C51 layer 27	6	12	_	C(NW)	
1461	C51 layer 28	8	4		C(NW)	
1462 }	Cer lover to	8	28		C(NW)	
1463	C51 layer 12	10-11	14	Slot	C(NW)	

### The Roman Layers (fig. 37)

The extent of stratified Roman layers encountered in the excavation is shown in fig. 37, from which it will be immediately apparent that about 40 per cent of the area has been totally destroyed by post-Roman features. The actual destruction is even more extensive when it is remembered that over most of the western part of the site, extending for about 50 ft. (15.3 m.) from the west wall, Roman layers have been shaved off by medieval levelling to within a few inches of the natural surface.

The general stratigraphy is very simple. The lowest deposit consisted of a thin mortar spread 1-2 in. (2·5-5 cm.) thick dropped on the original ground surface close to the Roman wall during construction. In trench C31 against the west wall, where an area was excavated, the mortar spill (layer 29) could be seen to seal a 6 in. (15 cm.) thick layer of brickearth (layer 30) which had been packed deliberately over the filling of the foundation trench of the wall and the lowest wall offset. Above this was a tip composed of lenses of clay and mortar sealing the second offset. Here the layers were 1 ft. 6 in. (0·46 m.) thick, thinning out to a few inches from about 5 ft. (1·52 m.) from the wall (layers 25-28, 32). These layers represent a deliberate deposit laid to protect the wall offsets from weathering. Much the same sequence was noted against the north wall of the fort in the sides of later disturbances.

Over much of the western part of the site a layer of redeposited brickearth and coombe rock had been spread on the surface of the natural clay at the beginning of the Roman occupation. It measured 14 in. (36 cm.) at its thickest, averaging about 10–12 in. (23–30 cm.). The extent of the deposit was traced in the sides of later features and is shown on

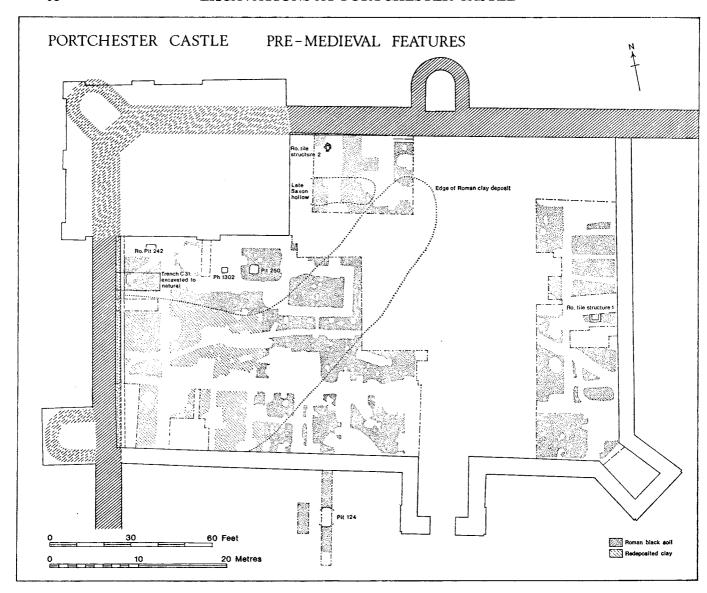


Fig. 37

fig. 37. Wherever its stratigraphical position was seen it lay immediately on the clean surface of the natural clay and was sealed by black soil containing Roman occupation material. The layer presumably consists of spoil, derived from the foundation trench dug for the Roman wall footings, which was spread out to level up the ground inside the fort.

The whole of the area examined was blanketed by a deposit of homogeneous dense black soil of somewhat clayey consistency, averaging 10-15 in. (23-38 cm.) in thickness. The lack of internal stratigraphy and the turf-like nature of the soil strongly suggest that the layer accumulated in an area devoid of intensive occupation activity. The possibility remains

that the layer, which contains a quantity of potsherds and animal bone, was the result of agricultural activity at the end of the Roman period which thoroughly mixed Roman rubbish deposits of the late third and fourth centuries. If the layer was created by early Saxon cultivation it might be expected to contain a few sherds of early Saxon pottery. Since very little of the layer was excavated the apparent absence of Saxon pottery is not significant. The only obvious variation in texture was noted against the north wall of the fort, between the keep and the north range: here the dense black soil gave way to a lighter layer mixed with mortar and flints, derived presumably from the erosion of the wall face.

Three Roman features were noted during the excavation: a pit and two tile-built structures:

# Pit 242 (PC 73, trench C31)

The base of the pit was noted close to the south side of the keep. It had been largely cut away by medieval footings but measured 3 ft. 6 in. (1.07 m.) in length and approximately 2 ft. (0.60 m.) deep from the original ground surface. The filling, of black soil and occupation material, was not excavated.

### Tile Structure I (PC 77, trench C45, layers 58, 69, 70) (pl. IX)

Rectangular structure measuring internally 2 ft. 2 in. (0.66 m.) wide by in excess of 2 ft. 6 in. (0.76 m.) long. It was built of broken roof tiles set in a white sandy mortar, the maximum depth from the top of the surviving tile being 12 in. (0.30 m.). The structure was built on the natural brickearth, which served as its base, and the black occupation layer abutted its side and partially sealed its filling. The walls and floor had been heavily burnt, following which two layers accumulated inside: layer 70 consisted of unburnt grey stony soil containing a block of burnt shelly limestone, presumably from the superstructure; this was followed by layer 69, a tip of sandy ash containing pebbles. The structure was probably the flue of an oven.

# Tile Structure 2 (PC 79, trench C51, layer 42)

A Roman brick surrounded by other broken fragments appears to have been set as a floor presumably for a hearth or oven. The surface was heavily burnt. The structure was observed after the removal of a post-medieval pit fill which had been dug to the level of the tiles. In the sides of the pit the tiles and a layer of loose burnt clay above it were seen to be sealed by a mortary soil accumulation (layer 41) which represented the erosion of the Roman wall face combined with soil formation.

#### Post-holes

A number of the post-holes found cut into the redeposited clay in the western part of the site could be of Roman date since they are sealed only by late medieval layers and contain only Roman sherds. For details see pp. 65-7.

#### The Saxon Layers

No features and little material of early or middle Saxon date were recovered, nor were any general layers of late Saxon date seen. Where later levelling had not removed the relevant deposits the earliest medieval layers were found to lie directly upon the Roman black soil. Four features of late Saxon date were found cut into Roman deposits:

### Pit 124 (PC 68, trench 83, layers 4-6)

A pit, or more likely a well, was located on the berm between the south wall of the inner bailey and

the lip of the ditch. It measured approximately 6 ft. (1.83 m.) in diameter at the top but only the upper levels were excavated (fig. 19: section 7).

The top fill, which appears to have slumped following the compaction of the lower layers, consisted of a mass of flint nodules in black soil (layer 6) sealed by a layer of redeposited brickearth (layer 5). Above this a layer of grey soil had accumulated (layer 4).

The pit contained pottery of Portchester ware type. Layer 4 had accumulated over its filling before layers associated with the inner bailey defences were deposited (p. 11).

### Pit 250 (PC 75, trench C39, layer 30) (fig. 38)

Square-cut pit measuring 3 ft. 6 in. (1.07 m.) across cut to a depth of 2 ft. 2 in. (0.66 m.) below the top of the Roman ground surface, at which point the pit first became visible.

The filling was uniform, consisting of grey soil mixed with wads of brickearth, occasional flints, lumps of mortar and flecks of charcoal. It was sealed by medieval layer 28. Although no trace of a post was located it is possible that the pit is a post-pit belonging to the same structure as post-hole 1302.

A few sherds of Portchester ware were found in the filling.

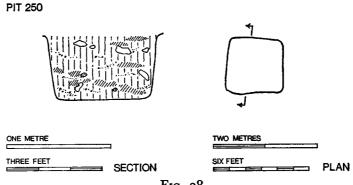


Fig. 38

### Post-hole 1302 (PC 74, trench C37, layers 11 and 12)

Square-cut post-pit 2 ft. 3 in. (0.69 m.) across, cut to a depth of 1 ft. 6 in. (0.46 m.). The pit was packed with redeposited black soil and brickearth. The position of the post, c. 10 in. (25 cm.) in diameter, was recognized, the void having filled with grey soil and large flints. The pit was cut into Roman layers but sealed only by post-medieval deposits. The post may be part of a structure of which pit 250 also forms an element.

### Irregular hollow (PC 79, trench C51, layer 23)

An irregular hollow approximately 10 ft. (3.0 m.) wide and up to 1 ft. (0.3 m.) deep cut (or more likely worn) into the top of the Roman level. It was filled with grey soil of silty texture containing tips of occupation debris including animal bones, oysters and pottery of Portchester ware type (fig. 63). The hollow was sealed by redeposited clay and soil relating to one of the phases of construction of the keep (p. 16). The form of the hollow and nature of its fill is suggestive of accidental creation, perhaps by traffic wear, and casual filling with miscellaneous debris.

#### Post-holes

Some of the post-holes found in the western part of the site may be of late Saxon date but the matter cannot be demonstrated (pp. 65-7).

The structural evidence, summarized above, for late Saxon occupation in the north-west corner of the Roman fort is evidently slight. This is also borne out by the pottery evidence. Apart from the material stratified in the features comparatively little distinctive late Saxon ware was found even in soil layers redeposited in the medieval period. In the western area of the courtyard, however, where earlier layers were churned up by the digging of the privy garden, a number of abraded sherds of Portchester ware were found. Trench C40, immediately north of the great hall, produced five sherds of grass-tempered ware of early Saxon date.

# III. DESCRIPTION OF THE CASTLE BUILDINGS

By Julian Munby and Derek Renn

THE buildings of the inner bailey are described individually rather than in one chronological series. The archaeological periods 1–8 are followed, with further subdivisions where necessary to distinguish phases only represented above ground. In general the present description omits discussion of the relative dates of the buildings, except where the architectural evidence alone provides the material for determining this. In the following section (IV) an attempt is made to correlate the sequence of archaeological structures and standing buildings with the known documentary evidence, and for convenience the sequence has been summarized in tables I (p. 7) and III (p. 133).

The descriptions are accompanied by a series of reconstruction drawings showing the likely appearance of the buildings in each phase (figs. 84–99, in separate folder), whilst the existing buildings have been recorded in a photogrammetric survey (figs. 100–107, in separate folder), allowing for comparison between the two.

References in the text, as (§97), are to items in table XIII, which lists documentary sources relating to building works (below, pp. 164-75). Descriptions of the keep and other Norman buildings, the gatehouse and defences of Assheton's Tower are by D.R.; those of the domestic buildings by J.M. The medieval buildings in the outer bailey have been described previously (Cunliffe, 1977).

### THE BUILDING OF THE NORMAN CASTLE

A structural analysis of the keep and its associated buildings reveals a sequence of works of some complexity, which cannot easily be correlated with the buildings known from the archaeological investigation of the inner bailey. This sequence is described here, and discussed in its historical context, as a necessary introduction to the account of the standing buildings.

Domesday Book does not refer to the castle of Portchester, whilst the mention of a halla probably has no architectural significance. This does not prove that the castle was not begun by

¹ The description of William Mauduit's holding in Portchester includes, between the serfs and the woodland, a 'fishery for the hall' (D.B. Hants, f. 47°; Morris, 1982, 35.4). Such entries occur elsewhere (1.29; 16.5; I.o.W. 6.19), or with a mill rather than a fishery (6.4; 21.1; 23.38; 69.54). There is no reason to suppose that the mention of a hall in this context actually refers to an architectural entity, as it would appear that the intention is simply to emphasize demesne ownership. On some occasions aula may well mean a building. Itchel and Cove 'each had a hall; when Germanus acquired it there was only one hall' (3.8); at Mill-

brook 'there is no hall' (3.17).

Maitland considered that 'hall' was often synonymous with 'manor' and that 'hall' was probably the OE word for a manor (Maitland, 1897, 109–10). It would thus be misleading to take this indirect reference in Domesday Book as evidence that there was any 'hall', in the architectural sense, at Portchester in 1086. Domesday tells us that three pre-Conquest manors had been united in one, and there is every likelihood that some architectural expression of this was evident, but Domesday Book provides no additional support for this.

1086; but in any case the strategic importance of Portsmouth Harbour was soon to be demonstrated again: Robert, Duke of Normandy, landed here in 1102 to dispute the English throne with his younger brother, King Henry I. Henry had assembled his forces at Pevensey, another Roman shore fort which had been updated from 1066, and had a long march to intercept Robert. This incident must have emphasized the importance of Portchester and the Harbour to Henry, who had held the Cotentin peninsula of Normandy since the Conqueror's death, and was the first of many English kings who regularly embarked from Portsmouth Harbour for Normandy (Le Patourel, 1976, 163 f.).

William Mauduit I held Portchester as tenant-in-chief in 1086, but was dead by 1100; his son, Robert Mauduit, was drowned in the White Ship disaster of November 1120 (Mason, 1980c, 132). William of Pont de l'Arche married Robert's daughter by c. 1128 and thus obtained the castle, which must meanwhile have been in the King's hands (Mason, 1976). The honour of Portchester was fragmented and partly lost to the family, especially after the foundation of the priory in c. 1128 (Mason, 1980a). William Mauduit II recovered Portchester in 1153 together with the hereditary office of chamberlainship of the exchequer, but the castle reverted to the crown, perhaps after the rebellion of 1173-4 (Mason, 1980b, xxvi-xxviii). Portchester's use as a depot for shipping bullion to Normandy in 1163-4 suggests it was already a strong place (P.R. 10 Hen. II, p. 26). Repairs are first recorded in 1173-4, some twenty years after the commencement of the surviving series of Pipe Rolls; references thereafter occur at fairly regular intervals (§§1 et seq.).

The following sequence fits all the observed facts relating to the Norman buildings:

- 1A. The Roman corner bastion 3 and about one-half of the lengths of wall to the adjoining bastions 2 and 4 are cleared at least to ground level. A keep is begun, using the rubble to hand, and the Roman fort ditches are cleared out and partly recut to curve round the north and west sides of the keep (Cunliffe, 1977, 9-10). It will be suggested below that this first phase of the keep may have been a single-storey stone hall.
- 1B. The keep is given thicker walls and an upper storey. An inner moat is dug inside the Roman fort walls to cut off an inner bailey, the spoil being spread over the area; the plinth of the keep is buried in earth all the way round (the south forebuilding may have been added now). A doorway is cut through the fort wall, just south of bastion 2, which is refurbished as a gate tower flanking the entrance to the castle in this phase.
- IC. The inner bailey is walled off in stone, with a squarish gatehouse and corner tower. The phase IB entrance becomes a postern giving access to the berm.
- 2A. The north (and probably south) forebuildings are added to the east face of the keep, which is again raised in height.
- 2B. Domestic buildings are put up against the north, west and south walls of the inner bailey.
- 2C. The space between the forebuildings is converted into a prison.
- 3. The south forebuilding is extended eastwards and a new building constructed next to it (NW1). A range is built on the east side of the inner bailey.
- 3/4. The top of the keep is raised and its parapets are rebuilt.

The initial stages of the creation of the inner bailey are likely to have been undertaken by

William Mauduit I in the eleventh century, whilst it is also possible that some of the late Saxon buildings in the outer bailey were still standing (Cunliffe, 1976).

Historical probability suggests c. 1102–28, and more particularly the 1120s, for phase 1B. The architectural design of the keep would support this: one high storey above a basement, with ancillary buildings later added on each side of the entrance, are seen at Corfe, perhaps by 1106 (Dufty, 1970, 59). Even more elaborate plinths occur at Bamburgh and Canterbury keeps, both perhaps built by 1125 (Renn, 1982a, 127–8). Portchester has only one mid-wall buttress (on each of two adjacent sides) which, on typological grounds, might indicate a slightly later date than the keeps just named. But by 1127–9 the keep at Rochester had up to four storeys above a basement with a properly integrated forebuilding protecting the entrance. Mounding-up of plinths has been found frequently (Renn, 1968); those at Ascot Doilly (Jope and Threlfall, 1959), Bungay (Braun, 1935) and Wareham (Renn, 1960) are unlikely to be later than the abandonment of the respective keeps by the middle of Henry II's reign. (A general refurbishing similar to that at Portchester, with curving recut ditches and masonry repairs to Roman bastions, could be seen at Pevensey before the refortification in 1939–40.) The building of the keep at Portchester might thus be the work of Robert Mauduit, if before 1120, or of the King himself if after 1120 and before c. 1128.

Phase 1C need only be marginally later, since similar open-backed square towers are dated to before 1136 at Carisbrooke (Rigold, 1969). At Sherborne there are a similar ashlar-finished gatehouse and towers (there straddling the curtain wall), built by 1139 and perhaps by 1122 (Potter, 1955, 49, 53; Johnson and Cronne, 1956, 172 no. 1324), but the type persists for another 50 years, for example at Framlingham (Renn, 1973). The completion of the defences of the inner bailey at Portchester might again have been the work of Henry I, or could have been instigated by William of Pont de l'Arche if after c. 1128. By the late 1130s or 1140s the latter's building activities were concentrated on the newly founded priory in the castle (Cunliffe, 1977, 105–6), which would perhaps have followed on the completion of works in the castle itself. (See Rigold, 1977, 122–7 for comments on the relationship between the church and castle.)

The upper part of the keep (phase 2A) is 'utility Romanesque' without any pronounced transitional features. It is likely to have been completed before 1173 when castle repairs begin to appear on the Pipe Rolls of the royal exchequer, as after that date 'the recorded expenditure is never enough for works on such a scale as the doubling of the height of the keep' (Rigold, 1965, 6). Thus the keep may have been enlarged by William Mauduit II after he regained the castle in 1153, though it is not actually known for how long he kept it after that date.

The domestic buildings (phase 2B), which need not all be contemporary and could have been added gradually over the years, may have been completed by 1180, when 100,000 slates had been transported from Totnes to Portchester (§2): some blue Devon slates excavated at Portchester (Jope and Dunning, 1954, 211 and pl. XXII, 3 and 4) were about 7 in. by 4½ to 4 in. in size. Allowing 50 per cent for overlap (and breakage), that number of similar slates would cover the roofs of all the known Norman buildings including the keep (although we know it was later leaded).

The dating of phase 3 is discussed fully in the next section (pp. 122-4), and it is sufficient to say here that an early thirteenth-century date is probable for the works.

The alterations to the top of the keep must belong to one of the many campaigns of work recorded on the leadwork and stonework of the 'great tower', in 1220 (§17), 1230-1 (§\$22-3), 1253 (§\$27-9), 1256-60 (§\$30-42), the 1320s (§\$57 and 66), 1337-8 (§79), 1362 (§98) and 1396 (§125).

# DESCRIPTION OF THE KEEP (pls. XVIII–XXIII)

(Unless otherwise described, openings have semi-circular heads both internally and externally. The post-medieval timberwork of the floors is not considered here.)

# The Keep: Phase IA — a Single-storey Hall?

The north, west and south walls of the keep each have on the ground floor a pair of double-splayed loops, the external splay being narrower and shorter than the internal one. The south pair are noticeably closer together than the others, not only to clear the line of the west wall of the Roman fort, but also because the space was restricted by the door to the stair in the south-west corner and the well-pipe in the south-east. The stair is sited not in the angle itself but at the west end of the south wall, so weakening it; in addition the shadow of the fort wall prevents the light reaching its two lower parallel-sided loops. The well, too, is curiously sited, with its axis at the inner angle of the walls, and is only carried up to first-floor level where it is vaulted over in an attempt to correct for this weakening of the angle. At the lower level a tapering embrasure can be seen through a hole in the well-pipe. This embrasure has a rounded head, and probably lit the well so that the water level could be watched. But the slit is now blocked and, although its thickness could not be checked, it does not seem to reach to the south exterior face of the buttress, nor to align with the blocking-patch nearer the angle.

Double-splayed windows are regarded as synonymous with Anglo-Saxon architecture (Taylor, 1978, III, 842-62), although they do occur later, for example in the pairs giving supplementary lighting to the chapels at Castle Rising and Richmond Castle. At Portchester the masoncraft is clearly Norman (externally at least), although the idea could obviously have been borrowed from a Saxon church (e.g. Boarhunt, just beyond Portsdown). Taylor (1978) has discussed the constructional advantages of double-splays, but Parsons (1974) has shown that there is no significant improvement in light transmission. Security could have been the paramount consideration at Portchester, as it was at the domus fortis (c. 1198) at Lydford (Saunders, 1980, 155–8, fig. 4). There is a single double-splayed window-jamb in the upper part of the west wall of the keep at Bridgenorth (the north wall has a V roof-weathering and weep-hole like that at Portchester); £300-worth of work was done on the castle (including the turris) in 1167-74 (Colvin et al., 1963, 576) but this may only have been improvements; the castle had been in royal hands since 1102. There is an elaborate double-splayed opening in the east wall at the level of the top of the plinth of the keep at Kenilworth, with a parallelsided centre section  $2\frac{1}{2}$  in. (6 cm.) wide and 2 ft. 5 in. (0.75 m.) long. That castle was built by 1139 (Cronne and Davis, 1968, 159, no. 418) and the keep shows evidence of the repairs recorded between 1190 and 1225 (Colvin et al., 1963, 683). At Farnham Castle (Surrey) there is a high-set row of five double-splayed lancet windows at the west end of the south curtain wall of the inner bailey. Excavation and clearance of the large building inside Bletchingley Castle (in the same county) by Dennis Turner have revealed traces of at least two double-splayed windows, again on the south side but almost at ground level.

But at Portchester, the curious siting of the stair and well, and the evidence of their lighting slits, suggests an alternative, namely that the walls have been thickened to support a taller structure, so converting a hall to a tower. Such a conversion has been demonstrated at Castle Acre (Coad and Streeten, 1982) and has been suggested at Colchester and at the White Tower of London. Contemporary double-splays formed because of wall-thickening can be seen in the crypt of La Trinité (Abbaye-aux-Dames) at Caen.

### The Keep: Phase 1B and Later (fig. 84)

Exterior

By phase 1B the keep formed a cube about 56 ft. (17 m.) each way (excluding buttresses and parapets) with two timber floors separating the high entrance level from a ground floor on the one hand and from garrets under a W-pitched roof on the other. In phase 2A the garrets were heightened and another floor added, raising the keep some 34 ft. (10 m.). Finally in phase 3 or later the keep was topped out with an almost flat roof and parapet, and probably raised another 12 ft. (4.5 m.)

All the exterior (and much of the interior) masonry is in good Quarr and Caen ashlar, with some variation in the height of the courses, as will be described below. There are seventeen rows of putlog holes on the exterior at vertical intervals varying between 3 and 6 ft. (1-2 m.); however, the topmost part of the keep shows very few holes. They indicate the pauses between minor building phases, when scaffolds were laid on the finished masonry to provide a working level for the next 'lift'. Variations in the spacing of putlog levels and the discernible changes in the size of masonry courses provide evidence for the various stages of construction in the keep. On the north and west faces the plain walling above the plinth is of a consistent size, but above the next string-course (and especially on the north face) there are two 'lifts' of narrow courses. The south face is less differentiated, but on the second floor of the east face, i.e. at the original garret-level, there is a similar band of narrow courses.

The break between the phase 1B walling and the subsequent heightening of the keep is difficult to detect with certainty. It is perhaps most marked on the east face, where the band of narrow courses described above ends just below a line of putlog holes. Here, as on the west face, there is a change in the vertical spacing of putlog holes: on the west face the lower part has six or seven courses between each row of putlogs, whilst above the break there are only four or five courses. The east face is more disturbed lower down but has a similar change in spacing above (which is not merely a function of the changing course-height). The break occurs about ten courses below the top of the external buttresses, and at the level of the phase 1B roof apex inside. At this level the south-west stair changes its alignment, being some 3 ft. (1 m.) to the west. It is probable that the parapets were removed down to the level of the wall-walk before work on the heightening commenced.

Above the break the masonry is of slightly different quality, less finely jointed than the

earlier work (this being most apparent on the south side (pl. XVIII)). There is some evidence, best seen on the inside, for a second break above the windows in the top storey, indicating that the final addition to the keep may have involved up to 12 ft. (4.5 m.) of new masonry. On all the faces of the keep it is difficult to trace the putlogs up to the present parapet level, and on the south side at least there is a colour-change in the masonry two courses above the upper window-heads. On the east face at the same level there is a change to larger ashlar courses (see below, in description of the top floor, and pl. XXII).

The keep was built across the north-west angle of the Roman fort, on the same axis but with its walls clear of the Roman foundation. However, the north-west angle of the keep had to be built on the site of bastion 3, and consequent settlement is marked by a crack in the north wall of the keep. Repairs to this 'grosse crevesce' were made as early as 1337 (§79; (6)). The exterior is ornamented with a chamfered plinth of up to ten offsets (pl. XIXb) with angle and mid-wall buttresses. The buttresses on the north side rise from the first offset (as now visible) but those on the west side from the fifth and second offsets. The plinth on the south and east sides is largely buried, except for the fragment to the south-west outside the curtain wall. There are no mid-wall buttresses on these sides, and the south-east angle has the offset carried round the angle, with two modest weatherings above as the only evidence of an east buttress. The north-west buttress will be discussed later. Similar plinths, but with different buttressing arrangements, have been excavated at Aldingbourne (Brewster and Brewster, 1969, fig. 8 and pls. 7-9) and at Old Sarum (Postern Tower) (R.C.H.M. 1980, pl. 28). There is an offset to all buttresses at the level of the top of the plinth and another some 1 ft. 6 in. (0.45 m.) higher on the corner buttresses only. Three higher string-courses are carried round the keep 16 ft. 6 in. (5 m.) apart, two being chamfered offsets but the middle one being a true string decorated with billet ornament — but this string is not found inside the line of the Roman walls. Above these string-courses the buttresses finally die back into the main wall face (by three similar chamfers) just above the level of the phase 1B roof within. The east face has been considerably altered, but one or more of the chamfered offset courses at or near the level of the top of the plinth elsewhere can be traced here, except towards the north end where the wall face at ground level is obscured by an irregular mass of mortared rubble. The forebuildings here are later additions, the evidence for this being discussed below.

The internal ground-floor level is now 8 ft. (2.4 m.) higher than the external ground level. At some time the external plinth (north and west sides) was covered by a mound of earth up to 10 ft. (3 m.) high (see photograph facing p. 158 in V.C.H., *Hants*, III). Today its height is recorded by the position of the Ordnance Survey benchmark above the first string-course on the south face of the south-west angle buttress — contrast the much lower benchmark on the north side of the keep.

#### Ground Floor

The interior of the keep is divided by a spine wall rising through all floor levels, placed slightly to the north of centre. There is a well in the south-east corner, and a stair in the south-west corner links all floors, opening directly off the present inner bailey ground level, that is, roughly corresponding to the top of the external plinth. A door opened northward (as does the modern one) through an opening at the west end of the cross-wall. Its jambs are obscured but it seems that the door could be secured by a cross-bar wedged into shallow recesses. The

original first floor (carried on wall offsets) was replaced in period 7 (1390s) by ribbed vaults springing from the north and south faces of the walls, and a doorway (later altered) was cut through the south part of the east wall probably at the same time, of which only its flat four-centred rerearch survives. The vault ribs are of similar profile to those of the land gate of the castle (fig. 52C and D, p. 114); both are referred to in the building accounts for 1397-8 (§125; 2.13-14 and 3.14).

### Access (pls. XXII and XXIII; fig. 41)

The first-floor entrance to the keep is on its east face and is reached through a tall doorway at ground level between the east forebuildings, having square jambs and a long bar-hole (with shallower holes for a 'pinch bar' also, wedged rather than slotted into place) indicating a 5 in. (8 cm.) thick door opening west and swinging back into a recess in the north wall. The modern stair rises west along this wall before turning south along the face of the keep to the entrance, with another stone wall protecting its east and south sides. The door into the north forebuilding at mezzanine level (described below) suggests that the phase 2A stair closely followed the line of the modern one. When the space between the north and south forebuildings had been enclosed, and the south forebuilding extended to the east (probably in period 3), an external stair of timber or stone was built against the east wall of the forebuildings, rising north to the keep entrance level. It is shown thus in the view of 1733 (pl. XV), with a first-floor opening surmounted by a pointed arch. The stone wall round the stair survived until site clearance in the 1930s (plan in V.C.H., Hants, III, opp. p. 156) and although it contained bands of brick it may in part have been medieval (pl. XXII). As there was a door into the dungeon between the north and south forebuildings and perhaps also a door into the basement of the south forebuilding through the later demolished building NW1 (fig. 6 above), the entrance proper would have been concealed among a warren of rooms, and attackers could easily lose their way and spend time and effort breaking into the wrong doorway.

### First Floor (pls. XXb and XXII)

The jambs and head of the first-floor entrance to the keep have been restored, the former in two square orders. There is no trace of any bar-hole or portcullis slot. Inside and to the south of the entrance arch is the curved head of another arch of similar size and at the same height, perhaps a window embrasure that was blocked by the subsequent addition of the south forebuilding. The well-head is covered by a barrel-vault running south, and projects into the south-east corner of the room. Similar barrel-vaults occur at the entrances to the latrines and stair passages on this and the second floor. In the south wall are two tall parallel-sided embrasures with roll-moulded heads, cushion capitals and moulded bases to the engaged jamb-shafts (fig. 39). The more easterly window is blocked externally by the later ranges, but the other window retains half of its dressings externally, showing a chevron-decorated head on chamfered imposts with an inner roll-moulded order supported on half-shafts with cushion capitals and moulded bases, for a two-light opening, having some resemblance to those of the Salle d'Échiquier in Caen Castle (de Boüard, 1965). A doorway beside a projection at the west end of this south wall leads to a mural stair descending to join the spiral stair near the angle. In the west wall opposite the entrance is a high window

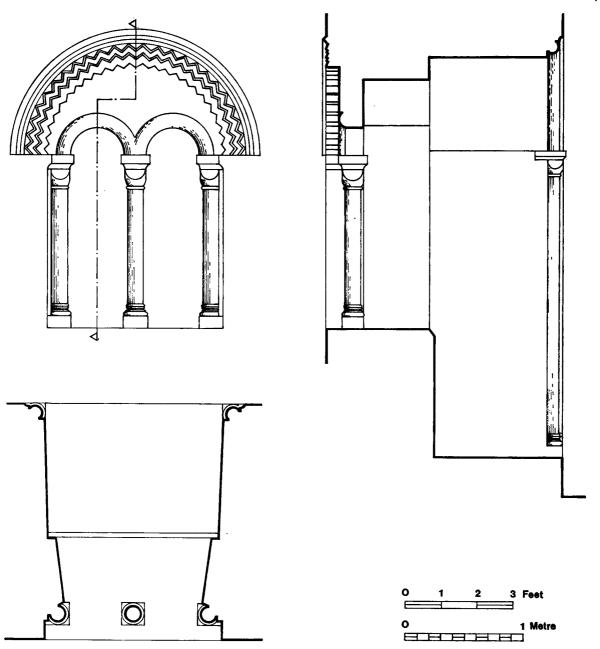


Fig. 39. The keep: first-floor window

embrasure, with stepped sill and converging jambs, the opening of one square order externally. It was subsequently blocked and replaced by a lower opening in the form of a square-headed light in a recessed panel with a flat four-centred rerearch and internal chalk voussoirs; this was probably done in the late fourteenth century when the windows in the south wall were

obscured by the building of storeyed ranges against the keep (and the stepped sill may well belong to this later period).

The doorway through the west end of the cross-wall was not rebated, but shallow holes indicate a free-hung door at some time. A doorway in the west wall just south of the cross-wall leads to a mural passage (with modern reinforcement) lit by four high-set small loops, ending above a latrine shaft which vented originally through a square opening in the north face of the north-west angle buttress just above plinth level (which now acts as a down-pipe from the roof gutter). There is a similar latrine shaft in the north-east angle buttress, but this is reached more easily by a dog-leg passage from the north end of the east wall. Clearly these two latrines were designed to serve the occupants of the south and north rooms on this floor respectively, the effluent being flushed into the north ditch (still tidal today). At some time the north-west latrine shaft was either replaced by or extended to another a little further east venting at a higher level, perhaps because the original ground vents were blocked by mounding-up over the plinth (see above) or, alternatively, because of the insufficiency of a single convenience for the numbers using the south room. Above the passage in the west wall is a high window similar to that in the south room, but without the later alteration. The two tall windows in the north wall are lower and narrower, and also have stepped sills which, if contemporary, are comparable with the nave windows in the church at Portchester (Cunliffe, 1977, 109, pl. xxx). They were partially blocked with square-headed lights, whose exterior aspect is the same as that in the west wall, being probably of late fourteenth-century date. Between the windows in the middle of the north wall is a round-backed fireplace which has lost its dressings but rises as a dome, venting through six short shafts opening in four tiers on the central buttress — two pairs of triangular openings, with a square opening above the upper pair and a semi-circular opening below the lower pair. Domed fireplaces are fairly common in early twelfth-century keeps: the closest parallel is one with a similar pattern of openings at Rochester.

### Second Floor: Garrets and Roof (pl. XXI)

The entrance floor was ceiled over at a height of about 21 ft. 6 in. (6.5 m.) on another wall offset to provide garrets in the roof-space, marked by a W-shaped string weathering, indicating a central east—west ridge on the line of the cross-wall with lean-to roofs against the north and south walls. The southern half drained through a weep-hole in the west wall, but the northern side has only a hole in the centre of the north wall which cannot have operated without some special arrangement. The off-centre position of the cross-wall caused problems for the builders in siting the lighting loops under the roof slope: on the west side the second from the south had to pass through the mid-wall buttress, and the inner arches of those on each side are cut by the roof weathering. The roof space was entered from the stair-well through a rising mural passage in the south wall like that of the floor below; the garrets must have been accessible from each other, and in the centre of the cross-wall is a door rebated to open southwards, with a long draw-bar hole beneath shallower ones for a reinforcing pinch-bar.

Whether the original parapet walk was just above the ridge-line or higher cannot now be determined. The corner buttresses, possibly in the form of turrets, certainly did rise a further 6 ft. (2 m.) above the internal ridge-line; on the south face there is also additional buttressing

for the stair between the garret-stage and the roof top, which dies back into the wall level with the top of the corner buttress (pl. XVIII).

The Enlarged Keep: Phase 2A and Later (figs. 85-6)

#### Third Floor

The next building campaign (phase 2A) begins now, with the stair-well moved into the south-west angle of the keep. The third floor was lit by one loop in the centre of the south wall and by two in the west wall. It was possibly floored over at the level of the original roof-ridges, but at that level there is no access from the stair, or through the cross-wall. Unless this was a tall room with a floor at the garret level and only additional lighting provided at the third stage, there must have been internal stairs between the second and third floors.

#### Fourth Floor (pls. XVIIb, XVIII and XXII)

The top floor is entered directly from the stair-well; it is carried on joists let into the walls and is lit by two square-headed windows in each wall, rebated for shutters. Those facing east and south towards the inner bailey are of two rectangular lights under a round-headed outer order. The door at the west end of the cross-wall opened northward, and in the north room is a latrine shaft venting beside the north-east corner buttress, reached by a dog-leg passage like that three floors below. The two-light windows (fig. 40) are very plain, simpler than those in the keep at Carrickfergus (c. 1182: McNeill, 1981) or in Normandy a generation earlier (e.g. Houdan).

The stair spirals on past an upper doorway, set diagonally across the corner. At the level of this door the internal faces of the east and west walls are set back, and the north and south walls cut back by the removal of an ashlar course, apparently to take roof timbers. About 3 ft. (1 m.) higher is a chamfered string-course all round the inside of the keep, below which is a crease-line for a lead roof-covering: this slopes to the centre and the west, leading water off to a square weep-hole in the centre of the west wall. The phase 2 roof valley must have been at this level, probably with a low-pitched V-profile roof (though if the mark only represents a parapet walk there could have been a steeper M- or W-profile roof set forward from the string-course).

The cross-wall (heightened at a later stage) now terminates at the level of the string-course, and carries the modern timber supports for the roof. Above the level of the string-course the north and south walls are set back (as the east and west walls were further down) and the narrower outer walls rise another 8 ft. (2.5 m.) to the almost flat present roof. If, as seems likely, the earlier parapet was just above the level of the string-course, then this narrower walling above is of later construction, corresponding with the changed appearance of the external masonry (described above) and the lack of putlog holes in the top sector. Rows of square holes in the inner wall faces of the top floor must have been for struts supporting successive roofs.

The leads are now reached by awkward steps from the stair. A few merlons remain of the parapet, which has low-pitched gables on the east and west sides. Their capping stones have a half-round hollow moulding on the outer side, which would have been an effective arrow-trap. The crenels seem to have been square-sided, with a chamfer to the inner sill.

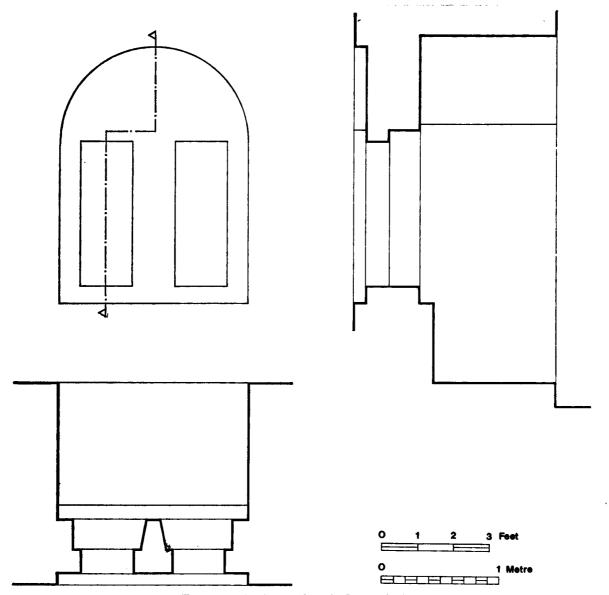


Fig. 40. The keep: fourth-floor window

## THE FOREBUILDINGS OF THE KEEP (figs. 41, 85, 86, and pls. XXII-XXIVa)

That the forebuildings are later additions to the east front of the keep is indicated by the following observations:

South forebuilding. The blind recess in the keep wall (described below) is uncomfortably close to the entrance doorway. The line of the wall running east between them has been refaced,

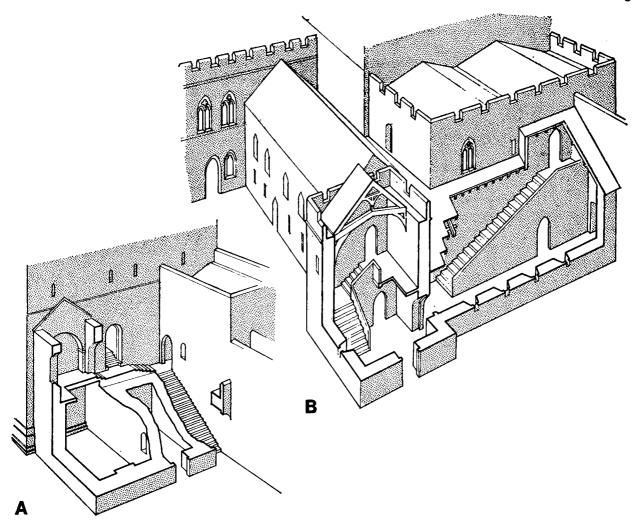


Fig. 41. Reconstruction of the forebuildings: A, in period 3; B, in period 5

but its position is indicated by the roof weathering above. Also, the recess blocks a high opening (visible inside the keep) which corresponds in position to a window in the opposite wall. The billet ornament which Rigold argued as evidence need not be primary (1965, 19), and could have come from the main wall-face. The excavation (above, p. 14) showed that the footings of the south-east angle of the keep and of the forebuilding were founded together. But the curious moulding on the east face of the corner buttress suggests a rebuilding, so the whole foundation here could be later (phase 2A).

North forebuilding. The external north face does not quite follow the plane of the keep proper, and is built mainly of rubble to the east of the profile of the north-east buttress. The ground-level offset is continued in smaller stones (derived perhaps from the east face of that buttress) and the other offsets are 'faded out' in coursed rubble, not ashlar, and are not continued

round the north-east angle of the forebuilding. The east wall of the forebuilding blocks what may have been an opening in the north wall of the inner bailey (?Norman, see below, p. 111). An Office of Works drawing (H.M.O.W. Drg. 274/3, plan B) of 1926 shows what could be the jamb of a window corresponding to that in the opposite (west) wall of the keep (just like the suggested window further south mentioned in the previous paragraph), blocked by the south wall of the forebuilding. Alternatively, this might be associated with the raising of the walls of the forebuilding at a later date.

The north forebuilding is a plain tower-like construction built out across the line of the Roman fort wall and rising above the top of the north curtain almost to the second-floor level of the keep. Its ground level has no entrance or other features, and would only have been accessible from above. The entrance was at mezzanine level, at the turn of the stair up to the first-floor entrance to the keep; it retains the lower part of a doorway with square jambs and a long bar-hole. Above this to the east is the only other opening in the south wall, one jamb remaining of a hatch-like opening with an external rebate and a flat-pointed arch. It is probably of late fourteenth-century date, perhaps being intended to give light to the stair passage. The height of the wall offsets for the principal floor level are 5 ft. (1.5 m.) above the level of the door sill, and there will have been a few steps up into the room. If there was an earlier and lower floor-level then there could have been another floor above. Alternatively, the first build may have been about 6 ft. 6 in. (2 m.) lower than the present structure, as the upper part of the north wall is not bonded into the keep, and the lower area of rubble walling is topped by two ashlar courses. The south wall could also have been raised by a similar amount, if not more, judging from the narrowing of the walls (fig. 85, section CC). The east wall of the tower outside the curtain wall has been patched in several places and there may at one time have been an opening at the upper level looking over the postern below. A short length of corbelling also suggests the possibility of there having been some external timberwork here.

In later medieval times the tower had only one tall room on the first floor, lit by a single oriel window in the north wall (pl. XLII). Internally the window has a flat four-centred arch and deep, flat casements; externally only the jambs survive, together with the springing of the window-heads and fragments of the base and top of the oriel. There were four (or eight) lights, with flat four-centred heads. The window was probably inserted in the late fifteenth or the early sixteenth century. The room may have been a lodging, though there is no trace of any fireplace, unless there was one in the east wall where there is now a large area of ashlar patching above first-floor level.

The north and east walls, at least, had parapet walks, these two walls being thickened internally with a corbel table. This provided a defence overlooking the north berm, the north postern-gate and the north curtain wall. It was presumably reached from an internal stair, but may also have had a removable stair leading to the north curtain parapet walk. It is impossible now to reconstruct the arrangement of wall-walks, but it is quite likely that there was a route from the north curtain to the west curtain across the roofs of the forebuildings and the chamber blocks on the south of the keep. This would have been relatively simple after the roofs were covered with lead at a low pitch. Initially the tower must have been roofed independently of the other forebuildings, rising as it did higher than the stair arrangement to

its south. There is no trace of any early steep-pitched roof, though the wall of the keep retains the line of a later low-pitched roof whose ridge line was above the south wall of the tower. This roof will have been leaded, and must also have covered the stair and associated building, running into the low-pitched roof of the chapel (fig. 86, section CC). In 1385 repairs were made to the lead roof of 'le Estour' above the door of the keep (§116) and in 1396 the 'lower tower joined to the keep' was reroofed (§125; 1.18).

### The Space between the North and South Forebuildings

The stair to the first floor of the keep has already been described, with its protecting L-shaped wall in the space between the forebuildings. At some time this space was enclosed by a wall running south from the door leading to the stair and returning westwards to meet the east wall of the chapel in the south forebuilding. A low narrow door (with an external barhole) gave access to this space, which was lit with high-set loops facing east and south. The walls of this cell now rise only to first-floor level, but the drawing of 1733 shows a continuous front to the forebuildings, two storeys in height (pl. XV). The room above the cell had at that time a round-headed window with chevron ornament (possibly of reused stone). As described above, the later lead roofing of this part must have been continuous with that of the north forebuilding.

## The South Forebuilding (Chapel)

There is little doubt that this building was the chapel, and the footings of the east wall (in both its phases) have the base for an altar (fig. 6, p. 14) even though that was on the first floor. The only Norman features survive at first-floor level: one splay of a window in the fragment of the south wall with a short length of billet moulding to the west of it, and a rubble-backed recess in the west wall (made by removing the facing ashlar from the keep here), whose full-centred arch springs from chamfered imposts. Above it, on the face of the keep, is a chamfered string forming the weathering for a roof pitched east—west. The chapel must have been entered from a door in its north-west corner.

After the cell had been added to its north side, the chapel was extended some 8 ft. (2·4 m.) out at its east end. On the first floor is a short length of chamfered string-course on the new length of wall. This was contemporary with the construction of building NW1 to its south, known only from its fragmentary remnants below ground. The view of 1733 shows only a small blocked rectangular opening in the east wall, where there must at one time have been a window (pl. XV). Work on the chapel is recorded at various dates: repairs in 1260 (§38), refitting and reroofing in 1362 (§98) and refitting with new windows in 1385 (§116). Perhaps it was in 1362 that the low-pitched lead roof was made for the first time, the line of which can be seen on the face of the keep cutting across the earlier pitched roof. In 1397 a tile floor was laid in the chapel (§125; 2.6); a door which still survives was also made, giving access to the chapel from the north chamber and the main chamber range on the west side of Richard II's palace (fig. 86).

The latest alteration was the insertion of a large oriel window in the south wall, probably matching that in the north wall of the north forebuilding. Only the springing for the base of the oriel survives, beneath which is the royal coat of arms of Henry VII and a fragmentary

inscription or motto below (pl. XXIVa). Possibly all of this was the work of Reginald Bray in c. 1489 (§137).

On the ground floor are door-jambs with a double hollow chamfer, probably work of the 1390s. The arch has mostly gone (though its segmental rerearch survives) and the opening is now covered with a wooden lintel. To the east of the door is a partly blocked window-opening. The basement of the chapel gave access to the bottom stage of the keep, probably from the late fourteenth century if not before.

## The Outer Forebuildings of the Keep: NWI-3 (fig. 41)

Although only known from their foundations and few associated features, the buildings enclosing the forebuildings of the keep were substantial structures that call for some comment on their architecture and function.

The earliest building (NW1), added at the time the chapel was extended eastwards, was about 16 by 32 ft. (4.9 by 9.8 m.) internally, and probably had a sloping roof to leave the window(s) in the south wall of the chapel clear. It was doubtless entered from the courtyard, and may have given access to the basement of the chapel. There is no evidence of its function, but it was most likely related to the other buildings on the west side of the court at this period.

The main building phase (NW2) belongs to period 4, probably dating to the early fourteenth century. One long building flanked the eastern side of the forebuildings, another replaced NW1 and extended along the south side of the chapel and keep, reaching up to the western range of buildings (W2), whilst a third and smaller structure projected at the corner angle. As little is known of these apart from their foundations, it is hard to give any definite reconstruction of their appearance. They cannot have been very high, lest they obscured the windows of the keep and forebuildings, and they are unlikely to have had pitched roofs as these would have introduced drainage problems in carrying off rainwater (with the exception of the corner building).

The eastern range, measuring 15 by 47 ft. (4.6 by 14.3 m.) internally, was almost certainly a covered passage, containing a stair up to the first-floor door leading into the keep, and also giving access to the two ground-floor doors into the forebuildings and to the postern gate which was cut perhaps at this time through the north curtain wall. The east wall of the chapel now shows at least two sets of sockets for the timbers of a stairway, though these may belong to the final phase of occupation in the post-medieval period. In the 1733 drawing a stone stair (discussed above) is shown leading up towards a door with a pointed arch in the first floor of the forebuilding. To the south of this door is a window, round-headed and with chevron ornament; beyond this are two horizontal bands with decoration, the lower of which may mark the roof-line of the covered passage (pl. XV). Had this been so, the roof would have had to rise to clear the door at the top of the stair.

The structure at the south-east corner measured internally 20 ft. by 11 ft. 6 in. (6 by 3.6 m.) and could have been a storeyed building, even a tower, with some sort of pitched roof. Its function is most likely to have been a porch giving access to the other two wings, and possibly also to the privy garden to its south-west. This would have controlled access to the 'palace' buildings, otherwise reached through a gate in the timber fence closing off the garden (above, p. 22). The corner building may have contained a guardroom or porter's lodge, perhaps with

accommodation on an upper floor. If the south range was storeyed, then there may have been a stair up to a door in the north-west corner of the room.

The south range of the outer forebuildings was perhaps a storeyed building, with a lean-to roof clearing the windows on the first floor of the keep. A line in the wall of the keep probably marks the top edge of the roof slope, and it occurs at about the same level as the line shown in 1733 on the east wall of the chapel. The reconstruction suggested here would leave a ground-floor room with a ceiling c. 8 ft. (2·4 m.) high and a first-floor room with a sloping ceiling 7 ft. (2·1 m.) high at its lowest. An alternative reconstruction, with only a ground floor, would have provided one large chamber with an interior similar to that in the west range of the court (W2). Whichever way it was fitted out, the building will have contained a decent-sized room with a southerly aspect overlooking the privy garden. The archaeology of the west range shows that the north end of the range was cut off to provide a latrine at about this time, which will have served the chamber (p. 21).

In period 5 the building was altered by the building of a wall adjacent to the south wall of the keep. The most obvious explanation of this is that the range was now given a pitched roof. It is suggested below that this range might have been the Queen's chamber mentioned in 1337 (§79), and which had a new wall and roof built in 1385 (§116) (pp. 143 and 149).

## THE GATEHOUSE AND BRIDGE TO THE INNER BAILEY (figs. 87–9 and pls. XXVI–XXVII)

The gate and bridge from the outer to the inner bailey have not been the subject of any below-ground archaeological investigation since the clearing of the site by the Ministry of Works in 1930. What follows here is based on an examination of the standing structure, supplemented by comparisons with the land and water gates of the castle which have already been described (Cunliffe, 1977, 10-21).

The original Norman gate has been successively extended forwards into the moat on three bays one in front of the other. For clarity of description the Norman gatehouse is termed Bay I, the next bay in front of it towards the outer bailey Bay II, and so on to Bay IV. Apart from these forward extensions, there was also a fortuitous lengthening of the passage back into the inner bailey by the building on the east of the period 2 domestic range (SE1) and the period 7 palace building on the west (SW4).

Bays II, III and IV each contained a separate drawbridge pit, a remarkable sequence. Being set so close together in space (if not in time) they cannot all have operated simultaneously, and at one time or another each seems to have exchanged the function of being the gap spanned by a bridge for that of being the pit into which the counterpoise of the drawbridge sank. Three pairs of contemporary pits can be seen at Carreg Cennen Castle (Dyfed) and another three sets existed along the present causeway into the Tower of London, but all these were separated by lengths of fixed bridges or stairs.

## Bay I. Period IC: the Norman Gatehouse (fig. 87)

The original gatehouse, integral with the curtain walls, and standing forward from them,

was square in plan but open-backed towards the inner bailey, where it may have been screened by a timber-framed wall. The walls are cased in Binstead limestone ashlar both inside and out, with broad flat buttresses against the outer angles like those of the priory church, not clasping the angle and only carried up to first-floor level. The front of the original entrance arch has been removed by the period 4 extension, but the semi-circular rerearch survives, the jambs being set back from the springing perhaps for timber door-posts. A patch in one flank wall may indicate the position of a loop formerly looking west along the berm, similar to those of the floor above. It is not clear how this floor was reached originally, perhaps from an internal timber stair or ladder against the wall rather than from the flanking curtain walls, which show no primary evidence for a wall-walk. There are no corner buttresses to the first floor, which now has loops facing east and west and probably also had one facing south. In the south-east corner is the beginning of a stair curving round into the rubble masonry and leading to another level marked by a second offset. The latter may have taken the roof truss inside a parapet (as reconstructed here), or be evidence for a third floor, making a tower gatehouse as at Bramber and elsewhere (Renn, 1977). The Norman gate probably had a bridge pit in front of it (perhaps less regular, and on a different alignment from the present one), and may have been spanned by a withdrawable gangway (a literal 'drawbridge') like that excavated at Carrickfergus (McNeill, 1981). This has been modified in later phases, and no evidence remains of the primary arrangement.

## Bay II. Period 3 (cf. fig. 88)

The side walls of the second bay stand on a wider foundation of flint rubble which runs at a slightly different alignment to that of Bay I and the bridge pit in Bay II but not that of the upper walls of Bays II to IV. It would appear that by period 3 (if not earlier) the flanks had been protected against infiltration along the berm by side walls projecting from Bay I. Flint rubble foundations reappear outside the side walls of Bay II in continuation as a sickleshaped curve to each flank, the loop forming a three-quarter roundel just big enough for a man to stand in, with a stub wall which might have been merely a buttress to the roundel. These external foundations may be separate from those below the side walls and be contemporary with the ashlar facing (see below, period 4) although, taken together, the foundations resemble similar additions to a square gatehouse on the town walls of Southampton (Bargate: Faulkner, 1975) and Rochester (East Gate: Harrison, 1972, fig. 5) and, separately and on a larger scale, at Bungay (Braun, 1935) and Helmsley (Peers, 1932) Castles. All these parallels are independently dated to the mid or late thirteenth century. If the Portchester roundels in their early form were part of the works of master John of Gloucester in 1256-60 (§§30 et seq.) they could have resembled the extant outer gate to Guildford Castle, upon which he advised in 1257 (Harvey, 1954, 115). There the flanking turrets rise from square bases, an idea developed in the 'Edwardian' castles (Caerphilly, Aberystwyth, Denbigh and Harlech). It is just possible for the roundels to have supported framework for a turning bridge, but a wellbalanced bridge needed very little assistance. The drawbridge pit of Bay II now has a smooth lining, with a sloping face on the side adjoining Bay I. A stone is missing from the ashlar course at the top, halfway along each of the flanking sides, immediately behind the line of the front arch and vault (period 4). If these gaps once held the stone or timber pivots, any turning bridge, however narrow, would have fouled the vault or front arch. So these must be later, and the first turning bridge pivoted like a see-saw to swing in the middle of its pit. Probably there was a fixed timber bridge across the inner moat, perhaps with a removable span (Rigold, 1975), successively shortened as the bays were added. If not of c. 1260, as the slight architectural and documentary evidence suggests, this could be part of the work described by John le Faukener in 1296, who reported: the 'inner gate newly made, the second gate next the bridge mended, a [draw]bridge newly made in the middle of the bridge and a timber brattice over the bridge' (§52).

## Bay II. Period 4 (fig. 88, pl. XXVII)

The superstructure of the second bay is not of one build, though it is likely to be of one period of work, that of the early fourteenth century. Any building associated with the foundations described above was demolished. The original outer (south) arch of the Norman gate was replaced with a low segmental-pointed arch having continuous chamfered orders of double-wave (cyma) profile, and a hood-mould with a wave and roll. The jamb chamfers end with a horizontal bar and a globular stop near the base (fig. 42). Both the chamfer and stop are exactly like those on the land and water gates, and in the west postern gate: work that can be attributed to the 1320s (fig. 52B, p. 114; Cunliffe, 1977, 10, 19). The arch clearly fronted on to a two-leaved door of similar size and position to the modern one, although the front of the arch (and the others further south) has been cut into at springing level to take a horizontal timber for framing a rectangular door at some unknown date. That the arch was

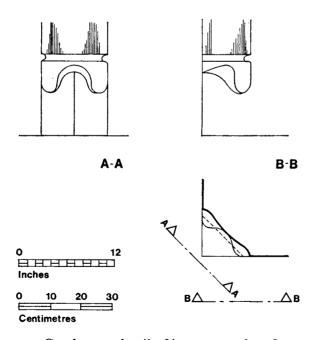


Fig. 42. Gatehouse: detail of inner gate chamfer c. 1320

built before the rest of Bay II is shown by the manner in which the terminal boss of the vault interrupts the hood-mould of the arch, and by the straight joint where the side walls abut against the door-jamb.

The side walls were completed (or replaced) in ashlar, each having a small doorway at ground level giving access to the berm. The doors have two-centred arches with continuous plain chamfers and segmental-headed rerearches; pairs of square-section holes (one deep and the other shallow) in the sides were provided for door-bars. At some time the inner face of each door-recess had a metal grille inserted and then torn out.

The flanking roundels were built (or rebuilt) with facings of ashlar on a chamfered foundation course. Little of them survives, but each tusking into the side walls of Bay II ends in a fragment of a jamb with an external splay, possibly one side of a forward-facing arrow-loop. Two curved facing stones at a lower level in the west roundel are inclined at an angle, just possibly a secondary slit off the first, looking towards the land gate. This roundel tusk has survived to its full height, showing that in this phase the roundel was about 8 ft. (2·5 m.) high, open-topped with a parapet of triangular section (and without stairs, pace Rigold, 1965, 17). The roundels' purpose was to enhance the dignity of the gatehouse, acting as sentry-boxes from which access to the side doors could be controlled or sorties dispatched; they will also have made the existence of these doors less obvious, and may have been supplemented with earth walls (see §79).

Inside, Bay II was given a quadripartite vault filled with thin stone slabs, having large diagonal ribs and smaller transverse and axial ribs (partly missing) (fig. 53, p. 115); the ribs have wave-moulded chamfers on each side (fig. 52F). Along the axis are three large foliated bosses, much decayed, the central one with a hole through it from above. The corbels flanking the inner arch as responds for the ribs have remnants of carved heads: a coronet to the west and flowing hair to the east suggest king and queen; the matching pair to the south only have foliate ornament. The outer (south) arch of the vaulted bay is two-centred, with an inner wave-moulded chamfer and a plain-chamfered outer order dying back into a similarly moulded jamb. This forms the inner edge of the portcullis slot, the outer edge having another, slightly higher arch, also two-centred and chamfered on each side with a weathered wavemoulding that dies back into square jambs. These last provided the rebate against which a cantilevered bridge could close, and above the arch is a hole for ropes or chains to draw up the bridge. The new bridge pivoted in front of the arch, the inner part descending into the pit in Bay II (with its sloping inner wall), and the outer end landing on a very large bridge pier some 13 ft. 3 in. (4 m.) southwards which is rebated for the bridge when horizontal. This pier was rebuilt in period 6 (see below).

The front wall of Bay II has an outer arch, higher again than the others to allow for the bridge being raised. It is two-centred, with wave-moulded chamfers on each side, and dies back into the flanking buttresses. The hood-mould has a wave and roll, exactly like that on the inner arch at the north end of the bay. A break in the jointing of the masonry courses below the outer arch proves that the buttresses were a later addition, at least in their present form. At first there were probably shallow buttresses extending to a line parallel with the external roundels, but very soon much heavier ones were added with three steep weatherings, built down the slope of the moat to increase the strength of the two-storey block both in engineering and psychological terms.

The first floor of Bay II (see fig. 89) was reached from the same level in Bay I, through a central wall-passage with a square-headed door at the north end and a two-centred arch at the south. The room had a plain south wall, later pierced by a square-headed door giving access to the parapet of Bay III. On the east a smaller opening forms the segmental rerearch of a splayed embrasure with a square-headed loop looking out to the south-east. Adjacent to this, in the east wall, there appear to be a hearth and remains of a chimney, implying that this room served as a porter's lodging. On the west is the springing of another rerearch over a larger window-splay, with an external two-centred arch, though the window-head does not appear to be original, and it may have been square-headed at first. To the south of this the wall is recessed and there is a small squint looking south-west. Below this is a rectangular shaft descending in the thickness of the wall with its top edge rebated. This was possibly the drain for a latrine (the superstructure for which would explain the wall-recess) but was perhaps more likely for a portcullis counterweight. In addition to the slot for the portcullis itself, there is the hole in the central vault-boss already mentioned.

## The Date of Bay II

Three phases have been distinguished in the second bay: the rebuilding of the inner arch; the reconstruction of the bay itself; and the alteration of the forward buttresses. Judging from the double-wave moulding on the inner arch jambs, this work should be contemporary with the work on the two outer gates of the castle. That the outer arch need not be much later might be suggested by the use of a similar hood, while the wave-mould is employed throughout the bay and on the vault. Thus it might well be that the whole bay was built during one programme of work, if at different stages.

There is clear documentary evidence for work on all the castle gates in the 1320s, with the one detailed account for 1320 giving the first week of September as the point when the masons moved from the land gate to the middle gate (§53 and table IV, pp. 136–9). In late August 240 Caen stones had been bought in Portsmouth, and in the middle of September 167 stones were brought from the Isle of Wight 'for the foundations of the bridge within the castle' (§53, see below, p. 137). The accounts for the next few years are less specific, but the plumbers put a lead roof on the chamber on the middle gate between 1321 and 1325 (§55), and small repairs were made to the carpentry and ironwork of the drawbridge in 1324–5 (§57 and §61). If Bay II was all of one period, then these references could comprehend the building of the whole bay.

By 1335 the 'great bridge at the entrance to the bailey' was debilis et fere decasus, but reparable for £10 (§77). The 1337 accounts do not refer to this, unless it be the mason walling the old postern in 'la barbecane' (§79; (6)), or the 'doors of two barbecans' replaced then (ibid. (8)). Work could also have been done then by the sheriff, for which there are no details (§§78, 80). Unspecified bridge works were ordered in 1344 (§87 and §91) and in 1369 the carpentry of the drawbridge (pons levabilis) was renewed and the roof partly releaded (§103). The masons' work on that occasion included adimplendum muros lapideos inter le gist' usque ad positionem tabularum sub camera magne porte interioris (ibid.), which sounds like repairs to the side walls. A portcullis built at the same time was possibly that of the water gate (Cunliffe, 1977, 11–14). The outer buttresses may have been rebuilt on any of these occasions in the middle of the fourteenth century.

## Bay III. Period 6 (fig. 89)

The space between the gatehouse in Bay II and its stone bridge-pier was given flanking walls of rubble, converting it into a second enclosed drawbridge-pit to prevent infiltrators along the moat sides from sheltering beneath the bridge itself. These new walls were aligned on the bridge-pier and encroach into the width of the passage, the west one having to be recessed to allow the rising bridge-bearer to clear it. The heavy bridge-pier was used as the foundation for another two-centred arch with continuous rounded chamfers behind a round-backed portcullis slot, with straight-chamfered arches to front and rear springing from high up on the side walls.

An open wall-walk round this bay is supported on an overhanging internal cornice which is carried on heavy corbels where the west wall has had to be recessed. The sinusoidal profile of the present rubble wall-head suggests that each flank had two crenels and three merlons to its parapet.

The fore-arch of Bay III has its voussoirs topped by a radial soldier-course composed partly of narrow bricks, which might be medieval. Each spandrel has an upright oblong hole, perhaps for chains of a lifting bridge. There is a hole 8 in. (20 cm.) square in each flank wall about 3 ft. (1 m.) above the modern decking, but too far from the door-rebates in Bays III and IV, so these holes also may belong to a lifting — not turning — bridge. The counterpoise of a turning bridge would have fouled the pier, but a lifting bridge could have used a portcullis as a counterpoise.

### The Date of Bay III

There can be little doubt that this bay, with portcullises front and rear, is the 'turris de le port coleys' at the gate of the inner ward, alias 'le port colyestower', whose lead roof was renewed in 1397 after the carpenters had made a new roof (§126; 2.15, 2.17). No mention is made at that time of masonry work, which would therefore seem to be earlier. The dimensions of the bridge-pier (13 ft. 4 in. by 18 ft. 4 in. by 6 ft. 6 in.) (4.06 by 5.58 by 1.98 m.) correspond reasonably closely with those of the previously unfinished work (measuring 14 ft. 6 in. by 16 ft. by 6 ft.) (4.4 by 4.9 by 1.8 m.) completed in ashlar by the masons in 1385 (§116). The same account speaks of carpentry and ironwork for the drawbridge of the inner gate, of diggers making foundations for a 'new gate' and of wainscot bought for 'a posterngate next the new gate'. The 'new gate' may, of course, not be this one, but it is at least possible that the third bay was built in 1385, or finished then having been started in the unrecorded works of Assheton a few years earlier.

## Bay IV. Period 8? (fig. 89)

The drawbridge appears to have been moved forward yet again with the building of another enclosed pit open to the sky, carrying up the side walls and building a new pier in the moat and a revetment of the outer bank reusing materials from other buildings. The new square pit was clearly for a counterpoise: the semi-circular concentric reams of its pivots can be measured (about 18 in., 12 in. and 8 in. (45 cm., 30 cm. and 20 cm.) diameters) just below the modern decking nearly at the front of the side walls. There is no front wall: from the south the walls appear as tall piers with an overhanging cornice at the top and chamfered

offsets at the base and about 6 ft. 6 in. (2 m.) up. Two projecting stones alone emphasize the fore-arch to Bay III seen behind. At this level, about 13 ft. (4 m.) above the pivot (the same distance as to the new pier in front) is a tall oblong hole, perhaps to take a cross-timber. A pair of square holes at a lower level 3 ft. (1 m.) or so further back may also have been for the bridge mechanism. Between these levels in the west pier is a narrow vertical slit providing a squint commanding the approach from the land gate side when the bridge was raised. Below the slit is a rectangular chamfered doorway with a projecting step, probably for a pedestrian bridge when the main bridge was raised. Such narrow bridges are common in French châteaux, and traces of a late medieval one can be seen at Raglan Castle. The doorway gave on to a short cramped passage roofed in slabs, with two square-rebated openings into the gate-passage behind the line of the raised main bridge. The inner, with a 'Tudor bonnet' head, would have allowed a small porter to control entry.

At first-floor level the parapet walks are carried forward from Bay III, each one rising up six steps towards the front of Bay IV, presumably into little turrets flanking the entrance. The sill of a mullioned window is preserved on each of the outer faces at the front. This bay is reasonably dated by Rigold to the Cornwallis period, c. 1600, being 'essentially domestic in character' (1965, 16–17). Nevertheless, by that date each of the three bays could have held part of two turning bridges which could have been operated simultaneously, making the approach to the inner bailey most secure (see Norden's survey, pl. XLIII).

## THE DEFENCES OF THE INNER BAILEY (pls. XXIV–XXV and XXVIII–XXXI)

Apart from the keep and the gatehouse, the inner bailey was defended with curtain walls on the south and east sides and the modified Roman fort walls on the north and west. The outer bastion in the south-west, the angle tower in the south-east, Assheton's Tower on the north-east and the bastion on the north were integral parts of the defensive system, as were the postern gates or sally-ports on the north and south-west.

#### South and East Curtains (Period 1C)

Perfectly plain curtain walls in similar masonry and height to the ashlar storeys of the gatehouse (Bay I) link it to the Roman fort wall on the west and to the south-east angle tower. Beyond the angle tower another similar curtain wall links that tower to the north Roman fort wall. The only trace of any medieval openings in the curtain are possible slits at the ends of the south-west panel of wall, but these probably belong to window-openings for the chamber made in the fourteenth century (see below, p. 105). These walls are complete to wall-walk level, but the only traces of a parapet are at the ends: a U-shaped gutter spout at the west end of the south wall, and the stub of a capped parapet about 6 ft. 3 in. (1.9 m.) high and 1 ft. 8 in. (0.5 m.) thick on the east wall, against which the south wall of Assheton's Tower was built. The lowest 6 ft. 6 in. (2.0 m.) of the curtain walls are faced externally with rubble, not ashlar. This is due neither to robbing (since the wall plane is vertical) nor to the removal of a previous earth bank into which the curtain had been built, since the masons' building debris sealed a 1 ft. (0.3 m.) turf-line on the berm (above, pp. 10-11). It must indicate an intention to

earth up the curtain once built, like the keep; in both these cases the existing ground level is lower than it was prior to the clearance work of the 1930s.

## South-east Angle Tower (pl. XXV)

The south-east angle tower is faced mainly in ashlar, particularly all round the base up to the level of the curtain wall, where a rubble band continues round. The tower projects obliquely between the south and east curtains. It is trapezoidal in plan, without an inner wall (like the gatehouse) and, although it has no buttresses, the external angles are nicked for much of their height to match the corners of the first phase of the gatehouse. Such a purely decorative feature, without pilaster buttresses, is very uncommon: the only parallel we have found is in the Tour aux Cognons at Civaux (Vienne). A patch in the south-east face may conceal an original loop facing forwards: there is a loop in each of the three walls at the upper level.

The concept of the Norman inner bailey at Portchester owes much to that at Carisbrooke Castle, just across the Solent, captured by the Crown in 1136. Carisbrooke is less ruler-straight, its curtains being set into the banks burying the walls of the earlier (Roman or late Saxon) fortlet. The keep there, although a shell on a motte, is positioned like Portchester over an angle of the earlier walls. The excavated Norman buildings were free-standing within the inner bailey and not butted up against the curtains as at Portchester; the exact form of the original gatehouse and adjoining angle tower may have resembled those at Portchester (Rigold, 1969, especially fig. 3).

#### The Wall-walks

Today the only access to the wall-walk is by way of the mural stairs from the high-level door in the north wall between the keep and the constable's house (described below, p. 111). For a while in the fourteenth century the passage between the King's hall and chamber in the south-west corner had a stair leading up to roof level, but this was removed in the 1390s (see below, p. 100). There is likely to have been some arrangement of timber walkways across the later medieval lead roofs of the buildings skirting the keep, but otherwise they will have blocked a complete circulation and made other access points desirable. There could have been stairs in the gatehouse or in the towers at the south-east and south-west corners, and access by stairs or removable ladders over the buildings round the courtyard; there is some documentary evidence for the existence of such stairs.

The building accounts for 1369 include masonry work on several stairs to towers and the gate, and repairs to the wall-walks (§103). In 1385 much carpentry work was expended on the defences (§116). Nine cartloads of timber brought for making two stairs in the inner ward, elsewhere identified as being above the King's chamber (west range) and the King's stable (?east range), and put there for 'the greater safety' of the castle. Four carpenters worked for a week making railes on the walls and hurdles were brought for safeguarding the men defending the walls (twenty-eight of 14ft. (4·3 m.), six of 18ft. (5·5 m.) and two of 22 ft. (6·7 m.) in length). The work of 1385 marked the end of a programme in which the north-east corner of the castle had been transformed into a strong defensive point by the building of Assheton's Tower, and either then, or in the 1390s, the north and west walls were strengthened with further modifications, to be described below.

The Defences of Assheton's Tower (figs. 43, 90 and 96 and pls. XXXIa and XLI)

(The interior is described separately below, pp. 112-13.)

The top of the north-east tower was designed for use as a fighting-top at two levels. The wall-walks of the inner bailey are continuous through the tower, with tall doorways leading from west and south into a gallery built in the thickness of the north and east walls of the tower. The gallery gives no access to the interior of the tower, which has different floor levels (see fig. 96). It does, however, have a high-level postern gate, there being at the north-east corner a few steps leading down to a door on to the wall-walk of the outer bailey. The gallery itself has a vault of four-centred profile, with stone springers and a brick crown, perhaps replacing chalk. Its north and east walls are pierced with two and three embrasures respectively (figs. 43 and 90), each with a wide plain-chamfered rerearch descending to floor level. Inside is a square opening with splayed sides and a central slit; the sill is flat and each jamb has equal stones under a deep lintel. The arrisses of the slits have all been eroded, but were probably shaped like an inverted keyhole, similar to the better-preserved example in the south wall of the top floor. Designed for hand-guns, loops of this type can be seen in profusion in the town wall of Southampton, in particular in the batteries of the Arcade on the west wall (c. 1380; Renn, 1964) and in God's House Tower by 1417 (Cal. Pat. Rolls 1416-22, 109; O'Neil, 1951; Faulkner, 1975), the latter being the residence of the town gunner. Naturally this level of battery faced outward (towards the north and east) but it was supplemented at the top level by one or more gun-loops commanding the wall-walks and roof of the adjoining north and east ranges within the inner bailey. The obvious keyhole gun-loop is that facing south, but two ashlar blocks close together in the corresponding position on the west wall may indicate another. The large rectangular framed openings (two on the east and one on the north) perhaps replace gun-loops if they are not original.

There is little reason to doubt that this is 'Assheton's Tower', mentioned for the first time in 1385 (§116) and presumably built in the time of Sir Robert Assheton (1376–81; see below, p. 303). The first known supply of firearms to Portchester was in 1379, when 'iij gunnes, cliij lb plumbi in pelottis in j barello' were delivered to Assheton from the Privy Wardrobe in the Tower of London (Tout, 1934, 267). Firearms had been in use for some 30 years by then and had appeared regularly in records of the Tower Wardrobe since c. 1360, being by the 1380s an essential part of the equipment of any major castle (ibid., 242–6). In the first years of the reign of Richard II, the threat of invasion on the south coast resulted in a flurry of castle building and defensive measures in Kent, Sussex and Hampshire, and it is then, in the years around 1380, that the first widespread architectural expression of the new technology of warfare becomes apparent (Kenyon, 1981). Provision for firearms was made in existing defences (e.g. Southampton) but now appears in new buildings. Gun-loops at three levels occur in the contemporary gatehouses at Cooling Castle (Kent) and Canterbury Westgate (Renn, 1982b, 117), but these face the exterior only. Here at Portchester we seem to have the earliest attempt in English military architecture at all-round command for gunfire.

## North and West Wall-walks (pls. XVI and XXXb)

Much of the north and west parapet has been rebuilt, probably at the same time and most likely in the 1390s. The random masonry and ashlar details are similar to other work of that

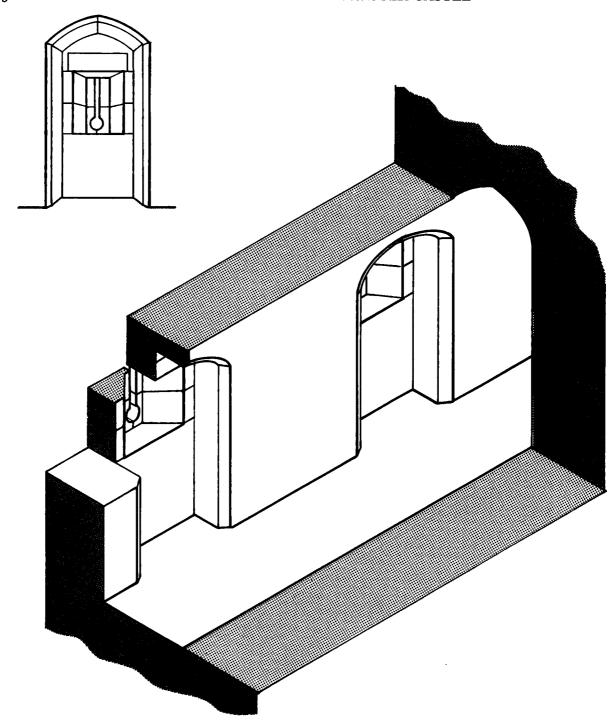


Fig. 43. Assheton's Tower: reconstruction of the firing gallery

period. In the north wall the parapet appears to be of the same build as the latrine built on a heavy external squinch across the corner to the bastion chamber at wall-walk level. The chamber is certainly of the 1390s. On the west wall there are similar, though smaller squinches, one across the angle to the keep (preventing an adventurous assault up the gap between the buttress and curtain) and another at the junction with the south-west bastion (fig. 94). Of the latter only one springer survives, but views of the castle by Buck (1733: Renn, 1972) and Park (V.C.H., Hants, III, opp. 152) show the whole arch, and the bastion itself rising above the wall-walk as if it also contained a chamber at that level (see pl. XVIa).

Both the north and west parapets are about 8 ft. (2.5 m.) high, pierced not by crenels but by a series of segmental-headed embrasures about 2 ft. 4 in. (70 cm.) square, their sills about 5 ft. (1.5 m.) above the wall-walk (figs. 94 and 96). In the north wall these are some 6 ft. 6 in. (2 m.) apart but on the west they are more widely spaced and are alternated with inverted keyhole-style gun-ports similar to those in Assheton's Tower, again indicating a late four-teenth-century date. Some of the square embrasures have quarter-circle grooves cut at the front as if to take a swinging shutter.

The western half of the northern parapet is of a different character. The embrasures on either side of the mural stairs (that on the west is partly blocked) appear to have been inserted into earlier walling, while the parapet is also defended from the interior by a high wall. This perhaps represents a survival of the Norman parapet walk (discussed further below, p. 111).

## POSTERN GATES (pls. XXVIII–XXX*a*)

North Postern (between the north forebuilding and constable's house)

A door, now reached externally up four steps, which was perhaps originally at the level of the ground surface. It is built in Bembridge stone, inserted into the rubble walling, and has a two-centred arch with a continuous wave-moulded chamfer. There is no chamfer-stop as the jambs run into the sill, which has a plain chamfer of the same breadth as the moulded one round the door. The postern was perhaps contemporary with building NW2, of the early fourteenth century.

West Postern (in fort wall, just south of bastion 2)

The larger, low, door has plain jambs which include Quarr stone and is probably Norman (see above, p. 11). This was blocked, probably early in the fourteenth century, with flint and rubble, and a narrower door inserted some 4 ft. 8 in. (1.4 m.) above. The jambs are of Bembridge stone, with a four-centred arch (only the stone decay giving it an ogival appearance), and a plain chamfer (possibly a weathered wave-moulding) stopped with a fillet and globular stop, like that in the gatehouse Bay II (fig. 42). The door was subsequently blocked with ashlar, probably in the late fourteenth century.

## THE HALL AND ADJACENT CHAMBERS (WEST AND SOUTH-WEST RANGES)

The Norman Buildings W1 and SW1 (Period 2) (figs. 44 and 92)

The Norman range, the first to be built in this location, consists of two single-storey wings arranged at right-angles flanking respectively the inner bailey wall and the fort wall. Little remains above ground but the foundations have been traced in sufficient detail to provide the outline ground plan (fig. 6). All that survives of the superstructure is the western part of the north wall of the hall standing to approximately full height and a few courses of the east wall of the chamber range in the vicinity of a fireplace.

In plan the two ranges appear to be without internal divisions, although timber screens may well have once existed. The south (hall) range measures internally 42 by 23 ft. (12.8 by 7.0 m.) while the west (chamber) range measures 51 by 16 ft. (15.5 by 4.9 m.). The positions of the outer doors are unknown for certain but the communicating door between the ranges

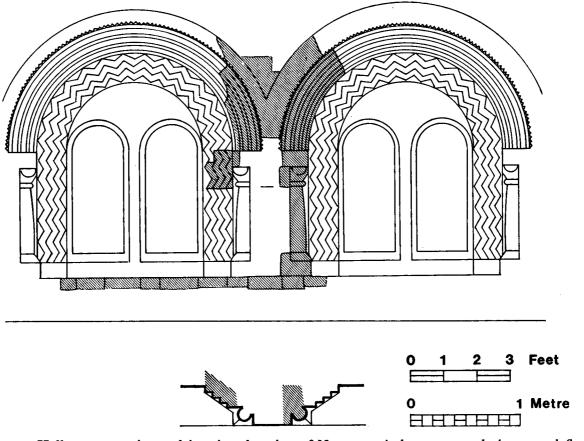


Fig. 44. Hall range: conjectural interior elevation of Norman windows or arcade in ground floor.

Masonry remaining is shaded (see pl. XXXIb)

survives largely intact with plain squared frame moulding. The hearth of the chamber can just be made out embedded in later masonry (pl. Vb) and the lower two courses of the ashlar masonry of the external chimney-breast were seen in excavation.

The surviving section of the north wall of the hall is built of flint and limestone rubble with ashlar facing of Binstead limestone. About 5 ft. (1.5 m.) east of the plain square jambs of the doorway are two blocked arches on the inner face of the wall (fig. 44; pl. XXXIb). Arcs of a triple roll moulding in low relief with outer blocked voussoirs and a contemporary spandrel are visible, but the pier between the arches has gone. One flanking detached column and cubical capital remain, and an inner-order voussoir carved deeply with multiple chevrons is visible in the other recess. They appear to be in situ, although the positions of both door and arches seem very awkward at the return angle of the two ranges. There is no trace of arcading in the south wall (some 23 ft. (7 m.) away) and the multiple orders are very elaborate for a blind arcade; further unpicking of the recesses might show that they are window-openings. There are no other openings for lighting the ground floor of the Norman south-west range, whose east wall was excavated running south from the axial line of the later porch-staircase. No evidence for roofing survives, though the lean-to roof-line on the south wall of the keep may belong to this phase (pl. XX). The reconstruction accordingly shows a single slope descending from the inner bailey and fort walls.

#### Early Fourteenth-century Alterations (Period 4)

The evidence for this period is archaeological (pp. 19-22) and whatever was done above ground, the hall and chamber ranges remained unaltered at foundation level, though a kitchen was probably added at the east end of the hall, and a latrine at the north end of the chamber. This was perhaps intended to serve the new ranges built round the forebuilding of the keep. The accounts for 1321-5 mention the 'King's wardrobe in a turret at the head of the hall' (§55, pp. 137-41 below), which must be the bastion at the south-west corner.

#### The Mid Fourteenth-century Hall and Chamber (Period 5) (fig. 92)

The Norman hall and chamber were largely rebuilt in the mid fourteenth century, retaining the outline of the earlier building. Only part has survived the subsequent remodelling in Richard II's reign.

The south (hall) range was lengthened by the construction of a new east wall beyond which a kitchen extended to the edge of the gatehouse. A new west wall was built, on line with the east wall of the chamber range. The overall result of these changes was that the actual hall remained almost exactly the same size but moved some 15 ft. (4.6 m.) to the east, whilst an additional private chamber was provided at its west end. Both ranges were now raised to two storeys, with the first-floor hall reached by a flight of external stairs. A connecting passage was built at first-floor level on a mass of masonry built in the corner between the two ranges. It linked the upper end of the hall to the chamber and gave access to the roof up a spiral stair. All that survives of this mid fourteenth-century arrangement are the two end walls of the hall and the linking passage. No features in the eastern wall of the hall can definitely be assigned to this phase; those in the western wall are described below.

The passage (fig. 93 and pl. XXXIXb) is a stone version of the timber pentices that were a familiar feature of medieval buildings for connecting separate ranges. Built in coursed flint and rubble with ashlar quoins and a stone roof, the whole of the lower stage is solid masonry. Where the passage turns to the hall a short length of diagonal wall was built across the outside corner, on a single stone squinch. This is a favourite device used in the later fourteenthcentury work on the castle, and it is possible that the passage was rebuilt then. Further evidence for this is provided by the discontinuous plinth on the outside, the changes of level inside the passage, and certain differences of detail. The door from the hall is of standard type for the later (1390s) period (as fig. 45), and the eastern part of the passage has a fourcentred vault profile with chalk crown on stone springers (like the gallery in Assheton's Tower). The west end of the passage has a chalk vault of segmental profile (c. 8 in. (20 cm.) higher than the other part), perhaps reflecting the slight upward slope of the passage floor; the two small splayed windows lighting the passage are also at different heights. A clockwise spiral stair rose in the thickness of the end wall of the hall, which was amplified by diagonal walling across the corner of each room (that in the hall was later cut back when the stair was blocked, but the inner chamber still has the supporting squinch and the walling above it). The entrance to the stair from the passage has a pointed four-centred arch with flat chamfers and broach stops. The door from the chamber has a flat four-centred arch, with a hollow chamfer on the northern jamb, and a straight chamfer on the south.

The chamber range (fig. 92) on the west of the court was modified by the addition of a second storey and alterations to the ground plan. A new door from the court was inserted, replacing one further south now blocked by the passage. The fireplace was repositioned to the south of the new door, and survives now only in the foundation rubble for the external chimney-breast. Inside there was a similar shifting of doors necessitated by the new building, with the door in the south-east of the room moving to the south-west corner, so that the wall could be strengthened to take the load of the spiral stair above.

Few details survive from this phase, though some large single corbels remain beside the later continuous cornice supporting the first floor and roof. The new doorway giving access from the court is somewhat problematical and at least in part seems to belong to a later phase. Its moulded jambs have two wave-mouldings with fillets and a half-hollow between them (fig. 52A), a type occurring from the second quarter of the fourteenth century (Morris, 1978, 23). Whilst the lower courses are in creamy Bembridge stone, the upper part of the door is of greensand, and the hood-mould is continuous over the door, the adjacent window and then round the corner over the door of the 'Exchequer Chamber', i.e. all work of the 1390s. Thus it would appear likely that the door from period 5 was rebuilt and incorporated into the work of period 7, but probably leaving the lower courses unchanged. The ashlar wall-facing to the south of the door may also belong to period 5.

The inner chamber came into being at this stage, with the construction of the wall dividing it from the hall. On both levels it was approached from the south-west corner of the great chamber. The upper door probably belongs to the 1390s, but that on the ground floor (replacing its blocked predecessor to the east) has one chamfered jamb which may be original. Most of the features in the inner chamber seem to belong to the later phase, though there are corbels for the floor and roof, as in the great chamber. Two blocked openings high in the east wall must belong to this period (fig. 92). They were splayed towards the inner chamber and

can only have borrowed light from the hall to illuminate an otherwise gloomy chamber. Opening off the chamber to the west was a room in the bastion, probably used as a latrine tower.

The only change to the outer buildings of the keep at this phase was the building of a new wall in the north-western range, which probably means that a pitched roof was constructed replacing an earlier lean-to roof. This blocked access to the latrine, which was repositioned in the room below the great chamber (fig. 8).

## The Palace of Richard II (Period 7) (figs. 91, 93-5 and pls. XXXIII-XL)

The extensive building campaign of the 1390s was concentrated on this part of the castle and is amply documented (see below, pp. 151-62). Surviving structures of this period can be easily identified, and have undergone little later alteration. The kitchen, hall and chamber ranges were all rebuilt on the old plan, with a further range alongside the keep replacing the now demolished outer forebuildings.

The walls of the new buildings are of random flint and rubble, with some reused stone from the earlier buildings. Plinths, buttresses, quoins and details are mostly in ashlar of greensand, with some lighter Beerstone; chalk voussoirs were employed between the ashlar facings in the arch-soffits of doors and windows. As originally finished the walls would have been rendered and probably whitewashed, masking the irregular appearance they now have. Putlog holes are clearly visible in all three ranges, giving some indication of the stages of construction. On the east wall of the kitchen there are seven levels of putlogs; at least five levels can be detected on the hall and chamber, each of these three being at slightly differing heights (and the porch is different again). Most of the doors and windows are of standard format, the windows occurring in several sizes. These are illustrated together, and not described in detail in the following description (see p. 108 and figs. 45-50).

Apart from the kitchen, the buildings were storeyed throughout, with principal rooms on the first floor, and domestic offices or chambers on the ground floor. Roofs were low-pitched and covered with lead. No trace of the parapets now survives, but a view of 1733 indicates the appearance of the hall porch with its turret (pl. XV), and it is likely that there were crenellations throughout.

The kitchen (fig. 91) was entered from a door to the courtyard in its north-west corner. On the ground floor are three single-light windows of standard size whilst on the north wall there is one window higher up, with two lights (figs. 49-50). The interior is plain, and there was probably a central hearth and a louver in the roof for smoke to escape. A door in the west wall leads through to a narrow room lit by a single-light window; it was probably a larder. This room contained a drain against the kitchen wall with a channel beneath the kitchen floor carrying waste out through the curtain wall (above, p. 32). At the other end of the west wall was a flight of steps leading up to another door giving access to the service (fig. 45).

The service was formed by wooden partitions that have now vanished, and its layout can only partly be restored from the remaining stonework. The first bay was in three stages, with large floor joists resting on stone corbels in the kitchen wall (there were similar corbels at the west end of the hall, and the four intermediate joists for the hall and service floor lay along the tops of the dividing walls, or in one case on posts standing on stone pads).

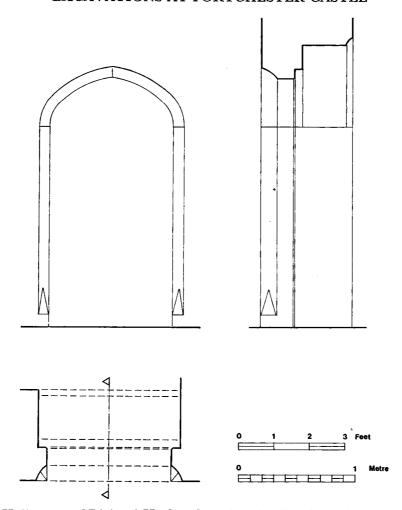


Fig. 45. Hall range of Richard II: first-floor door leading from the hall to the kitchen

On the ground floor were two storerooms adjacent to the larder. The first was reached by a stone flight of steps down from the service, and has a two-light window to the courtyard. A passage from the court may have given an alternative access to this store, and led to the second storeroom (or possibly chamber) which was against the curtain wall and unlit.

At the south end of the dividing wall between the larder and stores is a square masonry plinth projecting into the larder, which may have supported some feature like a stair to the floor above.

At the first floor the service was of the same dimensions as the larder, with a wooden partition between it and the screens passage. All that is known for certain of its layout is the door from the kitchen at the south end, the fireplace next to this in the curtain wall, and the two-light window in the north wall. If this window gave light to the whole area, it may have been undivided; alternatively there could have been a passage to the kitchen at the south end, a pantry in the middle, and a buttery (with access to the cellar) at the north end. In this

case there would have been the standard three doors to the screens passage, though not in the usual order.

The inner door of the porch led directly into the screens passage, and the screen would have stood directly above the ceiling joist over the storerooms that was supported by posts standing on pad-stones (which can still be seen in the ground: pl. VIII). There would normally be two openings in the screen leading into the hall.

Above the service was a chamber for some household official, reached by a spiral stair in the porch tower, warmed by a fireplace in the south wall and lit by a two-light window. The gallery over the screens passage would have been reached from this room, or by a separate stair from below.

The porch was entered from the courtyard at ground level through a door of tall and elegant proportions, with a two-centred arch in a square frame and a hood-mould terminating in two large projecting stops with brackets to hold lanterns. The external mouldings of the door have a hollow chamfer and three-quarter-hollow flanked by fillets, together forming the frame for the door arch, which is a continuous double ogee. The spandrels simply contain an elongated quatrefoil (fig. 52G and pl. XXXVII).

Beneath a small stone vault a flight of stairs rose to the inner door which led into the hall. Both doors have similar mouldings inside the porch: hollow chamfer, roll, casement and double ogee, all run continuously round the arch (fig. 52G; Harvey, 1978, 248). Of the vault only the arches against the walls and the springings of main ribs and tiercerons survive, and weathered bosses with rose designs (fig. 53). The ribs have hollow chamfers and three rolls (fig. 52E and pl. XXXIXa).

From the porch, a door in the south-east corner led to a clockwise spiral stair giving access first to a room over the porch and then to the room over the service. As the stair required more space than was available in the thickness of the wall, the outer corner was built up with a short length of diagonal walling resting on a double squinch (so designed as to clear the hood-mould of the adjacent window). Inside the hall, the curved profile of the stair actually breaks forward from the wall. The spiral stair ended in a stone-capped octagonal turret, to be seen in early views (pls. XV, XVIIa). The upper room of the porch is small and simple, with a single-light window in the east wall as well as the two-light window towards the courtyard.

The hall is of modest size (41 ft. 4 in. by 23 ft. (12.6 by 7 m.)), with three large windows in its north wall, tall and transomed with two traceried lights (fig. 46). The western third of the outer wall being covered by the passage to the chamber, it was only possible to have one single-light window lighting the high table end, above the stone roof of the passage. As indicated by the stone plinth surviving at ground level, the hearth stood in the middle of the floor, nearer to the high table; above this will have been a louver in the roof. That the walls stand nearly to their full height is shown by the survival of short lengths of cornice along the top of the south wall, one with a beast carved on it. The cornice, and the lack of any corbels below it, suggest that the roof had low-pitched tie-beam trusses resting on wall-plates, with no arch-bracing up to the tie-beam (and that it was not a hammer-beam roof). The walls were undoubtedly whitewashed, and would have been painted. Stained glass is mentioned in the building accounts (below, pp. 155 and 201).

The chambers below the hall at the west end were certainly domestic in character as opposed to the storerooms under the east end, though it is interesting that the external elevation of the

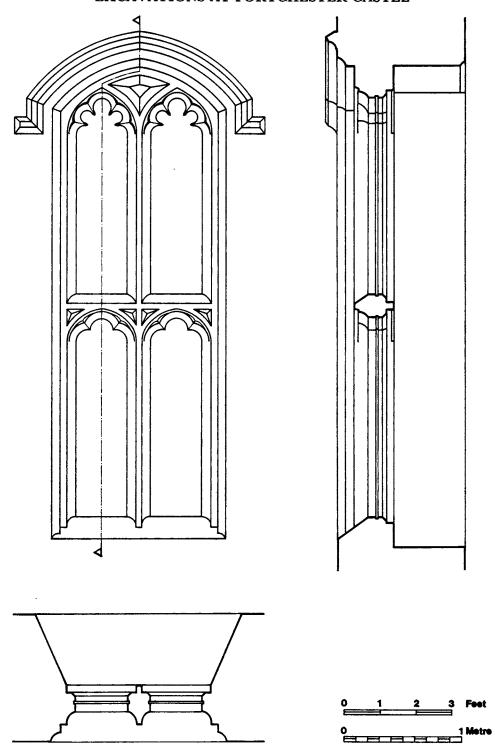


Fig. 46. Hall of Richard II: window

ground floor gives no indication of the different use or of the internal divisions. One door serves for both chambers, leading directly into the first one, which is lit by a two-light window that is displaced eastwards beyond the buttress to match the door and window in the other bay. The second chamber is slightly larger and was reached through a door from the first chamber; its two-light window is closely fitted between the door and the passage building. All three windows below the hall have irregular splays to conform with the internal arrangements whilst preserving external appearances.

The west range (fig. 94), like that on the south, had its principal rooms on the first floor and a series of chambers below. The great chamber (52 ft. 6 in. by 18 ft. (16 by 5.5 m.)) occupied most of the space and had four large windows to the courtyard, which were similar to those of the hall but of a slightly smaller module (fig. 47). Entry to the chamber was through the passage from the hall (there may also have been a stair up to it at the north end but there is no evidence for this); perhaps there was a screen across the chamber at the south end. A large fireplace in the centre of the west wall provided heat, but nothing of this remains except part of the hearth and the base of its northern jamb. A low-pitched roof-line cut into the wall of the keep may represent the roof of this phase, though it is higher than the cornice that runs along the west wall of the chamber (there are similar cornices, with a simple curved profile, for the support of the first floor, running the entire length of the chamber).

The inner chamber (23 by 18 ft. (7 by 5.5 m.)) was reached through a standard-type door in the south-west corner of the great chamber. It must have been a dark room, with curtain walls on two sides and the hall and chamber on the others, but the large arched recess in the south wall seems to have been a window, and not, as at first appears, a fireplace (fig. 95). The sill of this recess was about 5 ft. (1.5 m.) above the floor level, and the wide opening with a flat four-centred arch is splayed out from a narrower and lower square-headed arch in the middle of the wall. From here to the outer face of the curtain there is a steep upward slope and further narrowing. Although blocking and rebuilding on the outside has obscured the original arrangement, it looks as if there was a small outer window into a light-well, with an aperture in the middle of the wall (with a grille, or possibly a glazed window), and a standard window-splay on the inside, to maximize the light. In this way, what must have been the private royal chamber could have been lit in what would have appeared to be the normal manner, yet without breaching the necessary security of the curtain wall. There was a similar opening in the chamber below (pl. XVIII). Once these windows had been made, it would have been possible to block the earlier windows which borrowed light from the hall (described above).

The tower immediately to the west of the inner chamber remained in use as a latrine tower, and was reached through a standard type door. Views of the castle in the eighteenth century show this tower rising above the curtain wall, and like the tower on the north curtain it may have had an upper room (see above, p. 97, and pls. XVI and XXIX).

The northern chamber was above the 'Exchequer Chamber', on the eastward return of the chamber block against the keep. It was reached from the great chamber up three steps in the thickness of the wall, the rebate for the door being on the east side. The room has a fireplace with white tiles at the back, and windows in both outer walls of two lights with transoms, smaller than those of the great chamber (fig. 48). The chamber extends beyond the east wall of the keep, which was no doubt planned to provide access to the keep forebuilding. Steps in the thickness of the wall (there must have been more in the chamber) led up to a standard type

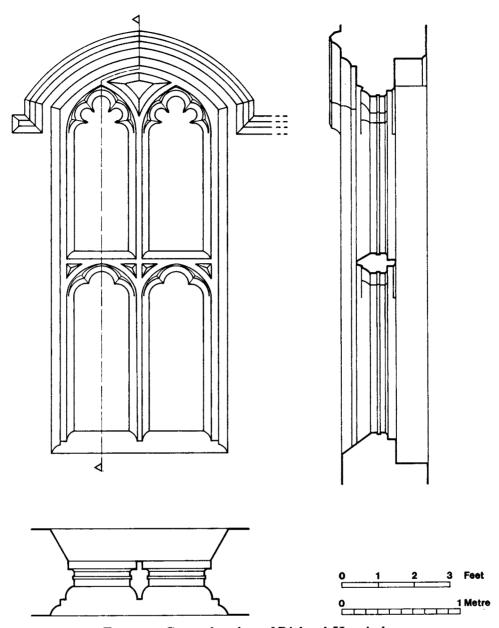


Fig. 47. Great chamber of Richard II: window

door into the chapel. The roof of this chamber was probably a lean-to sloping down from the keep (there is a crease on the wall of the keep at the appropriate height); the only internal evidence is a corbel table built out from the wall of the keep at the level of a wall-plate for a ceiling.

The lower chambers were four in number. To the south was a room below the inner chamber with a similar lighting arrangement to that above: it also had a door to the latrine tower. In

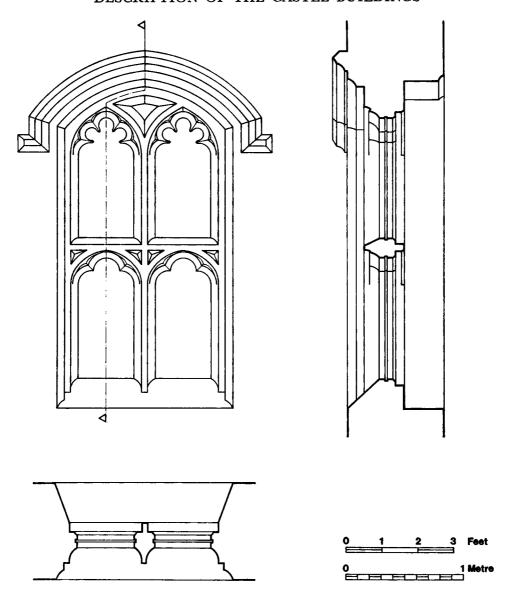


Fig. 48. Chamber over exchequer chamber of Richard II: window

the middle of the range was a large room entered from the court through the moulded door that has been described above (p. 100, fig. 52A). It was lit by a pair of two-light windows, and heated by a fire in the west wall, of which little remains. A stone wall divided the range at the north end of this room; only faint traces of it can be seen on the side walls, but it was substantial enough to alter the angle of the adjacent window splay. This two-light window provided the only light for the third chamber, which reached up to the wall of the keep. There may have been a door to it from the middle chamber in the party wall, and there was a

door from the 'Exchequer Chamber' (with a standard chamfer, but a two-centred arch). The fireplace in the west wall of the chamber is lined with white tiles, doubtless the Flemish tiles of the building accounts (pl. XLa). The fragmentary stone surround has hollow-chamfered jambs and a segmental or low two-centred arch. The last room is the 'Exchequer Chamber', if that name in the accounts be taken to refer to this part. It was of fair size (14 ft. 9 in. by 23 ft. (4.5 by 7 m.)), with a door from the court, three windows and a fireplace. The door is in the extreme western end, and its hood-mould runs into the hood of the adjacent window in the west range; the arch is two-centred, with a double hollow moulding. A fireplace and protruding chimney-stack occupy the centre of the wall, and the tiled reredos is in red tile brick (pl. XLb); beyond the fire towards the east is a single-light window and in the east wall one two-light window.

#### General Discussion of Palace Buildings

Richard II's addition to Portchester was a 'palace' on a small scale, designed to accommodate a king and some part of his itinerant household, but hardly magnificent. There was nothing approaching the elaborate kitchens of Eltham, the bath-house at King's Langley, the luxurious lodgings at Sheen or the stupendous hall at Westminster (Mathew, 1968, 32 ff.). Portchester was rebuilt in an 'austere early Perpendicular manner' (Rigold, 1965, 21) in the confines of a corner of the inner bailey, quite in contrast with the spacious and showy rebuilding of Kenilworth by John of Gaunt at about the same time. The design of the buildings was not without ingenuity, and the arrangement of storerooms and chambers beneath the principal apartments, and yet all behind a regular elevation, has already been described. In a building of larger plan (e.g. Windsor Castle, upper ward) the ground floor might be used entirely for storage, but the limited space in this instance required chambers to be on the ground floor; there was a precedent in the chambers below the hall at New College, Oxford (after 1380: Jackson-Stops, 1979, 177).

Apart from the concessions to symmetry in the design of the elevations, one feature which harmonizes the whole is the standard types and sizes of openings in the walls (figs. 45–50). Most of the plain doors are of the same width, with a four-centred arch, hollow moulding and broach-stop (fig. 45). The windows actually have segmental-pointed arches, though the arched lights almost give them the appearance of being four-centred. Their tracery was minimal, with a transom in the larger two-light windows, and only a small eyelet between the upper pair of lights. All the one- and two-light windows are of standard size (figs. 49–50), and the transomed windows increase in height from the smaller module used in the northern chamber through the medium-size windows of the great chamber to the large ones of the great hall (figs. 46–8).

Sculptural decoration is generally absent, except from the cornice in the hall, of which one fragment survives. The one departure from austerity was in the approach to the hall, where the casement and ogee mouldings were both used in the arches of the porch, and there was a vaulted roof with carved bosses. Decoration throughout the palace, rendered and whitewashed on the outside, will have been provided by painted walls or movable hangings, and glass, the latter being recorded in the building accounts and perhaps to be associated with some that has been excavated (Cunliffe, 1977, 128).

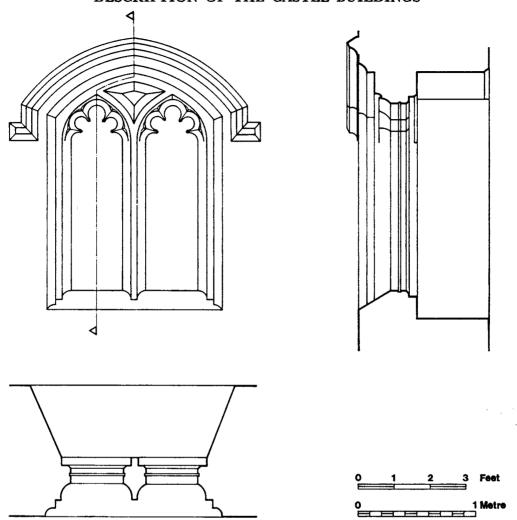


Fig. 49. Richard II: two-light window

A discussion of the building campaign of 1396-9 and the accounts for the work will be found below (pp. 151-62 and 183-205).

# THE NORTH RANGE (CONSTABLE'S RESIDENCE) (fig. 96)

The Norman Buildings (Period 2) (see fig. 12, p. 36)

The Norman range appears to have consisted of a first-floor hall measuring internally 9 ft. 10 in. by 31 ft. 2 in. (3 by 9.5 m.), built against the north curtain wall over a vaulted undercroft, with an external staircase at the west end providing access first to the hall and then to a door on to the wall-walk on the curtain wall.

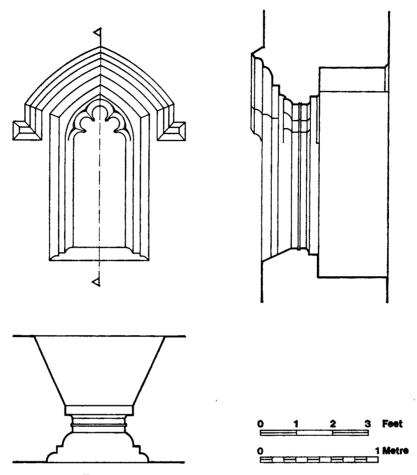


Fig. 50. Richard II: single-light window

Little of the original building has survived the extensive fourteenth-century rebuilding above external ground surface, but sufficient of its foundations remains to show that it was built of flint rubble, possibly with internal ashlar facing, of which only the lowest course survives. At the south-west corner was a clasping buttress faced with ashlar. The treatment of the east end is unknown but for reasons discussed above (p. 38) it is thought to have ended clear of the inner bailey wall and would therefore probably have been treated in the same way as the west end. Access to the undercroft would have been by an internal stairway which may, in the manner of Christchurch Castle, have been set in one of the corner angles. Since no trace of such a feature can be seen at the south-west corner, if it had existed it would have been in the south-east angle.

The responds for the vault survive on the long walls, and indicate that it was a three-bay structure; the four arches in ashlar would have been used in setting out the vault, and the space between them filled with stones set on edge (Blair, 1978, 49-54). The outline of the vault can be seen in the line of voussoirs in the base of Assheton's Tower. On the curtain wall

a short length of the springing of the vault survives, where the wall-facing breaks forward in a curve.

Of the hall level nothing is known except that the entrance would have been in the centre of the west wall. A drawing of 1733 indicates a round arch in this position (pl. XV).

From the first-floor landing steps, probably a wooden ladder, gave access to a small doorway set in the curtain wall leading to the wall-walk. This opening is a puzzle. It could have been reached from the courtyard by a stair-ramp rising (like that at Chepstow Castle) along the west face of the hall, past a first-floor doorway opening east, to the wall-walk. But why complicate access by switching to short mural stairs for the last 3 ft. (1 m.) or so of the rise? This is the only part of the curtain with an inner (parados) wall, here almost as high as the parapet further east and south-west. A narrow wall-walk necessitated a double stair to prevent the isolation of part of the wall-head by the open slot to give head-room above the stair. The opening, therefore, seems to have some other purpose. Further west there seems to have been a twin, now blocked but traceable both internally and externally on the north wall (above, p. 84). Are they a pair of windows to some upper chamber, west of the hall? No trace of a south wall was found in excavating the area, so such a design was either abandoned when the north forebuilding was inserted, or only a timber-framed structure was planned against the curtain here. The ground-level doorway below has a pointed exterior head and segmental inner arch, but it could have replaced an earlier postern door here. A course of large squared rubble midway up both wall faces, above an unusually close-set row of putlog holes passing right through the wall here, might belong to a former wooden gallery overhanging both wall faces (and the doorway) and possibly returning to the keep entrance. A ground-level pentice of this type existed at Dover Castle, linking keep to hall, and the hall-block at Richmond Castle had a high-level timber gallery externally. A late twelfth-century example in stone can be seen at Framlingham, where the postern at the lower end of the hall was approached by a loopholed gallery and foretower.

## The Fourteenth-century Modifications (Period 5) (fig. 15)

Although the remains above ground are slight, and the documentary evidence is inconclusive, it would appear that the north range was partly rebuilt in the second half of the fourteenth century. Excavated structural evidence shows that at the west end new stone footings for a stair were built above the contemporary ground surface, and that at about the same time the south-east corner was removed and new foundations built in one with the foundations of the east range. Such a thoroughgoing renovation implies that much of the original superstructure (except perhaps the west wall) was demolished and substantially remodelled.

Of the interior of the building at this date nothing survives apart from the western respond and jamb of the fireplace in the north wall and the extensive patching with ashlar masonry of the cavity formed by the fireplace and chimney. The form of the fireplace arch was either segmental or segmental-pointed, judging from the respond, and this is consistent with other work of the fourteenth century in the castle. There is no certainty about the width of the fireplace, but given the likely size of the room and the extensive blocking work, it has been reconstructed as a large one (fig. 96, section A-A). The rebuilding of the stairs at the west end implies continuing access from that direction. At the other end of the range, the space in

the north-east corner may well have been a small tower, but all evidence has been removed by the building of Assheton's Tower.

There is no evidence for the height of the walls of this building or its predecessor, apart from a corbel on the curtain wall next to Assheton's Tower (and the stub of the next one to the west) which probably gives the height of the wall-plate. The view of the ruins in 1733 shows part of the west gable of this range, and a series of small sockets in the face of Assheton's Tower can be interpreted as joist-holes for an attic or ceiling (probably of post-medieval date) in a roof of steep pitch. As it is perhaps unlikely that a low-pitched medieval roof would have been replaced with a more steeply gabled one at a later date, it is probable that the medieval roof was steeply pitched, and thus tiled.

## Assheton's Tower (Period 6) (figs. 16, 90 and 96)

The domestic layout of this range becomes more intelligible after the building of Assheton's Tower. It is difficult to see how much of the west wall of the tower is new work, though only the lowest stage can be shown to be of the earlier phase; quoins at the south-east corner were built right down to the ground and abutting on to earlier work in the east and north ranges, which implies extensive replacement.

On the ground floor a door was inserted, giving access to the base of the tower; here was an unlit room with cesspits in the southern half, emptying through a drain in the curtain wall out into the ditch on the east. On the first floor a door next to the north curtain led from the hall through a short passage to a small room with a latrine in the south-west corner, and adjacent to this the walled-in shaft of the latrine above. The area of this room is restricted by the thickening of the east wall to accommodate the gallery at parapet level.

The upper rooms in Assheton's Tower were domestic in character, though their military aspect has been described above (p. 95). They were reached through a door from the parapet walk on the west, which in turn could only be reached from the hall by the stone stair at the west end of the range. There are two rooms, that on the second floor (at a level lower than the parapet walk and approached down a spiral stair) containing a large window-seat in the south wall, and beside it a latrine; there is a fireplace in the western wall. The third-floor room is of larger dimensions, being above the level of the parapet and the covered wall-walk. It is well lit with small rectangular windows in the north and east walls, and a two-light window in the south wall with a gun-loop adjacent to it. In the west wall is a fireplace (fig. 90). These two chambers formed a private suite with carefully restricted access, and doubtless functioned, in association with the hall below, as the constable's residence.

Assheton's Tower is named after the constable Sir Robert Assheton (1376-81) (Colvin et al., 1963, 789), though the only record of its building is the account roll for 1385 which apparently includes the final work on the tower (§116). The stonework details of the tower are not unlike the later works of 1396-9. Only on the south wall were large windows admitted, and the transomed window to the second-floor chamber is of the same type as those in the northern chamber next to the keep. The upper chamber in the tower has a two-light window in a square frame, with a panel of blank tracery above it and a heavy rectangular hood-mould ending in square stops. In the cornice below the parapet is a large corbel with a rose carved on it, set above the centre of the window (fig. 51).

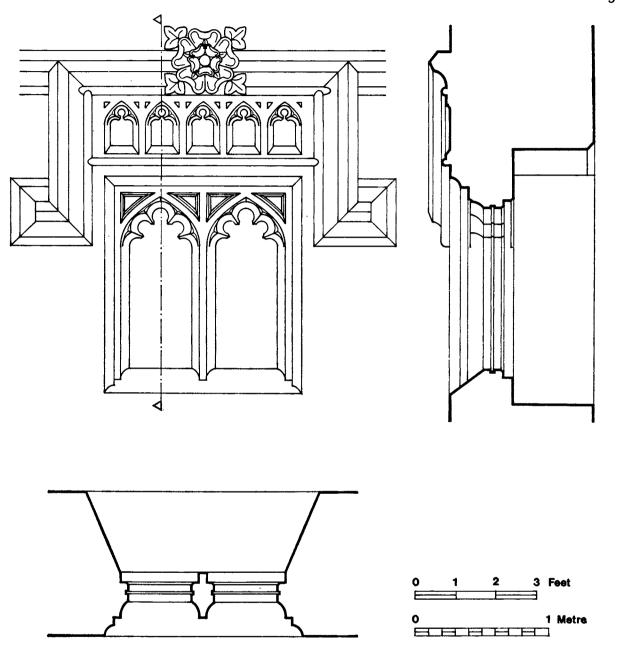


Fig. 51. Assheton's Tower: third-floor window

The Bastion Chamber (Period 7) (fig. 96, pls. XXXb and XXXII)

The next addition to this range was the rebuilding of the bastion on the north curtain. The details of this work are similar to other buildings of the 1396-9 campaign, the door and window being of standard modules (as figs. 45 and 49). A chamber was built in the bastion at parapet level, the tower being solid or filled with rubbish below the corbels that support the

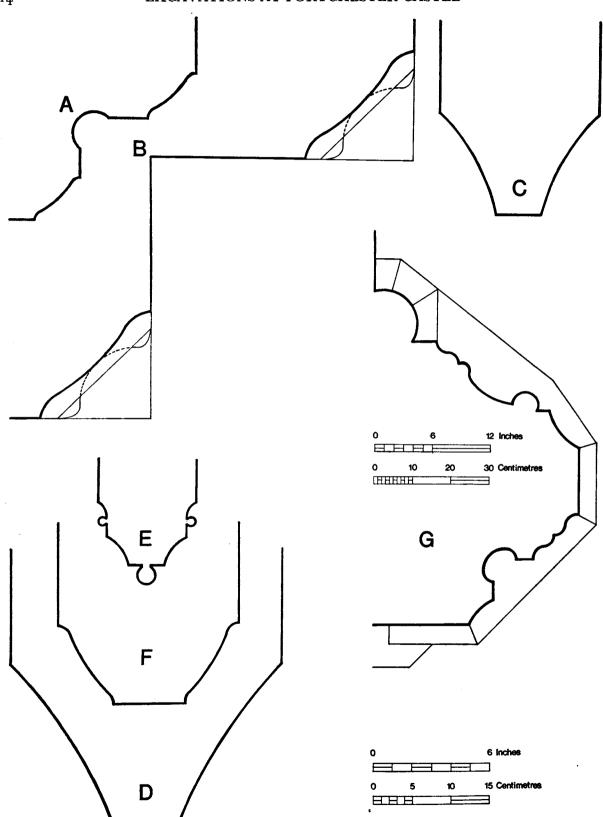


Fig. 52. Mouldings: A, west range door; B, door jambs of the three castle gates, c. 1320; C, land gate rib; D, keep basement rib; E, hall porch rib; F, gatehouse, bay II rib; G, hall porch door

floor. A door and two-light window take up most of the south wall, and there is a fireplace in the east wall. Immediately next to the bastion on the east a door leads out to a latrine that is built on a massive squinch across the corner of the bastion and curtain wall (pl. XXXb); inside it is a well-preserved rebate for a wooden seat.

With this work, the constable's residence was at its greatest medieval extent. Although somewhat difficult of access, involving the use of an outside stair and a walk along the parapet, this was a fairly commodious dwelling, gaining in security what it lost in domestic convenience.

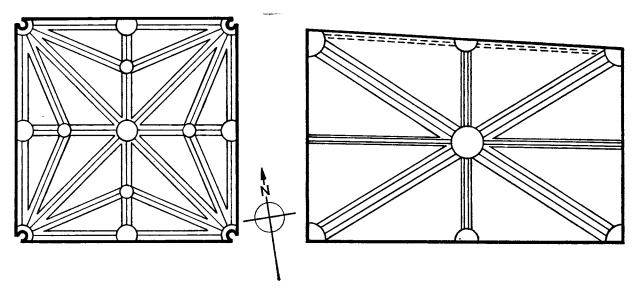


Fig. 53. Reconstructed vaulting plans: left, porch; right, gatehouse

## The Seventeenth Century (Period 8) (fig. 17)

As far as is known, the north range continued essentially unchanged until the beginning of the seventeenth century when it was once more modified, as part of the works of Sir Thomas Cornwallis (which are described on p. 117 below). Alterations to the basement level were small-scale. A central doorway was added in the south wall with steps leading down to the basement-floor level. The wall on either side was refaced, windows were probably inserted into the basement, and two projecting buttresses added to the wall, presumably of the same kind as those added at this time to the east range.

Nothing survives of the upper level, but as can be seen from the 1733 drawing it had new windows like those to be seen in the east and south ranges (pl. XV). Access continued to be by the external staircase at the west end, though there may also have been an entrance at the east end, where an external staircase leading to the east wing was added (fig. 17). The slight evidence for a pitched roof at this date has been mentioned above.

## THE SOUTH-EAST AND EAST RANGES

Twelfth- and Thirteenth-century Structures (Periods 1-3) (figs. 12, 13, 97)

The original *south-east range*, built into the angle of the inner bailey wall, consisted of two rooms, a main chamber and an irregular subsidiary room which extended into the corner tower. When this was built there was no east range, so the whole of the elevation was open to the courtyard.

The walls were of rubble containing quantities of limestone and the details were finished in carefully tooled ashlar of Binstead limestone. The principal door is thought to have been sited at the north-west corner, but the area was not examined in excavation. An internal door, joining the two rooms, had square jambs. In the north wall was a fireplace of which the hearth and lower part survive, together with the inner curve of the chimney embedded in later masonry. The chimney-breast, projecting to the north, was built entirely of fine ashlar of Binstead limestone (pl. XIVb).

Of the superstructure little can be said. Externally the wall face was enlivened with a course of Caen stone ashlar, now approximately 3 ft. (1 m.) above ground surface. Above the doorway at the west end of the north wall are three groups of stones carved in low relief: a single block with multiple chevrons above slightly curved narrow strips of chip-carving and simple diaper-work. These are clearly ex situ, being built into the seventeenth-century refacing, even though the 1733 view (pl. XV) shows a doorway lower than the present one and round-headed. The building was in all probability single-storeyed with a sloping roof covered with Devon slate. The windows shown in the reconstruction are entirely hypothetical.

The first east range was added probably in the thirteenth century. Little can be said of its first phase (period 3), which was built of flint and rubble and was most likely of single storey with a lean-to roof. Only at the south end does any masonry survive above ground, where there is rubblework surviving to a height of some 6 ft. 7 in. (2 m.). The range was divided into two, with separate doors into each part. At the north end, the smaller of the two rooms was unlit and was probably a store or stable; the larger southern room seems to have been a kitchen.

### Fourteenth Century (Periods 4-7) (figs. 14, 15 and 98)

Throughout the fourteenth century there were no structural alterations to the south-east range, though archaeological evidence was found for a series of domestic and industrial activities, some of them doubtless concerned with workshop activity for new building works; it is also possible that the range was unroofed for some time.

The east range, by contrast, went through several transformations. At some time, probably in the first half of the fourteenth century (period 4), the range was divided with party walls to create three rooms of nearly equal size. The two existing doors continued in use and a new door was cut towards the centre: no details survive. Cooking and domestic activities seem to have continued in the central and southern rooms (though it was about this time that the kitchen was added to the hall across the courtyard).

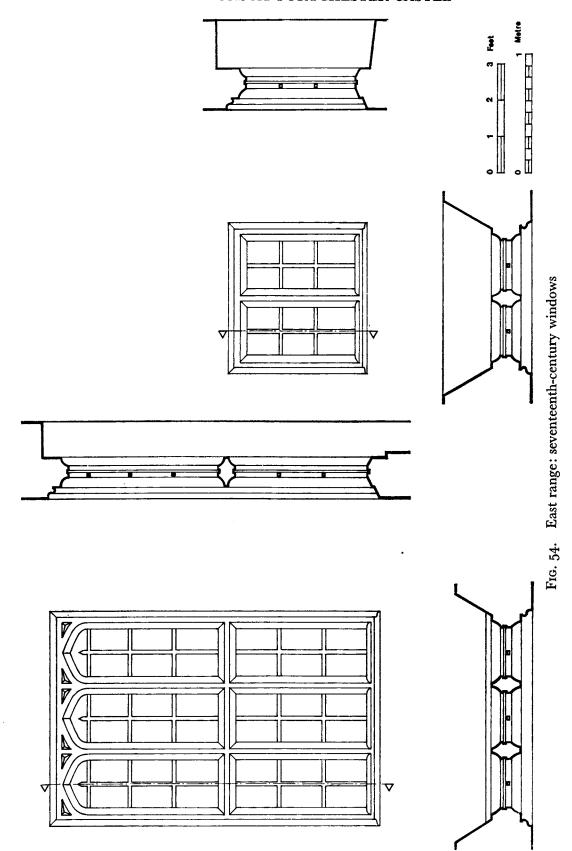
Some while after this, perhaps about the middle of the century (period 5), the reorganization of the north range led to the northern end of the east range being walled off, so that it

could no longer communicate with the east range. The remainder was divided into two rooms by a cross-wall (figs. 15 and 98). The main (west) wall of the northern room was entirely rebuilt on the old foundations in unfaced rubblework, of which substantial portions survive, including the greensand jambs and two-centred arch of the new door. In the southern room more of the original west wall was retained, but the door was replaced, also with greensand jambs, but with a four-centred head (which may be later). In all probability the range was provided with windows in the same positions occupied by the later windows of the seventeenth century. The roofing of the range was in Devon slate, and a faint impression of the lean-to roof-line can be seen against the south wall of Assheton's Tower (in which the small latrine window has been carefully sited so as not to be obscured by the roof). The floor levels were raised at this time, and in the southern room a tank and oven were constructed. These may have been only for baking or brewing, as at about this time the kitchen in the south-west range was rebuilt. No alterations to these ranges were made in periods 6 and 7.

### Seventeenth-century Alterations (Period 8) (figs. 17, 54 and 99)

The whole of the eastern part of the castle was reconstructed by Sir Thomas Cornwallis and is probably that part described by Norden in 1609 as a 'buyldinge not longe since in part newlie erected contayninge 4 fayre lodging chambers above and as manne roomes for office belowe' (see p. 206). The east and south-east ranges were doubled in height, given buttresses and a new fenestration, and roofed in slate. In the south-east range, the west wall was completely rebuilt and the east end was reordered, as the access door to the corner tower had been blocked and another cut in the south-east corner of the room. This rearrangement was necessitated by the building in the fifteenth or sixteenth century of a large oven against the east wall, for which the basement and the chimney scar in the curtain wall still survive (above, p. 49). Presumably this wing was the kitchen of the new residence and there is a large fireplace in the south wall, next to a blocked door to the garden outside the wall (see below). In the east range the internal partition was removed though the earlier doors were retained; there is no indication of its use. On the exterior elevation new square windows were inserted at the ground floor, with plain, bold mouldings, iron bars and perhaps wooden mullions (fig. 54); the existing wall was patched and rebuilt with rubble and ashlar up to the level of the string-course. The buttresses and all of the first floor were built in fine, closely jointed ashlar, and the windows (again plainly moulded) were of three lights with transoms, the stone heads of which survive in some of the windows. These have flat, four-centred arches, though the lower mullion was probably plain (fig. 54). The roof of both ranges was at a pitch of about 45 degrees, judging by the traces left on the wall of Assheton's Tower (whose large, second-floor windows must now have been somewhat obscured). At the north end of the east range is a blocked door at first-floor level (pl. XIb), which was doubtless reached by an external stair (which may also have given access to the room in the north range). The external appearance of the new work must have seemed rather old fashioned, with late Gothic windows and no concessions to symmetry.

The internal arrangements are hard to determine, as the wall surfaces bear traces of later alterations and refittings which are not easy to distinguish. On the first floor the east range was probably divided at least into two, with a smaller room at the north end (probably with a fireplace) separated by a partition from the larger, heated one to the south. The large brick



fireplace in the east wall (pl. XIa) would then have been in the middle of the room, and the supposed internal division would explain the apparently asymmetrical arrangement of windows outside. This room seems to have had at least one window in the curtain wall, looking east. The south-east room also seems to have had a fireplace in its south wall (unless this is later work), and probably a partition cutting off a smaller heated room. The view accompanying Norden's survey (pl. XLIII) actually shows three chimney-stacks in the east range and two in the south, with four windows cut through the east curtain and at least two in the south-east tower; their number is probably exaggerated.

Although in ruin these ranges seem rather plain, they would have been quite comfortable with panelling and plasterwork. The suggested arrangement would place Norden's '4 fayre lodging chambers' round the north, east and south sides of the courtyard, making a much larger dwelling than the north range on its own. The walled garden shown by Norden east of the gatehouse was probably accessible from the south-east range and, if not, a kitchen garden will have added a further private amenity to the lodgings.

# IV. THE SEQUENCE AND DATING OF THE CASTLE BUILDINGS

### INTRODUCTION

The broad chronological sequence reflected in the development of the castle buildings has been discussed in some detail above and the evidence for it has been made explicit in the descriptive text and accompanying plans and sections. Although there are some uncertainties in the exact phasing of the earliest buildings, the sequence as a whole is tolerably clear. It remains now to consider the dating of the individual elements. Three classes of evidence are available for this calibration: documentary, architectural and archaeological, each of which has been treated in individual sections elsewhere in this volume (pp. 5-71, 72-119 and 134-209). It is the purpose of this present chapter to attempt to integrate this evidence, in so far as it relates to the dating of the buildings.

The documentary evidence, though extensive, is frequently difficult to relate to individual buildings: it is not always possible to be sure that every 'order to work' recorded in the documents was actually carried out; it is difficult to identify the buildings referred to; and there is no certainty that work, when undertaken, was of sufficient magnitude to appear in the archaeological record. Having said this, however, the major building projects of 1321–6 and 1396–9 can readily be identified, while the individual buildings constructed in the 40 years between 1191 and 1229 can be isolated with a degree of assurance. Correlations of this kind provide a framework within which the other evidence can be assessed.

Considerations of architectural style are helpful in suggesting a sequence for the twelfthand early thirteenth-century buildings, but for the fourteenth century the documentary evidence offers a more precise dating method and indeed is of particular value in assigning dates to specific mouldings and details. Archaeological dating evidence, in this instance stratified pottery, offers little chronological precision: it is the documentary evidence which helps to date the pottery.

PERIODS 1-2: c. 1100-70 (fig. 55)

The origin and development of the castle buildings in periods 1 and 2 pose a number of questions to which there is no firm answer, but if we are correct in suggesting the existence of an early hall (1A) then the structure must date to the late eleventh or early twelfth century.

The encasing of the keep in ashlar (together with the south forebuilding), the digging of the ditch, cutting of the west postern and construction of the inner bailey wall (periods 1B and 1C), in whatever order they were undertaken, should be assigned to the first half of the twelfth century. Archaeological evidence for dating is sparse: the curtain wall post-dates the

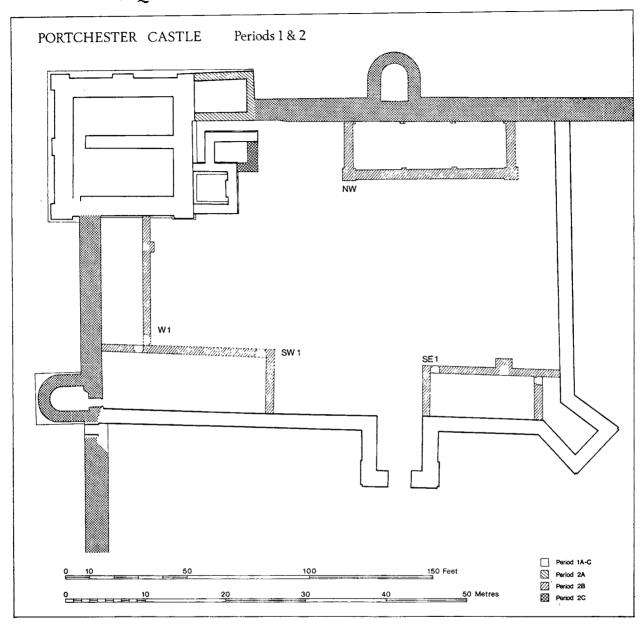


Fig. 55 (for alignment of figs. 55-61, cf. figs. 2-3)

filling of a pit (pit 124) which contained Portchester ware for which an eleventh-century date is probable. Elsewhere no datable material was found in association with these early structures. Nor is the documentary evidence of much value. References to Portchester buildings only occur on the Pipe Rolls from 1173/4 and then they record only minor repairs on the defences and keep, which by this time had presumably been standing for some time. Architecturally the early keep of phase 1B is likely to pre-date Rochester (1127-9) but has significant simi-

larities to Corfe, which was erected during the reign of Henry I. On these grounds a date of c. 1120 is suggested. Historically it could therefore be the work either of Robert Mauduit, if before 1120, or of the King, if between 1120 and c. 1128. The inner bailey wall with its open-backed square towers has similarities to work at Carisbrooke (before 1136) and Sherborne (before 1139 and possibly before 1122). Thus the completion of the defences may have been undertaken by Henry I (between 1120 and c. 1128) or William of Pont de l'Arche soon after. The heightening of the keep (period 2A) must have been completed well before the Pipe Rolls began to record minor expenditure on the tower in 1173-4. One possible context is immediately following 1153, when William Mauduit II regained the castle.

It was during period 2 that three separate buildings were put up around the inner bailey: a single-storey hall with an adjacent wing in the south-west corner (WI and SWI), a two-roomed range in the south-east (SEI) and a two-storeyed building with an upper hall, against the north wall (NI). SWI/WI post-dated the construction of the keep and inner bailey wall; SEI was also put up after the inner bailey wall, while NI is physically unrelated to the early defensive structures. No relevant archaeological dating evidence was recovered.

Stylistic considerations are of little help except to indicate a general twelfth-century date, but the blind arcade set in the north wall of the hall (SW1) has certain stylistic similarities to the windows of the main hall of the keep and to the ornamentation of the priory, which was founded by 1129. Thus a date in the 1130s or a little later would be appropriate (see also Rigold, 1977). The other buildings in the inner bailey are without surviving decoration, though it has been suggested that the vault of N1 may belong to the first half of the century (Blair, 1978, 53). The purchase of a vast number of slates in 1180 (§2) and repair work on the King's houses (domos Regis) in 1183 (§3) might be taken to suggest that some or all of these ranges were in existence by then. Thus, although the dating evidence, such as it is, is all indirect, it seems highly probable that the buildings of period 2 were erected between c. 1130 and 1170. There is no need, however, to suppose that all were put up at the same time: indeed it is more than likely that facilities were added gradually to augment the somewhat austere accommodation provided in the keep.

PERIOD 3: 1170-1320 (fig. 56)

Two building projects can be recognized archaeologically and assigned to period 3: the extension of the chapel and construction of an adjacent single-storeyed chamber (keep 3 and NW1) and the building of an east range (E1), between the northern range and the south-east range. There are no groups of closely datable archaeological material associated with either range, nor do distinctive architectural details survive, but the documentary record is informative.

The more substantial building works recorded during this period were those in the reign of King Richard, in 1191-3 (§§4-6), and King John, in 1200-3 (§§7-10), when operations were in progress on the King's houses (domos Regis), and in 1208-11 with the construction of a chamber and wardrobe (una camera et warderoba) (§§11-13). Under Henry III a kitchen and small chamber were built in 1229-30 (§§20-22), and various works on the 'defects of the castle' carried out in the 1250s (§§30-40).

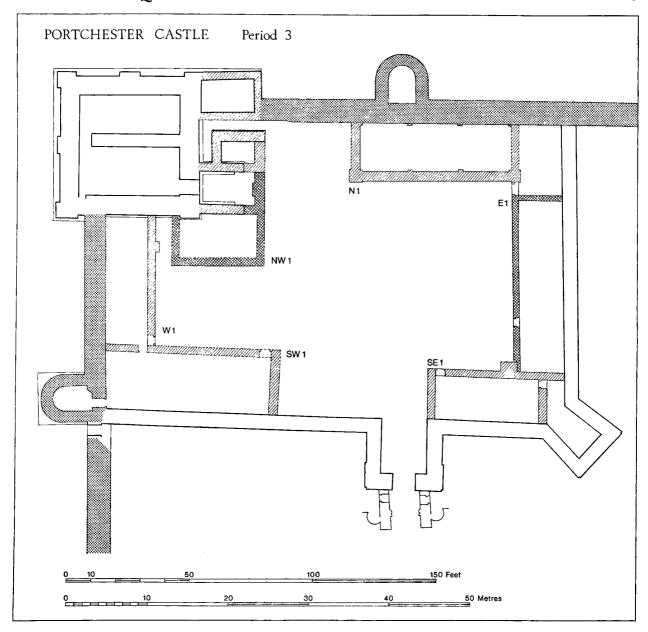


Fig. 56

In addition to these major programmes of construction, repairs to domestic buildings were ordered or carried out in 1218–20 (including the keep (§§15–17)), a tower in 1226 (§18), buildings and the keep in 1229–30 (§§19–23), the hall in 1243 (§24), the keep in 1253 (§§27–9) and again in 1256–9 (§§33–7 and 41). Work was done on the chapel in 1260 (§§38–9), the bridge in 1261 (§43), a tower in the outer bailey in 1264 (§44), possibly with other work in the castle (§45), and the castle buildings in 1267 (§46). Yet in 1274 an extent records that the

buildings were old, ruined and unsuitable for residence (§47). Work was done on the buildings and mill in 1289 (§§48-50) and renovations were also undertaken in 1296 as part of a more extensive programme of refortification on the gates and walls (§§51-2). Throughout the century small sums of money were regularly spent on various unspecified works, most likely concerned with keeping the defences in good order (Colvin et al., 1963, 784 n. 13).

Correlation between the archaeological evidence and the documentary records, must, of necessity, be tentative, but it is reasonable to assume that the new buildings put up in period 3 were those recorded in the 40 years between 1191 and 1229, since the later work was on a comparatively small scale. The work on the 'King's houses' presumably reflects modifications to existing structures of period 2 which would have been anything up to 70 years old by now. This leaves the two buildings put up in 1208–11 and 1229–30. It is tempting to correlate the 'chamber and wardrobe' with building NW1 and the 'kitchen and small chamber' with building E1, which from the archaeological evidence was, indeed, a kitchen with a separate room partitioned off in the north-east corner. The correlation between the documentary and structural evidence is impressive but unproven. Of the later works carried out throughout the thirteenth century most appear to have been small-scale, frequently involving reroofing. No trace of these operations can be recognized, except possibly in the earlier work in the gatehouse Bay II, which may belong to the 1250s campaign if not the 1290s, and the topmost part of the keep which might be of the 1250s.

## PERIOD 4: 1320–50 (fig. 57)

The fourth period of rebuilding at Portchester entailed: the construction of a completely new range to the east and south of the keep (NW2) and modifications consequent upon it to the adjacent west range; work on the main hall, including the addition of a kitchen (SW2); internal modifications to the east range (E2); and the reconstruction of the gatehouse (Bay II). The work in the western part of the inner bailey was far-reaching and was evidently aimed at completely renovating the outmoded and derelict buildings, now nearly 200 years old. The result was the creation of spacious residential accommodation arranged around a small private garden separated from the rest of the courtyard by a fence. The extended gatehouse added a touch of grandeur while at the same time improving the defensive characteristics of the castle.

The most plausible context for all or much of this reconstruction is the programme of work initiated by Edward II in 1320, and completed six years later at a total cost of well in excess of £1,100 (§\$53-75). The roll of 'particulars' for 1320-1 is especially informative (§53). Stone from the Isle of Wight was brought in for the foundations of the 'bridge within the castle' and work on the middle, or inner, gate, is recorded, leaving little doubt that the first extension to the gatehouse was being put up at this time. Meanwhile the roofs of the keep, and the King's chamber or hall, were being repaired. The accounts for the period 1321-5 are less specific (§55), but extensive reroofing, involving considerable quantities of lead, was being undertaken. The buildings mentioned in the inner bailey include the keep, the middle gate, the chamber over it and the chamber outside it, the wardrobe in the tower at the head of the hall

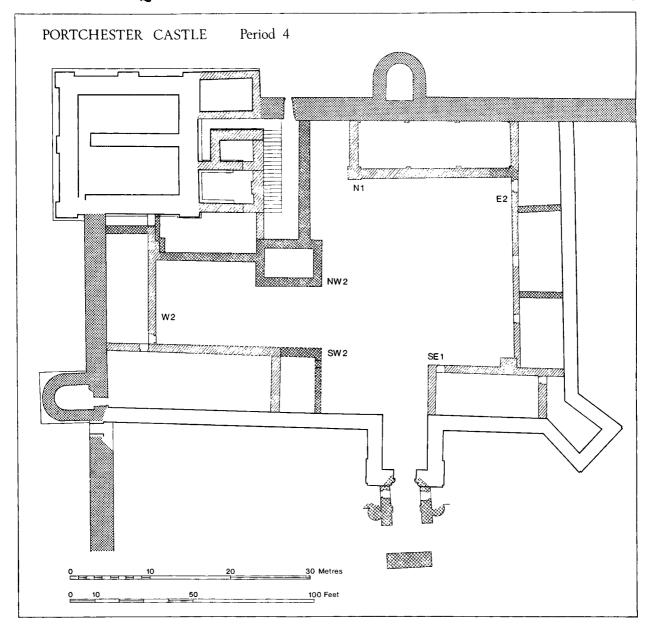


Fig. 57

(i.e. the reused Roman bastion), the hall itself (building SW2) and the chamber adjacent to the hall (building W2). Further references relating to the year 1324-5 note 'the construction of a hall and other buildings in the castle' (§62), while in the next year (1325-6) what is presumably the same building — 'the hall of the King's household' — was being roofed (§64). A separate item records carpenters working on a 'new chamber' in 1326 (§66) but there is no reason to suppose that this building was necessarily located in the inner bailey,

and a 'new chamber in the outer bailey' was roofed in 1324 (§58). The new buildings begun in 1324-5 can most plausibly be identified as the new range NW2, the outer forebuildings of the keep.

The work undertaken between 1320 and 1326 both in the inner bailey and at the land and water gates, which are specifically mentioned at this time (Cunliffe, 1977, 10–21), displays certain similarities, in particular the use of fossiliferous Bembridge limestone for door and window surrounds, the mouldings of which are closely similar in style and detail (see figs. 42 and 52B). Although building NW2 was subsequently demolished, and nothing remains above the footings, the postern door cut through the north curtain wall, presumably at this time, belongs to the same type, providing a further indication that the range should be assigned to the period 1320–6. The postern in the western wall of the fort just south of the inner bailey wall was also rebuilt in the same style.

Although the programme of repairs and rebuilding undertaken by Edward II was extensive, a survey carried out in 1335 (§77) listed nearly £200-worth of defects in the building, partly concerned with the defences, though a 'building near the keep' was described as ruinous and other buildings within the inner bailey were unroofed. It is possible that the north range (N1) and the south-east range (SE1), which appear to have been untouched in the earlier repair works, are the buildings referred to, though alternatively the newly built outer forebuilding (NW2) may be meant. In this context it is relevant to note that some archaeological evidence survives to suggest that the south-east range was indeed unroofed at this time (p. 43).

Most of the defects were put right between 1336 and 1338 (§§78-81), understandably the principal effort being spent on the defences. Two of the domestic buildings — the Queen's chamber and the knights' chamber — were, however, repaired. Identification is uncertain (see p. 143) but they may possibly be equated with the north-west or north, and the southeast ranges respectively. Further repairs to unspecified houses and buildings were ordered to be undertaken in 1339 and 1340 and again in 1344 (§§82-3, 87). Additional grants were made in 1346, when the sheriff was ordered to repair the hall, kitchen and existing chambers and to build a new chamber (§§88-90), and again in 1351 for general renovation including the replacement of a bridge (§91). The nature and location of the 'new chamber' is entirely unknown, unless of course the work referred to was the repartitioning of the east wing to create three rooms where previously there had been only two. No other possibility presents itself in the inner bailey.

PERIOD 5: 1350-80 (fig. 58)

Period 5, defined on archaeological and architectural grounds, saw an extensive programme of rebuilding which is only dimly reflected in the documentary evidence: the hall, kitchen and the adjacent residential range (buildings SW and W) were almost totally reconstructed in two storeys, a tower was probably erected in the north-east corner and the north and east ranges were refurbished.

This programme of work began in 1356 when we learn that the castle buildings underwent

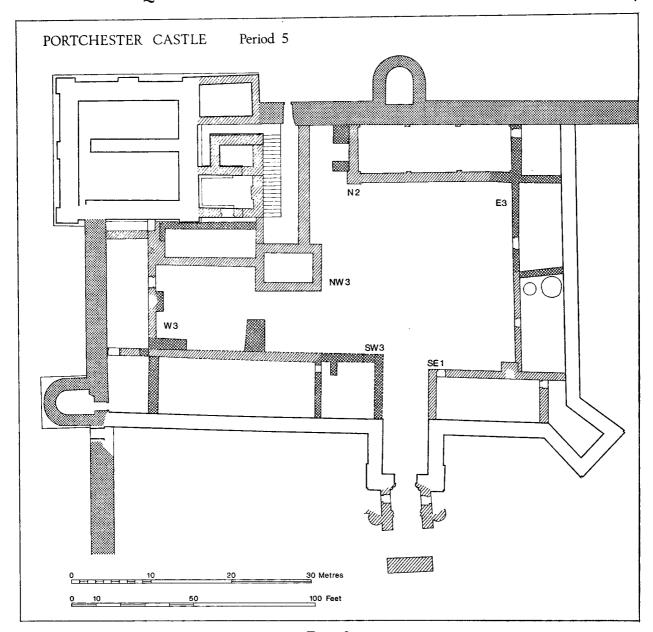


Fig. 58

general repairs, during which time a 'new chamber' 104 by 25 ft. (31.7 by 7.6 m.) was built at a cost of over £50 (§§92-4). The only reasonable possibility is that this new chamber is the refurbished and extended hall (SW3), the overall measurements of which are 26 ft. 6 in. by 112 ft. (8.0 by 34.1 m.) (or 92 ft. (28 m.) if only the hall and kitchen are included). Although the measurements differ slightly, no other range is closer in size nor was any other so extensively reconstructed. Repairs and modifications to the west wing (W3) and north-west wing

(NW3) may have been carried out at this time though they may belong to period 6 (see below). The changes in the west range were integral with and in the same style as those undertaken in the hall.

Whereas no particulars survive for the expenditure in 1356-7, they do for the works of 1362, when over £90 was spent (§§95-8). This included carpentry and some stonework on the hall, chamber and bakehouse, with releading of the keep and a reconstruction of the chapel. Unless this is to be seen as the work of period 5, it must represent the completion of the work begun in 1356 (see pp. 145-7). It is possible that the account also includes the alterations made to the east range in period 5.

A comparable sum was spent in 1369 but seems to have been reserved for the renovation of the defences ( $\S\S101-3$ ). 1376-7 saw a further programme of repairs and improvements ( $\S\S105-13$ ), when £116 was spent, unspecified except for the rebuilding of the mill ( $\S107$ ).

Period 6 is recognizable archaeologically by the construction of a tower, known as Assheton's Tower, in the north-east angle of the inner bailey. Sir Robert Assheton was constable of the castle from 1376 to 1381, during which time the tower was presumably begun (p. 303). It was not finished until 1385, when iron fittings, hinges and bolts were purchased for it and the roof was leaded (§116). The same year (1385) saw the construction of the second extension to the gatehouse: foundations were being dug and new bridges built and we also learn of the completion of an unfinished structure 14 ft. 6 in. (4·4 m.) high, 16 ft. (4·9 m.) long and 6 ft. (1·8 m.) wide (the approximate measurements of the bridge-pier in the gatehouse Bay III). The new wall built in the Queen's chamber may perhaps be identified with the wall built in NW3, if that had not been done in period 5 (p. 92 and below). The chapel was also refitted.

In period 7 extensive changes were made in the western part of the inner bailey. The north-west ranges of the 1320s were swept away and the existing west and south-west ranges were partially demolished before rebuilding began on a grand scale. The resulting structures remain substantially intact today.

The rebuilding programme is well documented (§§121-7). It began in April 1396 and was completed in August 1399 at a cost of some £1,600. The rolls of particulars (printed below) give a detailed account of the progress of the work. In 1396 a chamber between the keep and Assheton's Tower, presumably the north range, was repaired. Little now remains of the structure except the lower courses of the walls and traces of the undercroft vaulting, which must be earlier (p. 110). The repairs are therefore likely to have been to the main hall at first-floor level or above. Labourers are also recorded to have been removing old walls, and

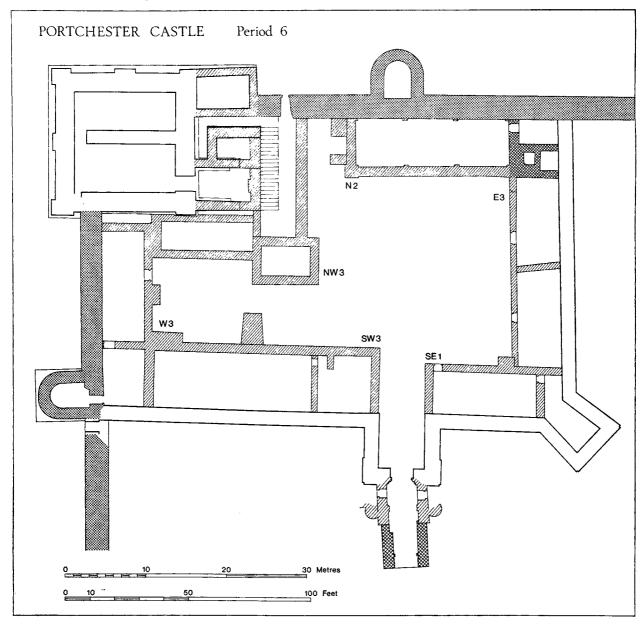


Fig. 59

building new ones apparently in the same area. If this is so then the account must principally refer to the removal of the north-west ranges (NW3) put up in the 1320s and demolished in the period 7 building programme, and the construction of the chamber ranges on the west (W4 and NW4). In 1397 the chamber ranges were being fitted out and the main hall range was erected (building SW4), being continued in 1398. Much of the last year, 1399, was spent raising and leading the roofs, paving, glazing windows and making doors. The build-

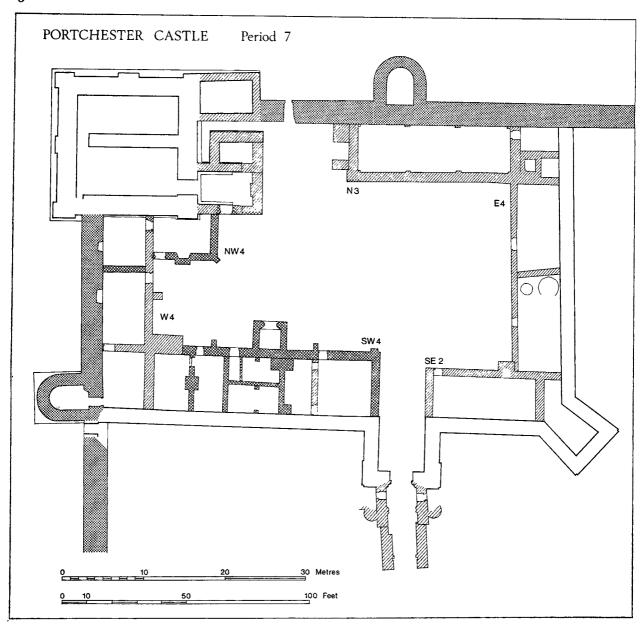


Fig. 60

ings named in the accounts are the hall, kitchen, pantry, buttery and chambers beneath them (SW4), the chapel (in the original forebuilding), the King's chamber, the great chamber and lower chamber beneath it (W4), the exchequer and the high chamber adjacent to it. The exact location of the last two are uncertain, but are likely to have been in the eastward return at the north end of the west wing (NW4).

Other work was carried out in parallel with the construction of the new royal lodgings: the

keep and forebuildings were reroofed with lead in 1396 and two years later the basement of the keep was vaulted. All three gates, the land gate, water gate and gate to the inner bailey, were renovated, the work on the last being restricted to reroofings (see Cunliffe, 1977, 10-21).

The lodgings initiated by Richard II in 1396 were still standing largely unaltered in 1609 when John Norden surveyed the castle (§147). His sketch shows them with lead roofs intact, but he points out that although the hall was 'verye fayer and spacious' the roof timbers were in a rotten state and were about to give way under the weight. He suggested immediate reroofing in a lighter material, but questions whether it would be worth the cost. Eventually, when the castle was converted into a prison in the late eighteenth century, the ranges were roofed with tiles, but these have since been removed, leaving only the masonry shell of the original structures.

## PERIOD 8: 1400–1610 (fig. 61)

The structural alterations which followed the rebuilding programme of Richard II have been designated period 8 in the archaeological descriptions set out above, but the period is a long one and improvements and repairs were probably in hand on a number of separate occasions. Simply stated, the principal changes included the further extension of the gatehouse (Bay IV) and the renovation of the buildings around the eastern part of the inner bailey, ranges N4, E5, SE3.

The documentary evidence for this period is sparse. In 1441 the castle was 'ruinous and feeble' (§129), and although sums of over £100 were spent on repairs during the next twelve years serious deterioration had set in. In 1489 further unspecified repairs were undertaken (§137). It was probably at this time that the large oriel window was inserted into the northern wall of the north room of the forebuildings. The royal arms of Henry VII set above the door leading to the room beneath another oriel window in the chapel probably belong to this phase. A few years later, in 1501, further repairs were undertaken upon the keep ('dungeon') (§138).

In the south-east range there is evidence of some building activity at about this time involving the creation of a new oven. Associated pottery would indicate a date in the early sixteenth century (p. 235).

Apart from works associated with the defences, for which small grants were made, no significant work was carried out during the sixteenth century. In the outer bailey, however, a large storehouse was built in 1527 (Cunliffe, 1977, 42-4).

At the beginning of the seventeenth century the constable, Sir Thomas Cornwallis, undertook a series of renovations estimated by Norden to have cost more than £300. This work is clearly to be identified in the east and south-east ranges, which were partially rebuilt and heightened at this time to provide spacious and well-lit accommodation to replace the old palace of Richard II, now beyond repair. The renovation entailed the raising of the level of the basement floors with tips of mortar, sealing pottery of the sixteenth century. It may have been at this stage that the north range was strengthened with buttresses between which a new door was inserted leading into the undercroft. Precise dating evidence is lacking, but

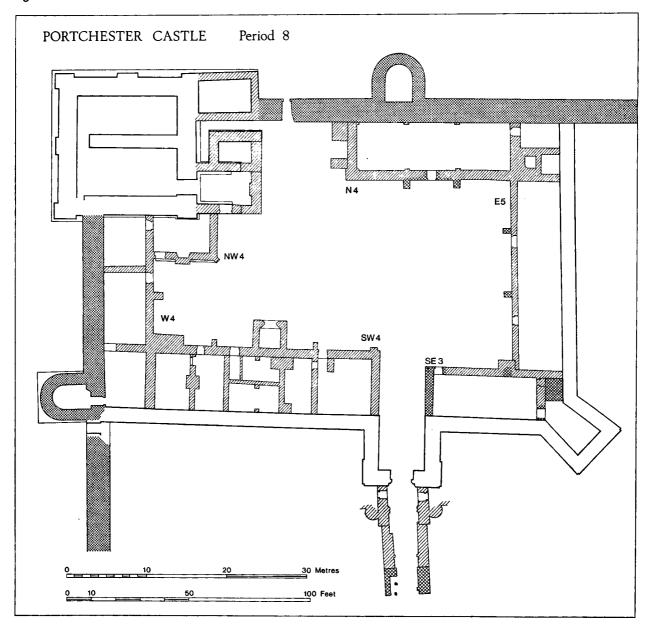


Fig. 61

Norden, in his survey of the castle in 1609, refers to the range as 'not long since in part newly erected'. That it was, however, in a poor state of repair, with unglazed windows and its roof stripped of slates, might suggest that the renovation took place somewhat earlier, in the late sixteenth century.

Norden's survey, transcribed in full below (pp. 205-6 and pl. XLIII), gives a vivid impression of the end of the period here considered (\$147).

## SEQUENCE AND DATING OF THE CASTLE BUILDINGS

### TABLE III

### Summary of Main Structural Activity

		Archaeological periods
c. 1120 c. 1130-70 c. 1130-70	Construction of the keep and the inner bailey defences (keep 1) Keep increased in height: forebuildings extended (keep 2) Hall complex (SW1 and W1) North range (N1) South-east range (SE1)	I and 2
1209–11 1229	Chapel extension (keep 3) and north-west range (NW1) Kitchen range (E1)	3
1320–6 1346	Gateway extension (gatehouse 2) Modification of hall and addition of adjacent kitchen (SW2) Modification to west range (W2) New north-west ranges (NW2) Internal modification to east range (E2)	4
1356 1362	Rebuilding of hall range with second storey (SW3) Rebuilding of great chamber in the west wing (W3) and consequent changes in the north-west wing (NW3) Partial rebuilding of east wing (E3 and N2)	5
c. 1380–5 1385	Assheton's Tower Second extension to gate (gatehouse 3)	6
1396 1396–9 1398	Rebuilding of north range (N3) Reconstruction of King's lodgings (NW4, W4, SW4) Vaulting of basement to keep	7
1489 c.1490–1500 c. 1580–1608	Oriel window in forebuilding Partial rebuild of south wall of forebuilding Modifications to south-east range (SE3) Repairs to the north range (N4) Reconstruction of east and south-east ranges (E5 and SE3) Third extension to the gatehouse (gatehouse 4)	8

### V. DOCUMENTARY SOURCES FOR BUILDING WORKS

By Julian Munby

### INTRODUCTION

DOGUMENTARY sources for building works in the castle are very numerous, and it is beyond the scope of the present work to present a completely new review of all the evidence. Since the account in the Victoria County History, there has been a comprehensive search of all materials, collected and summarized in the History of the King's Works (Colvin et al., 1963, etc.), which places Portchester in the context of other royal works. Rather than duplicate previous work, it has been decided simply to list the known references to works on the castle in chronological order (table XIII, pp. 164–75 below¹) and in addition to discuss selected sources of special interest, with either transcripts or tabulations of their contents.

Included in the materials under consideration are all known references to the buildings of the castle, both in the inner and outer baileys; while there will remain further discoveries to be made, there is no doubt that most of the significant campaigns of works are included. Certain large areas have, however, been omitted, and will require further investigation. Firstly, the personnel of the castle's custodians and constables is too large a topic to be satisfactorily dealt with here, including as it does the descent and administration of the castle, manor and forest of Portchester. Secondly, there is the garrison and its victualling, war preparations, keeping of prisoners, and the estates owing castle-guard. Lastly, all references to royal visits and other events at the castle have been omitted. These topics are considered elsewhere in relation to the buildings of the castle, but are not presented here in detail.

#### SOURCES

The Public Record Office is the principal source of materials for the works at Portchester, at least for those which came under direct royal control. The nature of the surviving evidence is closely related to the general organization of works, which has been fully treated in the History of the King's Works; the most obvious aspect being the growth of central control in the thirteenth and fourteenth centuries, as the clerks of works took over arrangements that were earlier administered by the sheriff or some local figure.

The main source throughout is account rolls, the primary series being the Pipe Rolls of the Exchequer, the annual accounts made up at Michaelmas which survive from 1156 onwards, In earlier times works done by the sheriff appear on the Hampshire section of the Pipe Roll, and later on the clerks of works' returns were enrolled on the 'rolls of account' (rot. comp.) at the back of the Pipe Roll (which were to become the separate Foreign Account Rolls in the

<sup>1</sup> This list, primarily based on the references in the *History* printed records and notes made by David Baker. Most of the of the King's Works, is also based on an extensive search of unpublished sources have also been consulted by the writer.

late fourteenth century). These enrolled accounts, which form a fairly comprehensive series, are but summaries of much fuller 'Particulars of Account', which have an uneven rate of survival (all those concerning Portchester are considered below, pp. 136–62). Some of the 'Particulars' are in fact counter-rolls drawn up by a 'comptroller' as a double check on the expenditure, the comptroller extending the type of work previously done by 'viewers' and 'surveyors'. Other types of account may give incidental information, such as the royal chamber accounts (§56) or the one surviving set of custodian's accounts (§57).

Works could be initiated by royal writs, though sometimes by oral command, and on one occasion without direct royal authority (§76). Letters Close and Patent contain many of the orders for works, and they survive from the reign of King John on their respective enrolments (there is also the special class of Liberate Rolls, begun in 1226, for writs authorizing expenditure). However, in the fourteenth century, works were increasingly ordered by writs under Privy Seal, which generally have not survived unless their recipients kept them (see §121 below), though they may be referred to in accounts.

Surveys of the castle were made for various purposes: some were especially concerned with the state of the buildings (§§52 and 147), whilst others were concerned with the manor and only incidentally touch the castle (§§47 and 84). Those purely concerned with agrarian matters are omitted here.

The completeness of the records is a matter that must be considered briefly. Apart from the chance that some works escaped enrolment, or that other minor expenditure remains to be discovered on the Pipe Rolls (§2 is on the Devon roll), there is the possibility that some works were carried out with no direct financial expenditure by the Exchequer. The period between 1273 and 1317, when successive Queens of England held the castle, may well have seen unrecorded works besides the few of which we know. Similarly, private expenditure by constables would not be recorded, and this could be the reason for the lack of information about the building of Assheton's Tower, probably begun during the office of Robert Assheton in 1376–81, or of Cornwallis's work in the early seventeenth century.

Finally, it must be remembered that the purpose of many of the documents was for accounting or reclaiming moneys spent on the castle, and in 'book-keeping' transactions between accounts. They did not necessarily seek to record which parts of the building were being worked on, beyond what was required to vouch for expenditure in terms that were plainly understood at the time. Thus, whilst the keep is usually recognizable as 'the tower', and distinctions between the various gates are made, it is often difficult to tell whether works were taking place in the inner or outer bailey, or on which range of the inner bailey. In earlier times the general term domus is used (strictly meaning 'house', but here usually translated as 'building', which it must have meant); later on aula, 'hall', and camera, 'chamber', are used, but often in a vague or ambiguous way, and even interchangeably (see table IV, weeks 8 and g). There were also more than one of each. Even when buildings are named, as the 'Queen's Chamber', the 'Knighten Chamber', or the stables, there may be no certainty as to their location, and it can be difficult to attribute particular works to a known structure unless it is unambiguously named. Even the scale of works can be hard to determine, and reparacio can mean much more than 'repair'. It is indeed remarkable, given the amount of evidence, how rarely a positive link can be made between the written description and the standing building or excavated structure.

### DISCUSSION OF BUILDING ACCOUNTS AND SELECTED TEXTS

§§51 and 52. Writ and Inquisition of 1296 (text below, p. 176) (P.R.O. E101/683/12)

This is the earliest surviving report on the castle buildings, and is a good example of a current method of central audit of local expenditure. John Faukener is ordered to view the works carried out by John of St John, the custodian, and report back to the Barons of the Exchequer on their cost. The brief return describes the new works and records the checking of the particulars of account before a jury of local men. The bureaucratic economy of the writ and return is in marked contrast with the elaborate comptrolling procedure used at a later date.

Faukener records work on the inner bailey gate, with the building of a (draw) bridge and brattice (some kind of boarded construction) as well as work on the gates themselves. A wooden tower was built on a bastion in the outer bailey that needed strengthening; the two gates of the outer bailey were repaired (the land gate being 'almost ruined'), and other repairs had been made to buildings, walls and ditches. The sum of expenditure was found to have been  $f_{17}$ , 8s. 4d.

§53. Particulars of Account 1320-1 (table IV) (P.R.O. E101/479/17)

The first surviving roll of particulars of account for Portchester is that of the clerk of works Peter of Pulford, a Clerk of the Chamber (Tout, 1937, II, 344, 359; cf. Emden, 1959, 1524). It lists the men and their work week by week over one year and provides a valuable opportunity to appreciate the disposition of labour throughout the year, rather than having the work presented in summary form (cf. the Westminster accounts, Colvin, 1971, 6-7, 249 f.). Of added interest is the comparison that can be made with the much abbreviated enrolment of the same work on the Pipe Roll (§72).

The account has been tabulated (table IV), omitting craftsmen's names, and showing both the number of men working and the total of days worked in the week. At the opening of the account in September 1320, masons were working on the 'north wall' of the castle, moving on to the 'east wall' at the end of October (these were perhaps the walls of the outer bailey). In the second half of November a roof of shingles was being put on the King's chamber or hall (it is called both). From December to February the only work being undertaken was the collection and carting of stones and sand by local labour, and this was interrupted by Christmas and the absence of the surveyor (supervisor) at Court; some demolition work was also undertaken in January. From February to June timber was being worked in nine different woods round Portchester, though apparently not in the Forest of Bere itself. The Pipe Roll version accounts for the sale of bark from 106 oaks, beside 42 oaks whose bark and branches were not sold, being felled out of season (and six oaks taken to the castle for burning 'at the King's order, so Peter says'). One group of men felled the oaks and scappled them, that is de-barked and squared them. Sawyers were at work throughout the period, probably sawing large trunks into suitably sized baulks, or planks. The King's carpenters, sometimes assisted by hired carpenters, then worked the timber. Repeated references to work done 'in the wood' imply that this processing was done near the point of felling. Timber was commonly worked when green and was marked up for reassembly once taken to the site. The carpenters moved to the castle at the end of June, and were working on the west (land) gate until the beginning of September. With the return of the masons in late August, work began on the middle (inner bailey) gate, to which some of the carpenters also turned.

Wage rates were generally 4d. a day,  $3\frac{1}{2}d$ . for the timber fellers and 2d. for assistants and labourers. Only a small group of master carpenters, working in weeks 37-9 and 50-1 were paid 5d. a day. Peter of Pulford received £17. 17s. for the year, at a rate of 12d. a day for 357 days.

Purchases of 'necessaries' (see table V) occur at places throughout the account, and include amounts of lime, various pieces of equipment like sieves, troughs, barrows, a tub, locks and keys for the east and west gates, and hawsers for raising stone and timber to the top of the keep. In August and September 1321 stone was purchased, first Caen stone from a supplier at Portsmouth, and then stone brought from the Isle of Wight 'for the foundations of the bridge within the castle'. Oak boards were for once not Baltic, but 'Weldichsbord', presumably from the Sussex weald (Salzman, 1967, 244).

From this account a clear view can be obtained of the use of the work-force, the distinction between general repairs on curtain walling, the winter work of gathering materials, spring and summer work of preparing timber, and the final application of these preparations to the reconstruction of two of the castle gates. No such impression is given by the account enrolled on the Pipe Roll (§72). The only additional information it provides is the number of oak trees (see above), the schedule referred to in the Particulars being lost. Totals are given of purchase costs of stone and lime, and of 'necessaries', but not all are mentioned and neither are they quantified. Labour costs appear separately, but no indication is given of how the work was shared out in the vague description of 'repairs and alterations of walls and towers and of various buildings in the castle'. This critical shortcoming in the evidence of Pipe Roll enrolments is to be remembered when they are the only available source.

In the five years following the last account there was a continuous series of building operations, recorded in a variety of sources. The enrolled accounts of William of Kingston, surveyor of works and receiver of victuals at Portchester, cover most of the expenditure in this period. They run from his appointment in September 1321 (§54) until May 1325, when he handed over to the constable Thomas of Saunford. Kingston had been at Odiham Castle in 1320–1 (Colvin et al., 1963, 767), and was perhaps the rector of Whippingham, Isle of Wight, granted leave of absence in 1322 (Emden, 1958, 1075). The accounts (omitting the victuals) are tabulated here (table V) with the addition of figures for the year 1320–1, already discussed. For each year the receipts are listed, the quantities and cost of the different materials purchased, and the total spent on labour (but neither specifying the amount for each trade nor where the men were working). A separate account for lead at the end describes its expenditure: 'roofing with lead and mending various defects in the great tower of the castle and the gutters of the said tower, the chamber above the middle gate, the King's wardrobe

### TABLE IV §53. Particulars of Account 1320-1 (P.R.O. E101/479/17)

The figures in each column give first the number of men working, followed in parentheses by the number of man-days worked in the week.

See table V for total costs and materials.

		ns	Assistants	urers	2.	's nters	Carpenters	Fellers and scapplers	ers	iases	57	
	1320	Masons	Assis	Labourers	Roofers	King's carpenters	Carp	Fellers an scapplers	Sawyers	Purchases	Totals	Work done in each week
1 2	28 Sept4 Oct. 5 Oct11 Oct.	6 (36)	12 (72)	2* (12)						×	23s. 7d. 26s.	(Purchases) North wall of castle (*collecting sand and stone)
3	12 Oct18 Oct.	6 (36)	12 (72)		!			:			245.	North wall of castle (*collecting sand and stone)
4	19 Oct25 Oct.	6 (36)	12 (72)	4* (20)				i			27s. 4d.	North wall of castle (*collecting sand and stone)
_5	26 Oct1 Nov.	5 (20)	10 (40)								13s. 4d.	East wall of castle
6 7 8 9	2 Nov8 Nov. 9 Nov15 Nov. 16 Nov22 Nov. 23 Nov29 Nov. 30 Nov6 Dec.	5 (30) 6 (36)	10 (60) 12 (54)	4 (20)	2 (12) 2 (10)					×	32s. 6d. 21s. £4 14s. ½d. 2s. 6d. 3s. 4d.	East wall of castle East wall of castle Roofing King's chamber Roofing aforesaid hall Collecting stones
11	7 Dec13 Dec. 14 Dec20 Dec.			4 (24) 4 (24)							4 <sup>5</sup> . 4 <sup>5</sup> . Nichil	Collecting stones and sand Collecting and carting stones and sand (Christmas)
13 14	21 Dec27 Dec. 28 Dec3 Jan.			4 (14)							2s. 4d.	Collecting and carting stones
15 16 17 18	4 Jan.–10 Jan. 11 Jan.–17 Jan. 18 Jan.–24 Jan. 25 Jan.–31 Jan.	ı (6)	2 (12)	4 (20)							3s. 4d. 4s. Nichil Nichil	Collecting stones  \[ \int Unroofing buildings in castle \\ \int pro debilitate earundem \] \[ \int Surveyor at court) \] \[ \int Surveyor at King's court)
19 20 21 22	1 Feb7 Feb. 8 Feb14 Feb. 15 Feb21 Feb. 22 Feb28 Feb.			4 (20) 4 (24) 4 (24)		3 (21)					3s. 4d. 4s. 4s. 7s.	Collecting and carting stones Collecting and carting stones Collecting and carting stones Felling oaks in Boarhunt Wood
23	ı Mar7 Mar.					3 (21)		4 (24)	4 (24)		225.	Working, felling and sawing in same wood
24	8 Mar14 Mar.					3 (21)		3 (18)	4 (24)		20s. 3d.	Working, felling and sawing in wood of Richard of Wallop
25	15 Mar21 Mar.					3 (16)			4 (24)		13s. 4d.	Working, felling and sawing in same wood
26	22 Mar28 Mar.					2 (14)		3 (18)	4 (24)		17s. 11d.	Working, felling and sawing in (?Bovega)
27	29 Mar4 Apr.					2 (14)			4 (24)		12s. 8d.	Working, felling and sawing in same wood

28 29 30	5 Apr.–11 Apr. 12 Apr.–18 Apr. 19 Apr.–25 Apr. 26 Apr.–2 May				2 (14) 2 (14) 2 (14) 2 (14)	3* (15) 3 (18)	4 (11) 3 (9) 4* (20) 5 (30)	4 (15) 6* (30)		12s. 10½d. 7s. 3½d. 25s. 6d.	Wood of St Denis Wood of St Denis Wood of St Denis (*in Lecceiye wood) Copnor Wood
32 33 34 35	3 May-9 May 10 May-16 May 17 May-23 May 24 May-30 May				2 (14) 2 (14) 2 (14) 4 (24)	2 (12) 2 (12) 1 (5)	4 (24) 4 (24) 3 (15) 3 (18)	2 (8) 6 (36) 6 (30) 6 (36)		18s. 4d. 27s. 8d. 24s. 8½d. 25s. 3d.	Wood of John de Roches Hirtyngcombe Wood Hirtyngcombe Wood (also four carters carrying to castle) Hayling Wood
36 37 38 39	31 May—6 Jun. 7 Jun.–13 Jun. 14 Jun.–20 Jun. 21 Jun.–27 Jun.				4 (28) 4 (28) 4 (28) 4 (28)	6* (31) 6* (30) 6* (36)	9 (34) 5 (25) 5 (30)	6 (18) 6 (30) 4 (30) 2 (12)		15s. 4d. 39s. 9d. 35s. ½d. 34s. 7d.	Hayling Wood Hayling Wood (*incl. Mag. Adam Denmead) Boarhunt Wood (*incl. Mag. Adam Denmead) Boarhunt Wood (*incl. Mag. Adam Denmead)
40 41 42 43	28 Jun.–4 Jul. 5 Jul.–11 Jul. 12 Jul.–18 Jul. 19 Jul.–25 Jul.				4 (28) 4 (28) 4 (28) 4 (28)		2* (28) 2* (10)	4 (20) 4 (16) 2 (12) 2 (8)		18s. 4d. 17s. 7d. 14s. 7d. 12s.	About westgate of castle (*in Boarhunt) About westgate of castle‡ (*felling chevron in Durford Wood) About westgate of castle‡ (15 carts tmbr from Hayling Wood) About westgate of castle‡ 'Now T. Chalk goes to court'
44 45 46 47 48	26 Jul1 Aug. 2 Aug8 Aug. 9 Aug15 Aug. 16 Aug22 Aug. 24 Aug29 Aug.				3 (21) 3 (21) 3 (21) 3 (21) 3 (21)		6* (18)	2 (12) 2 (12) 2 (10) 2 (12) 2 (12)	×	115. 115. 105. 4d. 235. 4d. 175.	About westgate of castle! (*in wood of Abbot of Quarr)
49 50 51	30 Aug5 Sept. 6 Sept12 Sept. 13 Sept19 Sept.	1	1* (6) 4 (20) 3* (15)	2‡ (12)	3 (21) 3 (21) 3 (21)	3* (18) + 9 (54) 3 (15) + 9* (45)		2 (12) 4 (24) 8 (40)	×	16s. 47s. 2d. 79s. 4d.	About westgate of castle (*work on middle gate, ‡sand and stone) ?All on middle gate (*in Hirtyngcombe) All on middle gate (*camera of same)

Total: £47 14s. 5½d.

(‡ circa dom' predict' port', etc.) (\*refers to notes in right-hand column)

### TABLE V

Portchester Works 1320-25 (14-18 Edward II); 1320-1 from Particulars (§53 and table IV) with totals from Enrolment on Pipe Roll (§72); 1321-5 from Enrolment on Pipe Roll (§\$55 and 75)

	1320-1 A <sup>0</sup> xiv	1321-2 A0 xv	1322-3 A <sup>0</sup> xvi	1323-4 Aº xvii	1324-5 A0 xviii
Receipts	£58 6s. 9½d.1	£259 4s. 5d.	£89 14s\frac{1}{2}d.1,2	£138 12s\frac{1}{2}d.3	£186 10s. 6d.1,4
Stone	68 qr. lime 240 Caen stone 167 I.o.W. stone	580 qr. lime 4521 Caen and I.o.W. stone	120 qr. lime 2385 I.o.W. stone 3 ships of ragstone	133 qr. lime 1784 I.o.W. stone	(560 qr. lime) <sup>5</sup> 1141 I.o.W. stone 7 ships of ragstone
Oaks (and income from sales)	(148 oaks) (£8 10s. 2d. in sales)		139 big oaks; 76 small (£7 12s. 4d. in sales)6		(£6 in oak sales)?
Nails	500 nails 100 boardnails	500 desnails 7100 spyknails 3900 boardnails 4500 cloutnails 400 planknails 3000 spyknails 41,000 lathnails	300 desnails 4250 spyknails 2050 boardnails 600 cloutnails	250 desnails 130 spyknails 800 boardnails 1300 planknails	7000 spykyngnails 8300 boardnails 700 cloutnails 800 planknails 77,000 lathnails
Steel, iron and coal		1300 lb. Spanish steel 92 lb. brass	400 lb. iron 12 lb. tin	4350 lb. iron 12 qr. sea coal	46 qr. sea coal 40 lb. tin
Boards	53 weldich boards 1400 shingles	150 estrich boards 1700 shingles	100 estrich boards	58 estrich boards	325 estrich boards
Slates		72,000 stone slates 72,000 slatepins			88,500 stone slates 45,000 slatepins
Lead			(15½ chars 414 lb.) 23½ chars 828 lb.8	(31 chars 212 lb.)	
Total purchases	£8 11s. 4½d.	£56 14s. 5\d.	£60 18s. 6\d.	£106 19s. 9d.	£24 10s. 2\frac{1}{4}d.
Workmen	Masons Assistants Labourers Roofers Carpenters Fellers/scapplers Sawyers	Carpenters Sawyers Masons Plasterers Plumbers Smiths Shinglers Clinchers Porters	Carpenters Sawyers Masons Plumbers	Carpenters Sawyers Masons Clinchers Smiths <sup>2</sup> Porters Diggers	Carpenters Sawyers Masons Plasterers Smiths <sup>9</sup> Roofers Clinchers Porters Diggers
Total labour	£39 3s. 1d. £17 17sd. (P. of P.)	£224 5s. 6d.	£38 3s. 2d.	£91 13s. 6d.	£106 8s. 1\frac{2}{3}d. £50 (W. Kingston) <sup>16</sup>
Grand total	£65 11s. 5½d.	£280 19s. 11\frac{1}{4}d.	£99 1s. 8¾d.	£198 13s. 3d.	£180 18s. 4d.

(Total for years 15-18: £759 13s. 3d.) (Total for years 14-18: £825 4s.  $8\frac{1}{2}d$ .)

4 Total includes 36s. from sale of lead-ash.

- <sup>6</sup> The timber came from various woods of abbots, priors and knights in the county.
- <sup>7</sup> The timber was from the wood of Fulco Lestraunge in La Trenche (see §\$67-9).
- <sup>8</sup> This total of lead expended in this year does not tally with the amount received (note 2 above), and must include a further purchase, if it is not an error. The separate lead account at the end of the enrolment correctly gives the total received in years 16 and 17 as 46½ chars 626 lb., with an expenditure of 41½ chars 626 lb. on roofing, leaving the remainder to the constable Thomas Saunford of 5 chars.
- <sup>9</sup> In these years vadia hastatorum also occur, but they are unlikely to have been 'spear-makers'.
- <sup>10</sup> The wages of William of Kingston for the whole time of the account (years 15-18).

<sup>&</sup>lt;sup>1</sup> Totals include receipts from sale of oak branches and bark.

<sup>&</sup>lt;sup>2</sup> Total includes value of lead supplied by Southampton: 7½ chars in October 1322 (£20 8s. 10d.) and 8 chars 414 lb. in February 1323 (£21 12s. 10d.). See §59 for this.

<sup>&</sup>lt;sup>3</sup> Total includes value of lead received from T. Frend, a merchant of Beaumaris (by writ of Privy Seal): 31 chars 212 lb. in August 1323 (£77 17s. ½d.); also 15s. from sale of lead-ash.

<sup>&</sup>lt;sup>5</sup> Supplied from the end of the account, where the sheriff John of Scures is noted as delivering this amount of lime, but with no date. It was all used in the work. The sheriff later accounted for £18 14s. 4d. as being its value, see  $\S65$ .

(garderoba) in a turret (in quadam turrelli) at the head of the hall with the gutters of the said hall and chambers adjacent to it, with a chamber outside the said middle gate and two chambers newly built over the two gates of the castle'. In addition to this, purchase of over 160,000 slates implies extensive roofing with that material. The quantities of other purchases suggest that much new building must have been in hand: over 10,000 freestones were brought from the Isle of Wight and Caen, together with 10 shiploads of ragstone. Timber is only recorded in sales of branches and bark, which may not be representative of the total of oaks felled; almost 700 boards were also imported for internal furnishing. Other fittings were provided for by purchase of iron and steel, together with the usual vast numbers of different sorts of nails.

If the lists of craftsmen can be trusted, then plasterers were only working in 1321-2 and 1324-5: years when slates and large quantities of lime were purchased. This might suggest completion of buildings in those two years. At the end of the account a small crane or windlass was handed over to the constable, along with surplus lead from the works.

### Other Sources for the 1320s' Works

The accounts of Peter of Pulford and William of Kingston do not embrace all the expenditure of this period, which came to about £1,100 in all. On the occasion of the King's visits in 1324 some payments were made directly from the royal chamber (§\$56, 58 and 60), whilst small amounts were accounted for by the constable, Thomas of Saunford (§\$57, 61 and 64). The Sheriff of Hampshire at times paid for materials and labour (§\$62, 63, 65 and 71). These sources supply additional information on the work being undertaken, if not of a very circumstantial nature. In 1324–5 colours were bought to paint a room or hall, a 'new chamber' in the outer bailey was given a tiled roof, work was done on the drawbridge and a 'hall' was constructed (§\$56–62).

After the end of William of Kingston's work in May 1325 there was perhaps a gap, though some of the Sheriff's work (§62) may have been in the following months. It appears that work began again under Thomas of Saunford in 1325–6. Apart from thatching the 'hall for the King's household' (§64), which may only have been a routine renewal, there was a short campaign between August and November 1326 (§§66 and 74) in which a 'new chamber' was built (under master Adam of Denmead, carpenter), the keep was repaired (under master John of Banbury, mason), and a ditch was dug. The enrolled accounts for this work (see table VI) are sufficiently detailed to reconstruct the weekly work-force that was maintained at the castle over these months.

The architectural aspects of this campaign in the last years of Edward II are described elsewhere. Although the evidence is largely from excavated remains (apart from the surviving gatehouses) it is clear that there was an extensive refitting and rearrangement of the castle, which increased the accommodation it provided and the security of access to it.

§77. Inquisition of 12 October 1335 (text below, pp. 177-8) (P.R.O. C145/128/19; calendared in Cal. Inq. Misc. 11, 358-9)

This inquisition is of interest in that it deals with the general munitions and victualling of

### TABLE VI

§66. Works of 1326 (P.R. 3 Ed. III, rot. 10)

	3-10 Aug.	10-17 Aug.	17-24 Aug.	24-31 Aug.	31 Aug7 Sept.	7-14 Sept.	14-21 Sept.	21-28 Sept.	28 Sept5 Oct.	5-12 Oct.	12-19 Oct.	19-26 Oct.	26 Oct2 Nov.	2-9 Nov.	
Carpenters Sawyers Masons	9 6	9 8	9 6	9 4	12 4 16	16 8	16 4	14 4 12	8 4 12	5 2	5 2	5 2	5 2	5 2	Work on new chamber Timber for chamber Work on tower
Assistants Diggers	4 32	4 32	4 32	4 20	10	13 10 20	12	6	6	8	5	9 4	9 4 —	-	Helping masons Ditch round castle
Totals	63	65	63	49	62	67	55	49	30	27	24	20	20	8	

Purchases: freestone, sand, coal, ironwork, etc., and carriage.

Cost: wages £50 2s. 2d; materials £8 14s.

the castle as well as the buildings; moreover the subsequent works are partly covered in a surviving account (see the following). Held before a local jury, the Inquisition lists the defects in the victuals, arms and buildings, and proposes repairs and purchases to a total of £384.5s.4d.

The necessary victualling (grain, salt, drink, meat and honey) required a stock costing £122. 16s. 8d. of which almost half comprised corn and wine. Fuel would cost another £11. 13s. 4d. Such arms as were already in the castle were thought to be of little value, though some could be repaired for £15. 2s. and additional purchases made for £38. 13s. 4d.

Repairs to the buildings were estimated at £196. The keep needed releading for £6, and fittings for twenty windows would cost another £3. The most urgent requirement seems to have been the building next the keep which was 'all ruinous and almost decayed': its walls could be repaired for £40, its carpentry for another £40 and its roof releaded for £60. Roofs of buildings in the inner bailey needed repairs to roof timbers for £10, as they had not been dealt with for such a long time. Two small towers in the inner bailey were 'all decayed' and would cost £20 to repair, and the bridge into the inner bailey needed £10 of work. Leadwork on the roof of the west gate would be £5, and the east gate was partly breached at high tide and needed 40s. to be repaired. General repairs to the towers and walls of the outer bailey could not be estimated.

Some of the necessary purchases and repairs noted in the Inquisition of 1335 were evidently made by the sheriff in the following year, of which nothing is known beyond the expenditure of  $\pounds$ 20 on 'walls, turrets, brattices and closes, and the archery' (§§78 and 80). However, the second surviving roll of particulars covers works done under Richard, Earl of Arundel and his Lieutenant, John Haket, and although the total spent was relatively small (just over  $\pounds$ 20) the arrangement and detail of the roll gives an unusually clear picture of the

programme of repairs, and it is printed in full below. The account is divided into sections (see table VII) dealing with works on various parts of the castle and its armaments.

The repairs to the Queen's chamber (section 3) involved roofing with 10,000 slates and 1,000 shingles, and raises the problem of the location of this building, which is mentioned in other accounts. The most attractive identification would be with the range on the south side of the keep, possibly the domus next the keep which was tota ruinosa in 1335 (see §77 above). This would have been adjacent to the King's chamber on the west side of the courtyard, and a pleasant, south-facing room overlooking the privy garden. Repairs to the Queen's chamber were made in 1369, when defects in the slate roof were made good (\$103 below), and major alterations in 1385 when two new walls were made, with new roofing and a lead gutter behind the chamber (§116 below). This last would correspond with the walls added to the range south of the keep at about this time (see above, p. 23). Against this interpretation must be put the later appearance of the 'Quenechamber' in 1398-9, when gutters were removed from around it, and new towers begun next to it (§125, 3.19 and 4.3). This would be anachronistic, as the outer forebuildings of the keep were by then demolished, but not conclusive evidence that the Queen's chamber was still standing. If this counter-argument prevails. then the next most likely location would be the northern range, here regarded as the constable's house, though not named as such in any of the documents.

A similar problem is presented by the 'Knighten Chamber' (4), which underwent somewhat more elaborate changes perhaps involving the insertion of a new floor, or just a roof. It had two tie-beams (liernes) and twenty-four rafters (cheverons) 36 ft. (11.5 m.) long (Salzman, 1967, 212.) This is an almost incredible length, but certainly implies a lean-to roof. The building had stone gables, with stone doors and windows (4), and a lead gutter 'between the said chamber and the bakery and the chimney of the chamber' (5). This description would exactly fit the south-east range, with its chimney at the junction with the kitchen building in the east range. If this were so, then it is interesting to note that the roof of the south-east range as reconstructed here (fig. 98) has rafters 26 ft. (8.3 m.) long. The building had 'six small windows with eavesboards' and two louvers (4). Does this account imply the flooring-in of the range, with a series of dormer windows and some arrangement for heating?

The keep had two large windows repaired and its great crack was filled (6), whilst the damage done to the wall by the door of the King's hall was made good with a lead gutter (7). Much of the rest of the account is taken up with military rather than domestic work, no doubt in the light of the commencement of the Hundred Years' War in 1337. The barbicans were strengthened and a brattice put on 'Broken Tower' (6 and 8), and the walls of the outer ward were repaired (6), scaffold hurdles being brought, apparently for access to the walls and turrets if not their repair (9). The water gate was repaired and acquired a false wall against enemy ships, and an earth wall was built next the 'castle bridge', probably the inner gate (6). Bars were constructed outside the land gate, and beside them an embattled earth wall and ditch 6 perches long (over 100 ft., or 30 m.) and a ditch 9 ft. (3 m.) wide (10).

The artillery of the castle was put into good order, two springalds being made or repaired. These were large, stationary engines, probably of ballista or crossbow type, placed on the tops of towers (see Hewitt, 1966, 71-2). The smaller was wound up with a vice (11), the larger with a robinetz or windlass (12); they had horse-hair ropes and hemp cords, and miscellaneous iron fittings and other parts that required lubrication. Whilst they may have

fired stones, wooden quarrells were made for them, whilst smaller quarrells with iron tips were also supplied for the 'one-foot arblasts' (13). The bands or belts of white hide were perhaps made for these engines (14).

At the end of the roll is an account for repairs to roofs after a 'great wind' (15), including slates and crests for the King's hall and straw for the stable. The 'King's timber' was also thatched with straw, at the King's verbal command, perhaps being some supplies of war rather than building material.

Unlike the sheriff, the Earl only cleared his account at the Exchequer some years after the work had been completed, and then only on receipt of a direct royal command to do so (§86).

TABLE VII §79. Particulars of Account 1337–8

Receipts (2)	£20	
Queen's chamber (3) Knighten chamber (4) Necessaries (5)	£2 -s. 1d. £3 6s. $4\frac{1}{2}d$ . £4 4s. $3\frac{3}{4}d$ .	Roofing with slates and shingles. Repairs to stone and timberwork, and roof. Slates, lime, laths, nails, iron and ironwork, lead.
Keep and gates (6) Gutters and leadwork (7) Barbican and brattice (8) Scaffold (9)	11sd. 18s. 2½d. 13s. 9d. £111s. 4d.	Masonry of keep, postern and water gate. King's hall and two chambers on outer bailey gates. Carpentry of barbican gates and brattice at 'Brokene Tour'. Hurdles and oaks for scaffold.
Bars and ditch (10) Small springald (11) Great springald (12)	15s. 4d. £1 8s. 4½d. £1 2s.11d.	Bars, ditch and earth wall outside west gate. Making a small springald. Repairs to great springald, with purchases of parts.
Quarrells (13) Belts (14) Roofing (15)	£2 15sd. 15s. 6d. 13s. 10\frac{1}{2}d.	100 large springald bolts, 1400 small arbalast bolts and tips Making and repairing 40 bands with hide and hemp. Roofing on hall, stable; thatching timber.
Total	£20 16s. 2½d.	

## §98. Particulars of Account 1362 (table VIII) (P.R.O. E101/479/19 and 20)

The next two rolls of particulars (the second being a counter-roll that duplicates the first) account for works carried out by John of Edyndon, Constable of Portchester, following an order to carry out repairs in January 1362 (§95). The account is a lengthy one, arranged under heads for materials and labour (as tabulated here), and with some tantalizing detail which suggests that a major building campaign was in progress. As so often, references to particular buildings are incidental, though the carpenters' account is divided into work on the hall and work on the chamber, and much of the operation was directed towards these two. Other buildings mentioned are the keep, chapel, buttery and stable.

The account gives prominence to the carpentry, and the labour is clearly divided, the bulk of the time being spent on 'making a hall', and about a quarter on 'making a chamber'. Contract work, reckoned separately, and comprising just over half of the total, included

'making a chapel', repairing a stable, making a bench in the hall and an 'aqueduct' between the larder and kitchen. Timber was purchased from the Prior of Hayling, 14 of the 62 oaks being for the new chamber. It was felled and sawn mostly in Holywell, with some at Waltham and 'Wallopswood', and then carted to Portchester. Much of the sawyers' work is unspecified, though half their work was on a contract for sawing joists and boards, and two days' work was at timber and boards for the bakehouse (pro domo pistrine). Imported timber (160 estrich boards) was purchased and carted from Southampton with the plaster.

Masonry is only described rather ambiguously, the account opening with work on 'defects of the walls of the hall and kitchen', and no further specification being given, apart from one instance (not far from the beginning) of eight days' work on the keep. It is possible that more than half the account thus refers to work on the keep, though this is perhaps not likely. The only masonry contract was for scappling stone. No stone purchases are mentioned, apart from 200 stones brought by boat from the Isle of Wight. A cart-load of sand was bought and a boat-load or two was landed with the slates. Lime (or possibly chalk) was brought from Fareham, and plaster for the walls and foundations came with the boards from Southampton.

Roofing work by plumbers and tilers was evidently a major part of the campaign. Lead was obtained from Winchester for the keep, chapel and a gutter. It was installed by contract, the main one being for the keep, a smaller one for a 'certain chamber, and making a gutter next the hall', and another one unspecified. John Plumber senior and junior were possibly the local men of this name who are prominent in records of the village and occur in the 1390s. Tiles were purchased in prodigious quantities. From Portsmouth were carted 58,000 tiles for covering the hall, chamber and bakery, and there were also 150 crestes (perhaps for as many feet of ridge). Another purchase was of 70,000 canill' tegul', perhaps drainage tiles (or pantiles), whose use is not further explained. The carriage of 7,000 slates by boat may have been an additional purchase. Other materials for roofing were 9,500 laths from Fareham and Southwick, 13,500 lathnails and 71,000 slatepins. The tilers were mostly employed on 'the new chamber', spending about a quarter of their time on the bakehouse, and two days on a gatehouse. The hall, unless included under the 'new chamber', is not mentioned.

Labouring work is mostly unspecified, but John Degher made five holes in the wall of the bakehouse for inserting corbels, and six labourers worked two days lifting timber to the chapel. Perhaps it was for this that a machine was borrowed from the Prior of Southwick, two carts being needed *pro magno ingenio* when it was brought over the hill. A cable was also bought specially for lifting timber on to the keep, chapel and other buildings.

The work-force consisted of a large number of people, most of whom worked for less than a week, perhaps indicating the reality of using pressed labour. This is also shown in the carting, where almost as many people were hired as there were cart journeys, most only being used for one journey. Wage rates were in general 4d. a day, with 2d. being paid to assistants and 2d. or 1d. to labourers. Carts cost between 4d. and 12d. a journey, depending on the distance travelled.

No master craftsmen are named, though Thomas Clever worked longer than any other carpenter ( $36\frac{1}{2}$  days), and Thomas Pulhare (19 days) with Robert Exestre (20 days) longer than any other masons, with the exception of John le Meyr (probably the Portchester inhabitant of that name) who worked 70 days.

What was the extent of these operations? Evidently the keep was releaded, with some

related repairs to its stonework. The chapel (presumably that in the forebuilding of the keep) was largely reconstructed and roofed in lead. The hall, chamber and bakehouse were refitted with much carpentry, and some stonework, and all tiled, but with lead guttering. The occurrence of these three together might imply that they were all one continuous building, though the masonwork referred to 'hall and kitchen', and there is also the aqueduct between the kitchen and larder. Considered in relation to the known building sequence of the castle, it must be asked to which phase these works relate. If it is assumed that most of the campaign was directed to the west and south-west ranges of the inner bailey, then there is reason to suppose that this was associated with the refitting of phase 5, when the hall and chamber became two-storey buildings. The fairly conservative nature of the work, as evidenced by the

TABLE VIII §98. Particulars of Account 1362 (E101/479/19)

m.ı	Oaks: total 62 from Prior of Hayling (14 for new chamber); also 'timber' bought in Hayling.	£7 14s. 2d.	
	Lead: total 51 formell from Winchester (26 for keep; 25 for tower, chapel and new gutter).	£12 8sd.	
	Tiles: total 128,150 (150 crestes; 58,000 for hall, chamber and bakehouse; 70,000 canill'tegul').	£11 -s. 4d.	Materials:
	Lime: total 138 qr. 6 bus. from Fareham.	£5 15s. $7\frac{1}{2}d$ .	£44 18s. 4½d.
	Nails: total 14,599 + (13,500 lath; 277 + spyk; 322 board; 500 lead; 500 plank; 71,000 slatpins)	£2 8s. 5d.	
	Boards and plaster: 160 estrich boards; 1 cable for timber; 2 mouncell plaster for walls and foundations	£3 10s. 6d.	
	Laths: total 9500, from Fareham, Southwick and elsewhere.	£2 1s. 4d.	
	Carpenters: 424 days' work on making a hall; 98 days on making a chamber.  Contracts: bench in the hall 20d.; task-work 23s. 2d.; aqueduct between larder and kitchen 2d.; felling timber 7s. 8d. and 1s. 4d.; felling timber for keep, chapel and stable 46s.; making a chapel 66s. 8d.; mending a stable 42s. (Contract total £9 8s. 8d.).	£18 3sd.	
m.2	Masons: 313½ days' work, including walls of hall and kitchen, and the keep. Task-work: scappling stone 29s. 8d.	£6 6s. 4d.	
	Tilers: 346½ days' work (260 on new chamber; 84½ on bakehouse; 2 on gate)	£4 8s. 4d.	Labour: £42 8s. 4d.
	Sawyers: 130 days' work (2 on timber and boards for bakehouse)  Contract: 4 men sawing great parcel of timber for joists and boards 48s.	£4 11s. 4d.	
	Labourers: 88 days' work (1 day in bakery; 1 day on keep; 12 days lifting timber to chapel).	14sd.	
	Plumbers: Contracts: leading chamber, making hall gutter 20s.; work 12s.; roofing keep £6 13s. 4d.	£8 5s. 4d.	
	Carriage: 59 carts (mostly timber; also sand, great engine, tiles, plaster and boards).	£2 18s. 8d.	Carriage: £5 9s. 10d.
	Boats: extracting and scappling 200 stones and bringing from I.o.W. 48s.; 3 boats getting sand from Haselore and 7000 slates from Grymesherd 3s. 2d.	£2 11s. 2d.	25 3
	Total:	£92 16s. 6½d.	

archaeology, would fit well with the comparatively small outlay on stonework, whilst the insertion of a new first floor and roof would necessarily have involved a great deal of carpentry. As to the bakehouse, this may have been the 'kitchen' known from the archaeological record to have been added to the hall for the first time, or it could have been the room newly made with an oven and tank in the east range during phase 5. It may be that general cooking activities were transferred to the hall range, and the east range became a specialized bakery or brewery. The comparative lack of references to a kitchen in the account could be because of the relatively few fittings required for a large open room with a central hearth.

Alternatively, it is perhaps more likely that these works were simply a continuation of the works of 1356-7 under the Prior of Southwick and Philip Daundely (§§92-94), following an order for general repairs, which included 'making a new chamber 104 ft. long and 25 ft. wide'. Perhaps the hall (the only range of appropriate dimensions) was substantially built then, and finished along with the chamber in 1362.

### §103. Particulars of Account 1369 (table IX) (P.R.O. E101/479/21)

The fifth roll of particulars deals with repairs and alterations made between February and November 1369 by Thomas More, the custodian, and has with it a portion of a counter-roll of the Abbot of Titchfield and the Prior of Southwick. The account is divided into sections for each operation, with labour and purchases all together. No craftsmen's names are given and much was done by task-work.

In the first section, a carpenter was contracted to fell timber in the Forest of Bere, make a garret next the Queen's chamber and make or renew the beams and planks of a drawbridge (pons levabilis) on the middle gate, repair the joists, wall-plates, doors and windows of the outer gate, and make brattices (bretag') for it. Timber had to be purchased and carried in, sawyers employed for cutting planks, whilst boards were fetched from Chichester. Miscellaneous items included rings, staples and ropes for lifting the bridge, and many nails. Two plumbers roofed the water gate, the outer gate and the inner gate, with 2,464 lb. of purchased lead and reused lead from the outer gate.

Masonry work is enumerated in the second section. Four masons worked with their assistants in the inner bailey on stairs to the keep, a tower and the gate, on underpinning (sublevand') three turrets, on walling under the chamber of the gate (see p. 91 above) and on wall-walks. Stones (probably flint) and sand were collected by labourers and carted in, and lime was purchased from Fareham. In the outer bailey six masons worked with their assistants on the walls between the joists of the great outer gate, on repairing and making new wall-walks, and on underpinning the towers and walls round the bailey. Two masons rebuilt a length of wall next the sea that had been felled by the action of water. Again, lime from Fareham and stones were fetched in for this work.

Next comes the carpentry associated with these repairs, with eight carpenters working in the demesne wood of Kingesden on scaffolds for fifteen towers and 162 hurdles, then carried to the castle. Four carpenters were contracted to build a round tower opposite the church (pro uno magno turr' rotundo ex opposito ecclesie), perhaps erected on the corner bastion overlooking the port; they also replaced two large windows in the kitchen.

Roofing work then follows, with the purchase of laths from Chichester and stone slates (but a larger number of slatepins, as some old slates were being used). Nine empty barrels were bought to make hones- or hovesbord, probably eaves-boards to assist rainwater dispersal (Salzman, 1967, 244). Two roofers worked with their assistants on the castle buildings, named as 'three King's chambers, one Queen's chamber, one chamber next the hall, the kitchen, bakery and plumbery' (plumbar). It is possible that this last was in the south-east range, there being some archaeological evidence for industrial use at about this period (above, p. 44).

TABLE IX §103. Particulars of Account 1369 (P.R.O. E101/479/21)

Receipts: 23 February–26 October (including £60 for garrison wages)	£140
Garret and drawbridge  Carpentry contract £8 13s. 4d.; 5 oaks 20s.; carting timber 32s.; sawyers making planks 15s.; boards for doors and windows 4s. 6d.; carting boards from Chichester 18d.; rings and staples for lifting bridge 2s.; hemp cords for drawbridge 6s.; 600 large nails for bridge boards 24s.; 800 nails for garret boards 8s.; 600 nails for chamber next bridge 5s.  Lead for sea gate, outer gate and inner gate (352 cloves) £7 6s. 8d. (clove=7lb.: Salzman, 1967, 264).  2 plumbers (and 15 webs-panni-lead from outer gate) £6 13s. 4d.  2500 leadnails	£29 3s. 10d
Repairs to stairs to various towers and walls  4 masons on inner bailey 42 days 70s.; 3 assistants 42 days 31s. 6d.  62 qr. lime 41s. 4d.; 12 carts for same 12s.  4 men collecting sand 6 days 6s.; 1 cart 6 days for same 6s.  4 men collecting stones 8 days 8s.; 4 carts 8 days for same 32s.  6 masons on outer gate and outer bailey 70 days £8 15s.  4 assistants 70 days 70s.; 2 masons on fallen wall next sea 12s.  62 qr. lime 41s. 4d.; 12 carts for same 12s.  8 men 8 days collecting stones 16s.; 6 carts 8 days 48s.	£29 15. 2d
Wages (scaffold and carpentry) 8 carpenters 19 days in Kingesden on scaffold 63s. 4d.; 162 hurdles 27s.; 26 carts 1 day 26s. 4 carpenters on round tower and kitchen windows 106s. 8d.; 500 nails 5s.; 10 carts 1 day 10s.	£11 18sa
Wages (roofing) 20 qr. lime for roofing 13s. 4d.; 4 carts 1 day for same 4s.; 2000 laths 8s. 4d.; carriage 12d.; 5000 lathnails 6s. 8d.; 8000 slates 26s. 8d.; 12,000 pins 3s.; 4 empty tuns 9s. 4d.; carriage of slates 5s.; 2 roofers 12 weeks 48s.; 2 assistants 36s.	£8 1s. 4a
Portcullis  1 carpenter preparing timber 30s.; 8 hinges for sea gate, iron chain for portcullis, hinge nails 13s. 4d. cable for gate or portcullis 3s.; cord for well in keep 4s.  14 men 6 days ditching 28s.; 5 carts 6 days removing earth 30s.	£5 8s. 4a
Total	£83 12s. 8a
Garrison  2 armed men 19 May-10 November (175 days) £11 13s. 4d.  18 archers 19 May-1 September (105 days) £31 10s.; 12 archers 1 September-10 November (70 days) £14.  Thomas More, Custodian, 25 March-10 November (230 days) £11 10s.	£68 13s. 4a

The final work was that of a carpenter on a contract to make a portcullis, possibly for the water gate, which was given new hinges at the same time (see Cunliffe, 1977, 12–14). The castle ditch was also cleaned out and staked (barband').

Appended to the works account is a garrison wage bill for two armed men, eighteen (later twelve) archers, and the custodian himself. The custodian received 12d. a day, the men at arms 8d. and the archers 4d.; compared with the carpenters and masons receiving 5d. a day, roofers and diggers 4d. and assistants or labourers 3d.

The counter-roll, on the third membrane, duplicates the main account only as far as the section on roofing, and is incomplete, but supplies some minor details and variants not found on the particulars.

### §116. Particulars of Account 1385 (table X) (P.R.O. E101/479/22)

This is an incomplete counter-roll drawn up by the Prior of Southwick of the works carried out by the constable, Robert Bardolf, under the supervision of John Cook. The account deals with alterations and repairs of a fairly modest nature, carried out between April and December 1385, following an order of 14 March 1385 (\$114). Stone was brought from St. Helens by Bembridge on the Isle of Wight, sand and flint were collected, and two lime kilns burned; timber and wood were carted from the usual local sources (including three carts of oak, alder, holly and hazel for scaffolding). The King's chief craftsmen were involved in the work. Hugh Kynton, the master mason, operated under the direction of Henry Yveley, and the carpenters under Hugh Harland (Harvey, 1954; Colvin et al., 1963, 210-12). Although the masons' work is mostly unspecified, the carpenters were working on the Queen's chamber, the chapel in the keep and the drawbridge of the inner gate. The Queen's chamber was evidently being refitted; laths were purchased for roofing buildings of the castle 'and for two walls (parietes) newly made in the Queen's chamber by ordination of Masters Henry and Hugh', as if a partial reroofing was involved; two new doors of wainscot-board were made for the chamber, iron fittings were purchased, and leadwork of the gutter behind the chamber was repaired. The chapel, in addition to its carpentry work, received new glass and iron fittings in its three windows. The inner gate seems to have been extended at this time. Over half the labourers' work was digging about the foundations of the 'new gate', which is not actually located. Some of the unspecified mason-work was undoubtedly expended on the gate, and to this may have belonged the curious task-work of completing an unfinished work in ashlar, 14 ft. 6 in. (4.4 m.) high, 16 ft. (4.9 m.) long by 6 ft. (1.8 m.) wide (see p. 92 above). Two drawbridges were made (perhaps only one for this gate), and iron and brass fittings were purchased for them. A door was made for the 'postern by the new gate', and leadwork on 'two towers above the gate' was possibly at the inner gate.

Assheton's Tower is now mentioned for the first time, with iron fittings, hinges and bolts being bought for it, and a new lead roof being put on, with lead sent by the Sheriff of Surrey from Guildford (see Colvin et al., 1963, 659 and 790). Two stairs were made, one over the 'King's chambers' and one on the King's stable 'for the greater safety of the castle'; perhaps they both gave access to the walls. Rails were put round the walls of the castle (in either the inner or the outer bailey), possibly connected with the hurdles made for the protection of men

defending the walls. Other minor work in the inner bailey includes locks on the pantry, buttery and King's chamber, fittings for the windows of the King's hall, and repairs to the lead roof of the keep and its forebuilding, described as 'the great tower [and] le Estour above the door of the great tower'. A rope was purchased for the vigil bell, perhaps the one that rang the hours for the workmen. The only specific work in the outer bailey was a lock for the outer bailey gate, and repairs to the carpentry of the water gate.

The 'Archery' account may mark the second recorded appearance of gunpowder at Portchester, as alongside repairs to the two springalds (still the same two of 50 years earlier?) are purchases of two iron guns for lead pellets, and two brass 'stoneguns' (see p. 95).

The final section of the account is incomplete, omitting the wage of the surveyor, John Cook, whilst the running totals are missing from each section of the account, which records expenditure in excess of £78. The enrolled account presented by Bardolf is for slightly less, being just over £75 ( $\S$ 117).

TABLE X §116. Particulars of Account 1385 (P.R.O. E101/479/22)

Lime Digging 2 lime-pits 78s.; burning them 33s. 4d.; 36 carts underwood from Kingesden cut and carried for fuel 6s. 2d.; collecting lime and taking in 13 carts to castle 7s. 4d.	£6 4s. 10d.
Stone 93 ton-tight stone from St. Helens 62s.; 18 ton-tight Rag from same 12s.; carriage into castle 9s. 3d. 18 dol. sand from Gosport by boat and cart 5s. 8d.; 8 carts from Portchester 12d.; 140 carts flint 11s. 8d.	£5 1s. 7d.
Timber 104 carts timber and underwood from Bere (93), Westboarhunt (8) and Kingesden (3) (includes 12 carts scaffold and 9 carts for 2 stairs in inner bailey and rails on castle walls.	£3 7sd.
Iron 611 lb. ironwork for 2 new drawbridges 102s. 2d.; 92 lb. ironwork for Ashtonestower, Queen's chamber and gate 15s. 4d.; 36 lb. ironwork 5s. 4d.; 64 lb. iron for wedges and crows in quarry 2s. 11d.; 10 lb. stone-axe for quarry 22d.; 3 new locks for doors of pantry, buttery and King's chamber 18d.; 71 lb. ironwork for window fittings in King's hall 11s. 10d.; 1 lock and 2 keys for outer bailey gate 18d.	£7 2s. 5d.
Task-work 36 scaffold hurdles from Kingesden 2s. 6d.; 36 hurdles for protection of men defending walls: (28 of 14 ft.; 6 of 18 ft.; 2 of 22 ft.) 6s. 8d.; 36 days felling timber in above woods 12s.	£1 1s. 2d.
Necessaries Rope, cord for vigil bell, containers, shovels, sieves, 8 locks for castle doors (4s. 8d.)	10s. 1d.
Masons' wages (Unspecified) Hugh Kynton 34 days 22s. 8d.; 7 masons total 366 days work £7 8s. 4d.1	£8 11sd.
Layers' wages (Unspecified) 4? at castle, total 166 days 69s. 2d.; 4 at quarry, total 33 days 17s. 6d.2	£4 6s. 8d.
Carpenters 2 masters and 9 others, total 584 days work on carpentry of Queen's chamber, chapel in keep and draw-bridge of inner gate £12 11s. 5d.; 4 making rails on castle walls, total 32 days 13s. 4d.; 1 mending window and making two new joists for sea gate 3s. 4d.	£13 8s. 1d.
Sawyers 96 days sawing timber and boards for works³	£1 19s. 8d.

#### TABLE X-continued

Labourers 393 days work (including digging about foundations of new gate)4	£6 9sd.
Purchases 700 laths for roofing buildings and 2 new walls newly made in Queen's chamber 3s. 6d.; 32 wainscot- boards for 2 doors in same chamber and 1 in postern by new gate 8s.; 48 lb. brass fittings for 2 drawbridges 12s. 3000 lathnails 3s. 6d. and 750 boardnails 2s. 11d. for castle buildings; 200 planknails for draw- bridges 2s. 4d.; 3000 stone slates for roofing castle buildings 8s.; 4000 slatepins for fixing same and mending others 12d.	£2 1s. 3d.
Plumbers  Task-work: newly roofing Assheton's Tower with lead from Guildford Castle 6s. 8d.; repairs to keep, l'Estour over door of same and 2 towers above the gate, various gutters behind hall and Queen's chamber 11s. 8d.	18s. 4d.
Task-work  Completing unfinished work in ashlar, 14½ by 16 by 6 ft. £8; 1 stair on King's chambers 28s. 6d.; 1 stair on King's stable 22s.; repairs to all stone roofs of castle 13s. 4d.; 3 windows of King's chapel in keep fitting with glass and ironwork 23s. 4d.	£12 7s. 2d.
Archery Cords for springald 18s. 4d.; 72 lb. ironwork for repairs to springalds 12s.; carpenter repairing same 3s. 9d.; 2 gyn trendals for same 2s.; 2 iron guns for lead pellets 8s.; 1 brass 68 lb. stonegun 22s. 8d.; 1 brass 57 lb. stonegun 19s.; 2 men repairing springalds and other work for archery 8s.	£4 13s. 9d.
Wages John Slotch, Purveyor, getting men and materials 10s. 6d. John Cook, Surveyor, 241 days	_
Total (Pipe Roll §117)	£75 is. id.5

- <sup>1</sup> Unless the other figures which make this total are wrong, it should be £7 12s. 6d.
- <sup>2</sup> As before, this should total 15s.
- <sup>3</sup> As before, this should total £2.
- <sup>4</sup> As before, this should total £6 11s.
- <sup>5</sup> The total of the figures given on the account, excluding the final section, is £78 2s., or £78 6s. if the above amendments are reckoned with.

## §125. Particulars of Account 1396-9 (tables XI and XII, fig. 62; text below, pp. 183-205) (P.R.O. E101/479/23 and 24)

The great value of these accounts is that they are largely concerned with identifiable buildings that are still standing, and that they are comprehensive enough to enable the organization and progress of the whole campaign to be followed through. For this reason, they are printed in full below, together with the letters patent that initiated the works, and a specimen of one of the Privy Seal letters connected with them. (Sources of materials brought to the castle are shown on fig. 62.)

#### Building Materials: Stone

Some 2,353 tons of stone were brought to Portchester (2,636 'tun-tight' with a tun of 2,000 lb., Salzman, 1967, 122), and the majority (65 per cent) came from Bonchurch and

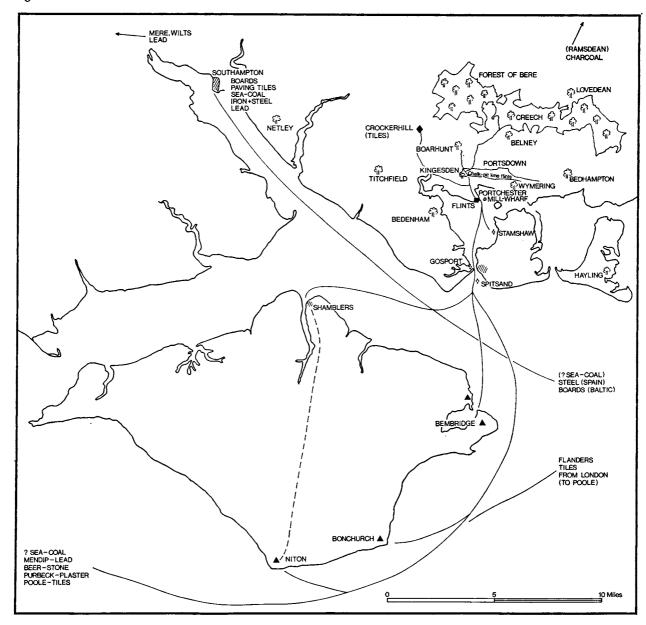


Fig. 62. Sources of building materials 1396-9

Niton 'by Southwight'. It was freestone, cut out and roughly squared, 'scappled' in the quarry, and some of it cut to moulds or forms (1.3, 2.3). It came in standard lengths, 5,800 pieces 'more or less' 2 ft. (0.6 m.) long (Salzman, 1967, 121) and 1,300 large pieces 2 ft. 6 in. (0.76 m.) long. For certain purposes special stones were supplied, for the vault of the outer (land) gate (2.3) and the vault of the keep, together with thirty-nine 3 ft. (0.91 m.) stones for newels (3.4). A smaller quantity (20 per cent) came from the quarry at Bembridge near St.

Helens in 'Northwight'. This was all described as ragplaten(er) stone (1.3, 2.3) or platen(er) stone (3.4, 4.4) and Salzman suggested that they were some sort of flat slab (Salzman, 1967, 133). It is possible that the slabs of stone set in courses below the windows on the inside of the building and some of the corbel tables were of this stone. The cost of these stones from the Isle of Wight included the labour of extraction, working and carriage down to the sea. Carriage by boat from the island to the castle accounted for up to 40 per cent of the total cost of the stone, whilst the final carting from the wharf at the castle mill into the inner bailey amounted to 3 per cent. Beer in east Devon (Grid Ref. SY 2189; Hoskins, 1972, 259-61) provided 14 per cent of the stone, described as freestone 'for doors, windows and chimneys' (1.3). It was bought by the tun inclusive of cost of freight from Devon (2.3), and was very expensive, accounting for 26 per cent of the total cost of stone.

Another import, though not really a building stone, was 'plasturestone' of Purbeck, for the dividing walls between the chambers, of which 22 tun-tight were bought (2.3) and burnt in the following season (3.14). It was gypsum, used to make fine white plaster (Salzman, 1967, 156).

## Other Walling Materials

Local resources could be exploited for a considerable portion of other walling materials, extracted with cheaper labour and subject to reduced transport costs; flint, sand and chalk were all available near at hand.

Flint, whose use is so apparent in all the walls, was carted from the sea shore (?1.3, 3.13) or from Portsdown (4.13), that from the Down at 2d. a cart costing twice as much as that from the shore.

Sand was bought by the tun (at 4d.) from ships which had collected it from Gosport, the Spit, Stamshaw on Portsea, and the 'bench' by Portsmouth (1.10, 2.9, 3.11, 4.11). Like the stone, the sand was dumped at the mill wharf and had to be carted into the castle. If, as it appears, this was all collected from sand-banks or the shore, the sand will have been saline and not of the best for building (Salzman, 1967, 152).

Chalk, so readily available on Portsdown, was used both for making lime and for building: 'hard chalk trimmed for hanging in the voussoirs of doors and windows and finishing the inside walls of the new chamber' (1.11). It is not possible except in the first year (1.11) to distinguish the quantities expended on each of these, but there is plenty of surviving chalk used as described in the interior of the walls, and some additional evidence for the scale of production of lime. The chalk was burnt in a great pit dug in the first year on Portsdown, 14 ft. (4·3 m.) wide and 11 ft. (3·4 m.) deep, which produced over 100 quarters at each burning (1.9). Wood from Kingesden in 180 carts was collected for its firing (1.8), and later sea-coal was used (2.20, 3.21, 4.20). A small number of men looked after the kiln, but the general labour-force was used for digging the chalk. Lime may also have been burnt in the castle (3.13, 4.13), and a kiln possibly of this period has been excavated in the outer bailey (Cunliffe, 1977, 58-9).

Earth was dug from the castle ditch and carted in for 'earthing the chamber floors' (2.10,

4.13); archaeological evidence indicates some build-up of floors and of the courtyard level (above, pp. 30-4).

Building Materials: Timber

All the internal fittings of the buildings, the floors and the roofs were of timber, as was the scaffolding for the new work. The quantity of timber used can only be expressed in cart-loads, that for building filling 404 carts of which 20 contained old timber from the demolished buildings that had been carefully removed (1.16) and was made into planks (3.12).

The chief source was the King's woods of Bere (232 carts) and Kingesden in Portchester (6 carts), and sales of bent timber and branches are recorded from 294 trees (1.2, 2.2, 3.3, 4.3), of which at least 210 were querculi for making rafters and at least 24 were great oaks (querci grossi) for making planks. The bark was not sold because the trees were felled out of season 'for haste' (2.2) and it could not be removed (Rackham, 1980, 154). The second most important source of timber (146 carts) was gift oaks provided by ecclesiastical and lay lords of woodlands about the forest. Printed below is a surviving specimen of a royal begging letter, in which the King asks the Abbot of Titchfield for 'six oaks suitable for timber' (§121). The clerk of works had to ride to London four times for these Privy Seal letters, and actually chose the oaks: 'seeing and marking' them (1.21). Six cart-loads were indeed provided by the Abbot in 1396 (1.13). Although the donors kept the profits of the sale of unwanted parts of the trees and did not necessarily have to arrange for the felling (1.16), it cannot be known with what willingness they parted with their timber. The royal requests are an interesting contrast to generosity with royal gifts of oak in an earlier period, but in this case the need for oaks may have been serious owing to the lack of large timber trees in the royal woods. Only in 1341 the shortcomings of the timber in Bere had been vividly described, and a reafforestation ordered in 1347 (§§84–5; V.C.H., Hants, III, 158). In 1397 Thomas Holand, Duke of Surrey, provided 16 great beams for the hall, made from 12 oaks and conveyed in 16 carts from Bedhampton Park (2.12), implying a careful selection of suitable specimens for 'gifts'.

The initial work on the timber was done in the woods, where it was 'scappled' (squared up) before being brought to the castle. Sawing was also done in the woods, though partly in the castle. This was paid for by the 100 ft. (30 m.), and nearly four miles (6.5 km.) was sawn over the four years (1.17, 2.16, 3.18, 4.17), probably to be accounted for in planks and perhaps rafters, though many of the timbers would have been finished with the carpenter's axe.

Scaffolding accounted for a further 104 cart-loads, together with 42 dozen hurdles (used instead of planks on the scaffold) (1.12, 2.11, 3.8, 4.8). Small oaks (querculi) and alder are recorded as being used for scaffold timber, much of it coming from the Forest of Bere (2.11, 4.8) and some from Kingesden (1.12); the alder was from 'the marsh' in Bere (2.11). Hurdles were made in Kingesden (24 dozen) and Boarhuntwood (18 dozen), probably from coppice wood; the underwood of Kingesden also provided two cart-loads of withies for binding scaffolding (3.8). The firewood collected there for the lime kiln included branches, pollards (roburum; see Rackham, 1980, 182) and large underwood (grossi subbosci) (1.8). As no timber needed to be purchased, the greatest cost in providing the material was for carriage, and this did not amount to much. Although carts from Netley cost 2s. 10d. and from Hayling 12d. (1.13), those from the Forest of Bere (like those from Bedhampton) cost 8d., and Kingesden only 3d.

### Boards, Tiles and Glass

Imported boards were employed for specialized purposes, in making doors and window shutters, and moulds for the masons to work from (1.5, 2.6, 3.6, 4.6). They originated in the Baltic (Salzman, 1967, 245; Rackham, 1980, 151), and came to Portchester from Southampton: one boat in 1396 carried a cargo of iron, coals, boards and an anvil (1.10). Wainscots (probably oak boards from Poland) were used in greatest number, for doors and windows. 'Botmeholt' boards were used in 1396, half of them for masons' moulds, but it is not known what they were (Salzman, 1967, 247). 'Rigolebord', from Riga, were being used in 1398–9 for the doors of the hall and kitchen, and for moulds (4.6); they may have been of softwood. The poplar boards made into two coffers for hauling mortar and lime (3.6) were doubtless home-grown, while the laths, for which no transport is recorded (2.5, 4.6) were probably all made locally. Poplar boards have been used in modern times in stone quarries, because of their hardiness (Edlin, 1949, 120).

Tiles were both locally made and imported (1.5, 2.6, 3.6). Hearth-tiles for chimneys came from Crockerhill in Fareham (1.5, 1.11), whilst 'white tiles from Flanders' were bought in London at Billingsgate, and apparently shipped to Poole before coming on to Portchester (1.5, 1.10). Paving-tiles arrived from Southampton, being used for the King's chamber, the chapel and two other chambers (2.6) and the 'private chamber' (3.6); they may have been decorated ones.

Glass occurs once, in the last roll (4.7): 216 ft.² (20 m.²) of glass decorated with shields, badges and borders for the windows of the hall, great chamber, chapel, exchequer chamber and adjoining high chamber, with the windows of the tresance, the kitchen and the low chamber below the great chamber, also 5 ft.² (0.6 m.²) of glass for the window above the tresance of the great chamber. The tresance, or passage, was possibly some internal screen in the chamber, but is perhaps more likely to have been the external stone passage, in which case the plain window above it was actually in the hall, though the passage was of course leading to the chamber.

#### Metalworking

Plumbers and smiths were working almost continually at the castle, and using a large amount of fuel as well as their raw materials. Some local charcoal was purchased for the smiths (2.5, 4.9), perhaps for steeling tools, and a great quantity of sea-coal which mostly came from Southampton or Portsmouth (4.10). Some appears to have been bought direct from the ships coming round from the north-east coast (or the Severn), as shipping was not paid for some 'by agreement with the sailors' (3.10, 4.10). The coal was also used for the lime-kilns, as mentioned above.

Lead was bought, some 35 tons of it (a 'fother' being 19 or 20 cwt.; Salzman, 1967, 263). At least half of it came from Mendip, carted 7 leagues to the sea, shipped round the coast and then carted ashore (3.7); another load came from Southampton (1.6). About a ton was refined from lead-ashes (2.17, 3.7), and over 8 tons were reused from Mere Castle in Wiltshire, where from it was carted (3.7). Solder was purchased for making and repairing water-pipes (1.6, 4.7). A small quantity of steel was bought for hardening the craftsmen's tools, some of it Spanish steel (1.4, 2.4, 3.5). Over 7 tons of iron were purchased, some 17 per cent of it being described as 'worked', perhaps implying that it was wrought in bars (1.4, 2.4, 3.5, 4.5). 300 lb. of 'large iron called brodyre' was bought for making large

hinges (4.5). The ultimate source of the iron is not stated, though it came via Southampton. It was used to make hinges, bars and catches for doors and windows. Smaller items, chiefly nails, were bought separately, probably from local smiths. A total of 16,510 nails were purchased, of the many different sorts that were available, the greatest number (11,000) being lathnails, followed by spikingnails, doornails, large doornails, windownails, leadnails, twistnails and boardnails.

## Tools and Equipment

There is a section in each year's account for the purchase of 'necessaries' (1.7, 2.7, 3.9, 4.9), in addition to which miscellaneous items occur under other heads. Basic craftsmen's tools do not appear, though grindstones for sharpening them do. Mattocks and shovels were bought for the labourers: shovels were wooden, being either metal-tipped or 'unshod', and were used for mixing mortar as well as digging. Bowls and 'meyles' (large bowls), sieves and tins for water were also required for mixing and carrying mortar. Hauling of stone and timber involved ropes and cords, though trays and wheelbarrows were also used, and a 'troclet' for which a pair of wheels was bought (1.7). Cord was also used for marking out the line of walls, 56 fathoms being bought for this purpose in the second year. Two horse-mills, repaired in 1398, are not further explained, but they may have been for mixing mortar or raising water (3.14).

In certain situations pitch, resin and wax were used for fixing stones (1.7, 2.6, 3.6, 4.6): one of these (2.6) gives the location of the work as the roof over the outer gate, where there can still be seen a portion of ashlar roofing at the north-west corner (Cunliffe, 1977, 20; see Salzman, 1967, 153). Possibly the ladles and 'turfyr' were associated with this (1.7). One barrel of pitch was used for blackening hinges (3.6), in contrast to those which were tinned (1.19, 3.20, 4.19; see Salzman, 1967, 295).

A chance reference to locks for the lodges (1.7) and a smith's chamber (3.8) implies the existence of temporary huts for the workmen, whilst the purchase of a bell-cord was perhaps for the bell that regulated working hours (4.9). In each year except the third, candles were bought for night-work, stated in 1399 to be for use between All Saints (1 November) and the Purification (2 February), and thus presumably to lengthen the hours on the shorter winter days for which in any case a lesser day-rate was often paid.

# The Progress of the Work

Despite the details afforded by these accounts, the order in which work was carried out on the new buildings is not made entirely clear by the incidental descriptions which are provided.

In the 33 weeks of work in 1396, some preliminary tasks were dealt with: the labourers were busy making a wharf to keep the stone out of salt-water when landed, demolishing walls and carrying away rubble and old timber, and in digging foundations (1.20). The masons worked on 'a new chamber between the keep and Asshetonestower previously broken and all decayed' (1.14); the layers took down old walls and made foundations and new walls for 'the said chamber', with dividing walls upstairs and down (1.15). A few carpenters felled and scappled oaks and others took out timber from the old chamber and worked on timber for the new chamber (1.16); meanwhile sawyers were preparing planks for flooring and

roofing the new chamber (1.17) and the plumbers put on the lead roofing, gutters and spouts (1.18).

Purely in the terms of the descriptions given here, it might appear that one chamber in the north range is being referred to, the chamber of the constable's lodging and/or the north bastion chamber at the level of the wall-walk. However, the archaeological evidence indicates that although the ranges in front of the keep were demolished at this time, and these could well be described as 'between the keep and Assheton's Tower', the constable's dwelling (at least at ground level) did not undergo alterations at this stage. All the new work on the 'chamber' is most likely to have been on the west range, which involved new foundations and the building of dividing walls (the hearth-tiles were also purchased in this year); the work was apparently also on a larger scale than would have been necessary simply for refitting the chamber of the constable's residence, or adding the chamber in the top of the adjacent tower.

Other operations of the first year included repairs to the leadwork of the keep, and reroofing the 'lower tower joined to the keep' (1.18). The smiths made fittings and sharpened the workmen's tools, labourers dug chalk and helped with carting, and the lime-burners filled and fired their kiln six times.

The second account covers most of 1397. Work on the chamber was finished with earth flooring (2.10) and laying of paving-tiles in 'the King's chamber, the chapel and two other chambers adjoining the said chamber' (2.6). It was perhaps the internal walls of the west range that were plastered with the 'plastureston of Purbik' (2.3). Masons and carpenters began on the 'new hall and kitchen with pantry, buttery and other new chambers adjoining' (2.13), for which the labourers prepared foundations, 'digging and searching for firm ground' (2.22).

All the gates were refitted. That of the inner ward had a new timber roof put on 'le port coleys' tower and was leaded (2.15, 17), probably on the extension made earlier to its south (see p. 92). The 'new fabric' made at the water gate was roofed with stone tiles (2.19), though there was probably not any masonry work here, the 'new fabric' being a generation older (Cunliffe, 1977, 10–14). The land gate, or 'great gate of the outer ward', was given a 'double vault' on the ground and first floor (Cunliffe, 1977, 16–21), for which special stones were bought (2.3, 13, 14); the use of pitch, resin and wax on its roof has been referred to above.

Plumbers also leaded the 'tower above the artillery' and the east tower of the inner ward (2.17), neither of which can certainly be identified. Chalk-diggers are given a separate entry in this year, winning and scappling stones from the quarry below Portsdown, both for lime-burning and for use in building (2.21). Labourers carried mortar and stones for the layers, fetched large stones for the masons, dug foundations and did 'all other burdens placed upon them' (2.22).

Only 25 weeks of 1398 are included in the third account, up to St John the Baptist Day (24 June). Masons and carpenters continued on the hall range, and 20 carts of old timber were taken to the carpenters for flooring the new hall (3.12), whilst sawyers prepared planks for roofing the hall and kitchen (3.18). In the previous year 16 great beams for the hall had been carted in (2.12), and now oil was obtained to preserve the timber from sun and wind (3.6). The '39 pieces of large stone 3 ft. long... called newels' (3.4) were perhaps for the hall porch, and 400 paving-tiles for paving a private chamber (3.6) were possibly for the room over the porch, if not for the chambers beneath the hall.

In a separate item of 'taskwork' (3.14), the basement of the keep was vaulted 'with double vaults' (a reference to the two parts on either side of the cross-wall). Plumbers finished the work begun on the water gate in the previous year; they also removed and mended gutters and spouts round the 'Quenechambre' (3.19), which would seem to imply that this building was still standing, though there is reason to suppose that it might have been the chamber to the south of the keep and now demolished (p. 143 above).

The last account covers the longest period, some 61 weeks from June 1398 until August 1399. The roof of the hall and kitchen was probably raised during this time, as a long cable was bought for hauling the 'great timber of the new hall and kitchen' (4.9), and timber was bought for the femorall or louver in the kitchen roof (4.3; cf. 3.7). Sawyers were still preparing planks for the roof (4.17) and then the plumbers put on the lead which had been purchased the year before (3.7), lastly fitting the gutters and drain-pipes 'through which the water descends to the earth' (4.7; 18). The stone-layers prepared the stonework for the gutters and rendered the walls of the new building (4.15); they also paved the kitchen floor, though the chambers were floored with earth from the ditch (4.13). Carpenters worked on the carpentry of the 'new hall, kitchen, pantry, buttery and chambers beneath them' (4.16). The doors to the hall and kitchen were made of 'rigoldboard' (4.6) and special 'broadiron' was purchased for their hinges (4.5). Locks and keys were provided for eight doors (4.9). Glass, as previously described, was fitted to the principal windows (4.7).

One rather puzzling reference is to the purchase of 2,000 lathnails and 500 laths for the 'celura supra dress' (4.5; 6), possibly a ceiling or coving above the dresser or serving-table at the entrance to the hall, or a coving above the high table.

Some new work was commenced in this year. Trees were felled to provide rafters for 'two new towers begun next the Queen's chamber' (4.3), and masons were working on 'two new towers and other buildings' (4.14). The only key to their location is provided by the description of the purchase of straw (4.13), which was put on 'the walls of the two towers on the east and north sides of the castle' over the winter (4.15). If the inner bailey is being referred to, then the obvious candidates would be the northern bastion chamber on the wall-walk above the constable's house, and the south-east tower. Only the former retains evidence of work at this period though there may have been similar work in the south-west tower (p. 105 above). (This again raises the problem of the use of the 'Queen's chamber' as a locating point, if that building had been demolished in 1396 as one of the chambers next to the keep.)

Evidently the main ranges were completed by the summer of 1399, with glass in the windows and locks on the doors. This was fortunate, as work came to an abrupt halt, the last day of the account (23 August 1399) being four days after Richard II's reign ended with his surrender to Henry, Duke of Lancaster, at Flint.

#### The Personnel

Apart from a small portion of work undertaken ad tascham (as piece-work) most of the building works of these years were done by a large body of impressed labour, sought out by the purveyors and brought to the castle on pain of imprisonment, as was commonplace at the time (Colvin et al., 1963, 192). A bailiff spent 28 days in the first year 'arresting' craftsmen in Hampshire, Sussex, Berkshire and Wiltshire; John Cook went to the Isle of Wight for 16 days, arresting masons and labourers to work in the quarries there (which he also inspected);

Walter Weston went as far as Gloucester to fetch masons (1.21). Following a second commission in 1397 (§126), two purveyors (one a Portchester man and one who had worked as a labourer in the previous years) went out again to 'attach' craftsmen and materials (3.23); in the fourth year only one of them went (4.22). Unlike the work-force drafted to Wales a century earlier (Taylor, 1961) it is not possible to discover the origins of the men working at Portchester, though a few names may be toponymics. Certainly a large proportion of the general labourers were Portchester men, with names such as Baron, Hough, Jolif, Meir and Wroght being prominent in village records; while the plumbers who worked throughout the campaign are very likely the local Plumber family who figure in the 1405 survey. John Demayn, the principal smith at work in the first two seasons, was a local man, since his gear was carted over from Idsworth (1.21).

There was quite a high turnover of the work-force; of the 280-odd men who worked on the castle, only 10 per cent came in each of the four years, a further 20 per cent returning for more than one year. The number of days worked was variable, men perhaps being laid off and taken on as needs dictated. The size of the force always decreased over the winter, the period between the feast of All Saints (1 November) and the Purification (2 February) having a lesser rate of pay for the shorter winter days (there was also a week or so taken off at Christmas). Only Walter Weston, the sub-warden, and Thomas Clevere, the master-carpenter, were at work continuously, staying longer than anyone else in each year. The master-mason Walter Walton, was present for a few weeks, coming for only short visits in each season. He was a London mason, who had worked on Westminster Hall under Yevele in 1394–5 and at Shene (Harvey, 1954; Colvin et al., 1963, 211). Neither Weston nor Clevere are known for work outside Portchester, but a couple of masons can perhaps be identified with known personalities. Thomas Denyas (4.14) may be the same as Thomas Denyar of Hereford, and Richard Wynchcombe (4.14) is probably the well-known Oxfordshire mason (Harvey, 1954).

#### Costs

The costs of the whole campaign are laid out in table XII, where a simple analysis has been made of the relative expenditure on materials, transport and labour (based on the main divisions of the accounts). Whilst this is not as exact as might be wished for, in that each category subsumes parts of others, the results would probably be little different if calculated with more precision. The works cost almost £1,600, of which over half was spent on labour, a third on the purchase of materials, and the remainder on transport.

The amount of time covered by each account is different (see table XI), but in terms of average spending on labour per week (£5.5s. over the whole period) the only marked variation is a higher expenditure in the second year (£6.10s.). Purchases were proportionately higher in the first year, as would be expected, and the high figure in the third account (covering only 25 weeks) is balanced by the low spending in the fourth account.

The total given on the enrolled account ( $\S127$ ) is greater than the sum of expenditure recorded on the counter-rolls of particulars, and probably includes costs incurred elsewhere: £1,899. 16s. 5d. against receipts of £1,792. 19s. 5d. The enrolment concludes with a list of dead-stock remaining at the end of the works.

TABLE XI §125. Particulars of Account 1396-9 (P.R.O. E101/479/23-4)

	1396	1397	1398	1398–9	Totals
Stone	322 tun Bonchurch 90 tun Bembridge 48 tun Beerstone	594 tun Bonchurch 126 tun Bembridge 162 tun Beerstone 22 tun plastureston	235 tun Bonchurch 113 tun Bembridge 80 tun Beerstone	564 tun Bonchurch 200 tun Bembridge 80 tun Beerstone	1715 tun Bonchurch 529 tun Bembridge 370 tun Beerstone 22 tun plastureston
Flint Sand Chalk	1000 carts flint 243 tun sand 167 carts chalk (87 lime; 80 hard)	563 tun sand 606 carts chalk/lime	62 carts flint(shore) 315½ tun sand 424 carts chalk/lime	405 carts flint(down) 363 tun sand 554 carts chalk/lime	1467 carts flint 1484½ tun sand 1751 carts chalk/lime
Earth		100 carts earth		99 carts earth	199 carts earth
Charcoal Sea-coal	(180 carts underwood) 11 qr. 4 bus. sea-coal	3 qr. charcoal 53 chaldr. sea-coal	46 chaldr. sea-coal	15 qr. charcoal 45 chaldr. sea-coal	18 qr. charcoal 144 chaldr.; 11 qr. 4 bu sea-coal
Lead and solder	77 lb. solder 12 fother lead	1100 [lb.] refined lead	14½ fother Mendip lead 1 foth., 800 lb. refined 18,900 lb. lead from Mere	67 lb. solder	144 lb. solder 27½ fother, 20,800 lb. lead
Glass		12 sheafs steel		{216 ft. dec. glass } 5 ft. plain glass}	221 ft. glass  20 sheafs steel
Steel	8 sheafs steel	114 lb. Spanish steel	94 lb. Spanish steel	(2200 lb. iron	208 lb. Spanish steel
Iron	3270 lb. iron 500 lathnails	1700 [lb.] iron 2046 lb. worked iron 8500 lathnails	6500 lb. iron 264 lb. worked iron	463 lb. worked iron 3001 lb. 'brodyre' 2000 lathnails	2773 lb. worked iron 300½ lb. 'brodyre'
Nails	60 bordnails	1200 spikingnails 1600 doornails 250 large doornails 1400 window/leadnails 1000 twistnails			5510 other nails (16,510 nails in total)
 Scaffold	36 carts scaffold	39 carts scaffold	4 carts scaffold 2 carts withies	25 carts scaffold	104 carts scaffold 2 carts withies
Hurdles Timber	156 hurdles 142 carts timber	216 hurdles 158 carts timber	72 hurdles 49 carts timber (20 old timber)	60 hurdles 57 carts timber	504 hurdles (42 doz.) 406 carts timber 238 King 148 gifts 20 old
(feet sawn) Boards	6673 ft. sawn  134 wainscot 12 bottomeholt	7300 ft. sawn 301 cwt. wainscot	2739 ft. sawn  { 60 wainscot }  2 poplar }	4000 ft. sawn  100 wainscot  1 cwt. rigolebord	20,712 ft. sawn 308+302 cwt. board
Laths Tiles	∫ 300 hearthtiles	1300 laths	400 pavingtiles	500 laths 576 pendantiles	1800 laths 14,276 tiles
1 1163	1000 Flanders tiles	12,000 pavinguies	400 pavinguies	5/0 bendanines	14,270 tiles

Tools etc.	2 anvils				2 anvils
		2 sledges			2 sledges
	2 mattocks	ı pick			1 pick+2 mattocks
	2 pairs wheels				2 pairs wheels
	3 wheelbarrows	5 wheelbarrows		2 barrows	10 barrows
	_			4 trays for hauling	4 trays for hauling
		24 ?hoops	6 hoops for barrows	4/5	30 hoops
	7 shovels	15 shovels	a moops for Surroy, s	6 shovels	28 shovels
	, i			[ 1 long cable (112 lb.)	20 5210 7 013
			[13 fathoms cord]	2 steycords (15+13 fath.)	
	cable	56 fathoms cord	4 steycords	i bellcord	ropes
			4 sicycolus	24 fathoms line	
	8 bowls	II bowls	12 bowls	10 bowls	houde
	8 meyles	12 mortarmeyles	12 downs 13 meyles	10 DOWIS	41 bowls
	1 tub	2 tins for water	13 meyies		33 meyles 1 tub+2 tins
	2 kevels	2 this for water			
	ı chisel				2 kevels
	2 baskets				1 chisel
	4 sieves	<b>-</b> ( ) ( )			2 baskets
	2 ladles	7 sieves (+ riddle)	ı sieve		12 sieves
	1 turfyr	6 potyladels	6 ladles		14 ladles
		, , , ,			ı tyrfyr
	I grindstone (+2 pts.)	3 small grindstones	2 grindstones		8 grindstones
		3 barrels pitch	1 barrel pitch	∫ 1 100 resin }	pitch, resin
	13 lb. pitch and resin	\{ 300 lb. resin	\{ 24 lb. resin \}	2 lb. wax	wax and oil
		24 lb. wax	$\left\{\begin{array}{c} 6\frac{1}{2} \text{ gall. oil for timber} \end{array}\right\}$	(	
	,, ,,	2 pairs bellows	ı bellows	1 horse-hide for bellows	bellows
	18 lb. candles	candles		26 lb. candles	44 lb. + candles
	2 locks for lodges	12 locks		8 locks + keys	22 locks
Masons	1748 days	5037½ days	1469½ days*	3802½ days	12,057½ days*
ayers	1125 days	1880 days	731 days	2670½ days	64061 days
Carpenters	1974 days	21441 days	856 days	26181 days	7593 days
awyers	102 days*	22 days*	(***)	(***)	124 days + task-work
lumbers	140 days	96 days*	16 days	186 days	438 days*
miths	249 days	532 days	292 days	695 days	1768 days
Roofers	~~ ′	50 days	-3,-	33 44,5	50 days
ime-burners	(6 firings)*	490 days	140 days	420 days	1050 days
tone-diggers	`	280 days	1-10 (11)3	420 days	280 days
abourers	1661 days	3207 days	975½ days	31901 days	9034 days
urveyors	(78 days)*	3-07 4475	100 days	118 days	9034 days 296 days*
	(/,-)		100 days	110 days	
	(33+ weeks)	(46+ weeks)	(25 weeks)	(67 vysola)	39,097 days in total
	(33) (1008)	(407 Weeks)	(*2 wccrs)	(61 weeks)	(165 weeks)

<sup>\*</sup> Includes task-work of unknown duration.

TABLE XII

Costs of Building Works 1396-9

	139	6		1397			I	398		13	98–9			Totals	
Materials	£131 12s. 3	d. (39%) 1.3-9	£124 9.	s. 10½d.	(25%) 2.3-8	£157 1	35.	5 <i>d</i> .	(49%) 3·3-9	£91 19s.	9 <b>3</b> d.	(21%) 4·3 <sup>-</sup> 9	£505 15	. 4 <u>1</u> d.	(32%)
Transport	£43 25. 3	d. (13%) 1.10-13	£73 17.	sd.	(15%) 2.9-12	£34	5s.	5 <u>₹</u> d.	(11%) 3.10.13	£66 11s.	5 <b>½</b> d.	(15%) 4.10–13	£217 16	s. 2d.	(13%)
Labour	£162 25. 10	d. (48%) 1.14-21	£297 9	s. 11 <i>d</i> .	(60%) 2.13-22	£131	<b>4</b> 5.	5 <b>d</b> .	(40%) 3.14-23	£283 19s.	6 <u>3</u> d.	(64%) 4.14-22	£874 16.	s. 8¾d.	(55%)
Totals	£336 17s. 4	d. (100%)	£495 16.	s. 9½d.	(100%)	£323	3s.	3½d.	(100%)	£442 10s.	10d.	(100%)	£1598 8.	s. 3d.	(100%)
Less receipts (oak sales)	15s. –	d.	£1 1.	s. 8d.			8s.	-d.		8s.	3d.		£2 12:	s. 11d.	
Totals	£336 2s. 4	<i>1</i> .	£494 155	. 1½d.		£322 1	5s.	$3\frac{1}{2}d$ .		£442 25.	7d.		£1595 15	s. 4d.	

§143. Estimate for Repairs to the Castle, c. 1581 (B.L., MS. Lansdowne 31, no. 70)

This document, dated by association with others in the same volume, is a brief estimate drawn up by Thomas Frymley (cf. §145) of the timber and lead required to repair the roofs of the castle: in total 45 loads of timber, 1 ton 19 cwt. of lead and a cost of £66. 14s. It deals only with the inner bailey, and names the following: roof of the gatehouse, two bridges 27 by 10 ft. 6 in. (8·2 by 3·2 m.), roofs of the hall, the surveying place, the great chamber, the chamber between the great chamber and the King's chamber, the King's chamber, the chamber from the King's chamber towards the windmill, the 'Asselyn tower', the chamber on the right-hand coming into the castle and the stable 80 by 21 ft. (24·4 by 6·4 m.).

If these are given in succession going clockwise, the surveying place might be the south-west tower (or even the keep), and the 'King's chamber' the room in the forebuilding with the bay window (and royal coat of arms beneath). The windmill would then have been on the site of the earlier tide-mill on the north-east side (though later it was to the west of the castle). Like all surveys of the castle, it paints a gloomy picture of the state of decay, and perhaps stimulated the allocation for repairs in the subsequent invasion scare (§144).

John Norden, having carried out his county surveys in the 1590s under the patronage of Lord Burghley, became surveyor to the Duchy of Cornwall in 1604 (Tyacke and Huddy, 1980, 43-5). In 1607 he made a survey of the Honor of Windsor for presentation to James I, and this included a large coloured bird's-eye view of the castle (*ibid.*, 60; Hope, 1913, 291 f. and plan VIII); he later surveyed the royal forests and other castles (Colvin *et al.*, 1975, 286 and 295). It was on his way to a timber sale in the New Forest that he stopped off to make the survey of Portchester in 1609.

The view of the castle (pl. XLIII) is little more than a sketch, possibly drawn up from memory and less sophisticated than his view of Windsor Castle. However, it supplies several corroborative details, and features such as the garden next the gate that would not otherwise be known.

The survey describes the western half of the castle as nearly derelict, owing to the removal of lead. Norden suggests that the keep should be lowered by half, as it hinders the escape of chimney-smoke. The unused buildings could be stripped of their remaining lead for selling, though the cost of new timber would hardly make it worth reroofing in cheaper materials. Cornwallis's new building, estimated to have cost over £300, is presumably the 'building not long since newly erected', but then it is curious that this is described as being 'almost uncovered' and in need of glazing.

The demesne land of the castle is briefly described, without the rest of the manor:  $8\frac{1}{2}$  acres (3.4 ha.) round the castle and 24 acres (9.7 ha.) of warren or coppice on Portsdown (probably the last remnant of Kingesden wood). Norden is puzzled by the tenancy of the house inside the outer bank, and suggests that its claim to be customary be investigated. Finally he suggests that the opportunity should be taken to unite the castle with the office of Governor of Portsmouth. This, and the general tone of the report, rather suggests that the castle was

unoccupied at the time of the survey, and later it was granted to the Earl of Pembroke to be held with Portsmouth (Cal. S. P. Dom. 1603–10, 551), though Cornwallis himself did not die until 1618.

TABLE XIII
Summary of References to Building Works in Portchester Castle

ı.	Michs. 1174 Repairs to gates and keep (portar' 7 turris) included in garrison account.	£2 -sd.
	Works on bridge, gates and walls; engines and other things.	£9 -sd.
	P.R. 20 Hen. II (P.R.S. xxi), 125 and 138	
2.	Michs. 1181	
	100,000 slates brought from Totnes to Portchester Castle.	£7 10sd.
	P.R. 27 Hen. II (P.R.S. xxx), 28	
3.	Michs. 1183	
	Repairs to King's houses (domos regis); by view of Mathew Oisel and Richard fitz Daniel.  P.R. 29 Hen. II (P.R.S. xxxii), 72	£3 3s. 9d.
4.	Michs. 1191	
	() cables for bringing and lifting timber for works at the castle.	12s. 8d.
	P.R. 3 Ric. I (P.R.S. n.s. ii), 92	
5.	Michs. 1192	
	Elyas of Oxford accounts for carpentry and works at the castle; by view of William of Ranvill' and Hugh Palmer	£10 $-s$ . $-d$ .
	For works on the King's houses in the castle.	£4 1s. 4d.
	P.R. 4 Ric. I (P.R.S. n.s. ii), 294	
6.	Michs. 1193	
	Works and repairs to castle, repairing walls and ditches, and fitting out mangonels (mangunellis parandis) by view of W.R. and H.P.	£10 13s. 2d.
	P.R. 5 Ric. I (P.R.S. n.s. iii), 133	
7.	Michs. 1200 Hugh of Neville accounts for £76 12s. 8d. spent on repairs to several of the King's houses, including Portchester; by view of William Spileman and Walter Fuilet, also for works at Portchester by view of William Ranvill and Rannulf Ruffi.	£8 10s. 1d.
	P.R. 2 John (P.R.S. n.s. xii), 162	
8.	Michs. 1200	
٥.	Master Elyas the Engineer ( <i>Ingeniator</i> ) accounts for repairing the King's houses in the New Forest and at Portchester.	£8 14s. 4d.
	<i>Ibid.</i> , 191	
ο.	April 1201	
J.	Hugh of Neville is to be paid for expenditure on the King's houses at several places, including Portchester.	
	'Liberate Roll' 2 John (P.R.S. n.s. xxi), 95	
10.	Michs. 1203	
	Hugh of Neville accounts for works on the King's houses at Portchester; by view of Mathew Oisel and Robert fitz Maurice.	£24 3s. 5d.
	P.R. 5 John (P.R.S. n.s. xvi), 161	
II.	22 January 1208  Hugh of Neville is to be paid for expenditure on repairs to the King's houses at several places,	
	including Portchester.	
	Rot. Litt. Claus. (Rec. Com.), i. 100b	
12.	Michs. 1208	
	Hugh of Neville accounts for expenditure on works on buildings in the castle; by view of Robert Renceval.	£5 2s. 4d.
	P.R. 10 John (P.R.S. n.s. xxiii), 202	

# DOCUMENTARY SOURCES FOR BUILDING WORKS

<u> </u>	Micha rozz	
13.	Michs. 1211 Hugh of Neville accounts for works at the castle, on a chamber and wardrobe (camera 7 warderoba).	£15 9s. 4d.
	P.R. 13 John (P.R.S. n.s. xxviii), 84	
14.	27 April 1217 Oliver of Aubeny ordered to pull down, or failing which to burn down the castle. [It had surrendered to the French forces in the previous year.]	
15	Cal. Pat. Rolls, 1216-25, 62	
15.	29 July 1218  The Sheriff of Hants is to repair the castles of Winchester, Southampton and Portchester.  Rot. Litt. Claus. (Rec. Com.), i. 367a	
16.	27 February 1220 The Sheriff of Hants is to pay the Bishop of Winchester for repairs to the castle (ad firmacionem castri nostri).	£5 -sd.
	Ibid., 412b	
17.	P.R. 3 Hen. III (P.R.S. n.s. xlii), xiii and 24 18 May 1220	
1 /.	The Bailiffs of Southampton are to send four chars of lead to the Constable for roofing the keep (turrim nostram de P. cooperienda).	
	Rot. Litt. Claus. (Rec. Com.), i. 418a P.R. 4 Hen. III, rot. 9d	
18.	3 November 1226 Allowance to the Sheriff of Hants for repairing a tower (? the keep) in the castle (also collecting munitions).	£4 2s. 9d.
	Cal. Lib. Rolls, 1226-40, 3	
19.	Allowance to Geoffrey of Lucy, Constable, for repairs to buildings in the castle (10 marks).	£6 13s. 4d.
20.	18 November 1229 Geoffrey of Lucy is to take timber from the Forest of Bere, to construct a kitchen and small chamber for the King's use; to repair the buildings of the castle, and to take timber there.  1bid., 157	
21.	30 January 1230 Allowance to Geoffrey of Lucy, for works in the castle.	£25 7s. 8d.
	Ibid., 164	£25 /s. ou.
22.	201	£7 4s. −d.
	use, for repairs to the King's houses at Portsmouth, and for carrying the timber to Portchester.  The same accounts for repairs to, and roofing of, 'Portsmouth' castle; by view of Philip the	(£11 8s. 3d.)
	Forester and William Poitou.	(%)
	P.R. 14 Hen. III (P.R.S. n.s. iv), 200	
23.	(? May) 1231 William Poitevin and Philip Forester, by their view of the work on the keep (in operacione turris), vouch for the expenditure on its repair and roofing of Portchester.	(£11 8s. 3d.)
24.		
	Paulin Peyvre and John of Gatesden, keepers of the Bishopric of Winchester, are to repair the hall in the castle.	
25.	5 April 1249	
٠,٠	The Sheriff of Hants is to spend 50 marks on repairing the castle.  Cal. Lib. Rolls, 1245-51, 225	(£33 6s. 8d.)
26.	I January 1253 Cancelled order, as §29, for 'works on the King's tower'.	
	Cal. Lib. Rolls, 1251-60, 95	

# EXCAVATIONS AT PORTCHESTER CASTLE

# TABLE XIII—continued

27.	I January 1253 The Sheriff of Hants is to find four viewers for works on the keep (in operaciones turris).		
^	Cal. Close Rolls, 1251-3, 439.		
28.	7 February 1253 Peter of Cosham, Herbert of Boarhunt, Andrew of Horsea and Geoffrey of Beaumont are		
	appointed viewers, and ordered to go to the castle.		
	Ibid., 317		
29.	16 March 1253 Richard of Guernsey is to pay 100 marks to the Sheriff of Hants for the King's works at Portchester.	£66 13s.	4 <i>d</i> .
	Cal. Lib. Rolls, 1251-60, 115		
	10 July 1256		
30.	The Sheriff of Hants is to go to the castle with Master John the mason and Master Alexander the carpenter, to view the defects of the castle and its buildings, and by their advice to make contracts for necessary task-work.		
	Ibid., 310		
21.	13 August 1256		
3**	The Keeper of the New Forest is to supply 25 oaks to the keepers of the works in the King's castle.		
	Cal. Close Rolls, 1254-6, 349		
32.	13 September 1256		
34.	The Bailiffs of Southampton are to let the Sheriff of Hants and the keepers of the works at the castle have a cable and two lesser cords (such as the keepers shall think fit for the works) out of the farm of the town.		
	Cal. Lib. Rolls, 1251-60, 322		
33.			
33	Robert of Mares, Keeper of the Forest of Bere, is to supply the Sheriff of Hants and the keepers of the works at the castle with 50 oaks suitable for the works, together with the parts of the trees not needed for the works; to give them for the flooring of the keep (ad plancheandum turrim) the gangways (de pontibus) in his custody that were made for the King and Queen going overseas, and similarly as many hurdles (de cleis) as they need for making scaffolds for the said works.  Cal. Close Rolls, 1254-6, 360-1		
34.	23 November 1256		
31	The Bailiffs of Southampton are to let the Sheriff of Hants have six chars (carratas) of lead for the works at the castles of Winchester and Portchester.		
	Cal. Lib. Rolls, 1251-60, 342		
35.	20 July 1257		
33.	The Bailiffs of Southampton are to buy 12 chars of lead and carry it to Portchester for the works of the castle.		
	Ibid., 387		
36.	A		
501	The Sheriff of Hants is to roof the keep of the castle thoroughly with lead, and spend up to £10 in repair of the buildings there where most necessary; by view of the Constable and other good men.	(£10 -s.	d.)
	Ibid., 445		
37•	29 September 1259  The Bailiffs of Portsmouth are to let the Sheriff of Hants have £20 to buy lead for the roof of	(£20 −s.	d.)
	the King's tower at Portchester.		
۵0	Ibid., 478		
38.	The Sheriff of Hants is to spend up to 10 marks on repairs to the buildings and the King's	(£6 13s.	. 4d.)
	chapel, as only £5 was spent after the previous order.		
	Ibid., 522		

Ibid., 522

# DOCUMENTARY SOURCES FOR BUILDING WORKS

		· · · · · · · · · · · · · · · · · · ·
39•	Michs. 1260 The Sheriff of Hants accounts for 10 marks spent on repairs to buildings and the King's chapel in the castle.	£6 13s. 4d.
	P.R. 44 Hen. III, rot. 3	£0 133. 4 <i>a</i> .
40.	19 October 1260 Allocation to the former Sheriff of Hants for repairs in 40 Hen. III to defects in the castle by task-work, by counsel of Master John of Gloucester and Master Alexander (see §30 above).  Cal. Lib. Rolls, 1251-60, 533	£71 10s. $7\frac{1}{2}d$ .
41.	19 October 1260 Similar allocation for completely roofing the keep with lead, and repairing buildings in 43 Hen. III (see §36 above).	£5 -sd.
40	Ibid., 533 Michs. 1261	
42.	Enrolment of §41.  P.R. 45 Hen. III, rot. 9 <sup>d</sup>	£5 -sd.
43.	I October 1261 The Sheriff of Hants is to repair the castle bridge; payment to be made by view.  Cal. Lib. Rolls, 1260-7, 59	
44.	4 April 1264	
	The Bailiffs of Portchester are to spend up to 5 marks on repairing the tower under the church beside the sea.	(£3 6s. 8d.)
	Ibid., 133	
45.	4 April 1264 The Keeper of the Forest of Portchester is to supply 20 oaks to the Constable of Winchester Castle, from the King's wood of Bere inside the Forest: 10 for making bars (barreas) and 10 for shingles for roofing the castle buildings as necessary.  [It is possible that the word Portchester in the margin of this enrolment is a mistake, and that it may refer	
	to Winchester Castle.]  Cal. Close Rolls, 1261-4, 339	
	(P.R.O. C <sub>54</sub> /81 m.4)	
46.	14 September 1267 The Countess of Arundel, Constable of the castle, is to repair as necessary the castle buildings; to be credited by view from the issues of the castle.	
	Cal. Lib. Rolls, 1260-7, 290	
47•	14 November 1275  An extent of Portchester, largely concerned with manorial income, states that the castle buildings are old and ruinous, unsuitable for habitation, and in need of great repair.  P.R.O. E143/1/3(9)	
48.	15 May 1289 Henry Huse, Constable of the castle, is to repair the castle buildings and rebuild (de novo construi) the King's mill.	
	Cal. Close Rolls, 1288–96, 10	
49.	17 May 1289 The Keeper of the Forest of Portchester is to supply the Constable with as much timber as is	
	necessary for the works.  Ibid., 10	
50.	18 December 1290 Allocation to the executors of Henry Huse, late Constable, for expenditure on repairs.	£22 11sd.
51.	Liberate Roll, 19 Ed. I, m.5 18 October 1296	
Ĭ	John le Faukener is to go to Portchester and survey the works of John of St John, the custodian. P.R.O. E101/683/12(i)	

52.	(No date) Report of John le Faukener on the works at the castle (see p. 136 and text p. 176).  Ibid. (ii)	(£17 8s. 4d.)
53•	September 1320-1 Particulars of account for the works of Peter of Pulford, Clerk of Works (see §72 below, also	(£47 14s. 5½d.)
- 1	table IV and p. 136.  P.R.O. E101/479/17	
54•	21 September 1321 William of Kingston appointed surveyor of works.	
55.	P.R. 3 Ed. III, rot. comp. 29 (60) September 1321-May 1325	
55.	Enrolled accounts for works under William of Kingston (see §75 below, also table V and p. 137).	(£759 13s. 3d.)
•	P.R. 3 Ed. III, rot. comp. 29 (60)	
56.	July 1324 Payments made by the Comptroller of the Chamber during the King's visit to Portchester include: paint bought at Portsmouth and Chichester (colurs achatez pour peindre la sale dienz	4s. 10d.
	le Chastel de Porcestr'); wages of carpenters, masons, assistants and diggers on two successive weeks, 15 and 22 July.	£30 -s. 8d.
	P.R.O. E101/380/4, f.11v-15 July to Michaelmas 1324	
57•	Accounts of Thomas of Saunford, custodian of the castle, include: repairs to the lead roof of the keep, the carpentry of the bridge and of the furnace roof, and roofing the furnace (furnum).  P.R.O. SC6/980/1	18s. 9d.
58.	6 October 1324 Chamber accounts (as §56) include: purchases from William King, tiler of Chichester, for la novele chaumbre en la foreyne baillye (2300 tiles, 50 tiles de crestes batailles and 50 hupetil pour les corners).	11s. 5d.
	P.R.O. E101/380/4, f.17 <sup>v</sup>	
59•	April 1325 Allowance is to be made to the Mayor and Bailiffs of Southampton for their expenditure in providing lead for the castle works (supplied in October 1322 and February 1323: §55 and table III).	
	Cal. Close Rolls, 1323-7, 281	
60.	May 1325 Chamber accounts (as §56) include a gift to six of the King's carpenters for their work at the castle.	£1 -sd.
_	P.R.O. E101/380/4, f.33*	
61.	Michs. 1324-5 The custodian's accounts (as §57) include ironwork for the castle drawbridge, by Nicholas the Smith of Southwick.	9 <b>d</b> .
	P.R.O. SC6/980/1	
62.	Michs. 1325 The Sheriff of Hants accounts for purchase of materials (timber, iron and nails) and wages of carpenters and others for the construction of a hall and other buildings in the castle in 18 Ed.	£36 18s. 2d.
	II (July 1324-5).  P.R. 18 Ed. II, rot. 14 <sup>d</sup>	
63.	24 January 1326 Allocation to the Sheriff of Hants for expenditure as in §62 and for the Constable's wages from	(£52 3s. 2d.)
	October 1323–July 1324 (£15 15s.).  Liberate Roll 19 Ed. II, m.4	
64.	Michs. 1325-6 The custodian's accounts (as §57) include thatching a hall for the King's household: aula	£1 18s. 6d.
	familie Regis. P.R.O. SC6/980/1	

# DOCUMENTARY SOURCES FOR BUILDING WORKS

	·		
65.	Michs. 1326 The Sheriff of Hants accounts for wages of carters (May 1322-July 1323: £31 9s. ½d.; October-December 1323: £87 10s. ½d.) and for the wages of William of Kingston the surveyor (£10), and for the purchase of 560 qr. of lime (£18 14s. 4d.—see table V, note 5).  P.R. 19 Ed. II, rot. 15  (Memoranda Rolls, 1326-7, 254)	£147 13s.	4 <i>d</i> .
	[There is no Pipe Roll for 20 Edward II and that year is included on P.R. 1 Ed. III]		
66.	August-November 1326 Enrolled accounts of works under Thomas of Saunford include: carpentry for a new chamber, digging a ditch and repairs to the masonry of the keep (see §74 below, and table VI and p. 141).  P.R. 3 Ed. III, rot. 10 m.ij	(£58 16s.	2d.)
67.	20 March 1327 An inquisition finds that 134 oaks had been felled in Chalton and taken to Portchester, to the		
	value of £95.		
68.	Cal. Inq. Misc. ii, p. 244 (983) 28 May 1327		
JU.	Another inquisition, following a petition to the King, finds that in 17 Ed. II (July 1323-4) 134 oaks were felled in Chalton and taken by William of Kingston to the castle (to the value of £90); in 19 Ed. II (1325-6) 100 oaks were purchased for £40.		
^	Cal. Inq. Misc. ii, p. 245 (986)		
69.	12 July 1327 The King allows John heir of Fulk Lestraunge £90 for timber felled in Chalton wood (during John's minority, when the King had his lands), following his petition and the inquisitions.  Cal. Close Rolls, 1327-30, 142		
70.	Michs. 1327		
,0.	Enrolment of Thomas of Saunford's accounts as custodian of the castle, from July 1324 to Michs. 1326 (§§57, 61 and 64). (Also an inventory of dead stock taken on by his successor, John of Basing.)		
	P.R. 1 Ed. III, rot. comp. 4		
71.	Michs. 1328  The Sheriff of Hants accounts for 280 qr. lime purchased for works on the castle and delivered	£9 6s.	8 <i>d</i> .
	to Thomas of Saunford.	~5	
79.	P.R. 2 Ed. III, rot. 14 m.j. Michs. 1328		
/~.	Enrolment of Peter of Pulford's account for 1320-1 (\$53).	£47 14s.	5 <b>1</b> d.
	P.R. 2 Ed. III, rot. comp. 6 (46)	₹41 ·43•	J24.
73∙	8 June 1329		
	Allocation to the executors of Thomas of Saunford for his account in the exchequer (§66).  Liberate Roll 3 Ed. III, m.4	£2 17s.	2d.
74.	Michs. 1329	<u>.</u>	_
	Enrolment of Thomas of Saunford's account for 1326 (§66).	£58 16s.	2d.
~-	P.R. 3 Ed. III, rot. 10 m.ij		
75.	Michs. 1329 Enrolment of William of Kingston's account for 1321-5 (§55).	(750 100	0.4
_	P.R. 3 Ed. III, rot. comp. 29(60)	£759 13s.	zu.
<i>7</i> 6.	13 July 1334 John Randolf is to be allowed his expenses in repairing the buildings and gutters of the castle, although incurred without the King's order (the buildings had been in great need of repair and the late Treasurer had ordered their repair, which had been done by view of the Sheriff and custodian).	£9 7s.	10d.
	Cal. Close Rolls, 1333-7, 236-7		
77-	12 October 1335 Inquisition, following a writ of 28 August, into the defences of the castle (see pp. 141-2, and text pp. 177-8).		
	Cal. Inq. Misc. ii, p. 358-9 (1472) P.R.O. C145/128/19		

78.	(? June) 1336 The Sheriff of Hants is to repair the defects of the buildings, walls, turrets, brattices and enclosures of the castle, spending up to £20 by the advice of the Earl of Arundel (see §80 below).  Cal. Close Rolls, 1333-7, 591	(£20 -sd.)
79•	1337-8 Particulars of account for works of Richard, Earl of Arundel (see §86 below; also table VII, p. 142 and text, pp. 178-82).	(£20 16s. 2½d.)
	P.R.O. E101/479/18	
80.	<ul> <li>Michs. 1338</li> <li>(i) The Sheriff of Hants accounts for expenditure on repairs to walls, turrets, brattices and closes, and the archery, in 10 Ed. III (Jan. 1336-7) (cf. §78).</li> <li>(ii) The Sheriff accounts for money given to the Earl of Arundel for repairs in 11 Ed. III</li> </ul>	£20 -sd.
	(Jan. 1337-8) (cf. §79).  P.R. 12 Ed. III, rot. 15d m.ij	<b>5,20 % %</b>
81.	12 November 1338  The Keeper of the Forest of Bere is to deliver to the Earl of Arundel as much timber as is needed for the works in the castle that have been ordered by the Council. The Sheriff is to provide carriage.	
^	Cal. Close Rolls, 1337-9, 564	
82.	26 October 1339  The Sheriff of Hants is to repair the defects of the houses and the buildings in the castle, spending up to 20 marks, by view of the Abbot of Titchfield.	(£13 6s. 8d.)
^	Cal. Close Rolls, 1339-41, 203	
83.	4 February 1340 The previous writ, and another of 10 November having been surrendered and cancelled, the Sheriff is now ordered to repair the defects in the castle buildings, spending up to £20 by view of the Abbot of Ticchfield (the Sheriff testifies that the defects need speedy repair, and that it	(£20 −s. −d.)
	ann ha dana fan (aa)	
	can be done for £20).  Ibid., 345	
84.	Ibid., 345  11 June 1341  An extent of the King's manor states that the inundation of the sea prevents the castle mill from working, and that the house of one tenant, built inside the castle gate, has been taken into the	
-	Ibid., 345  11 June 1341  An extent of the King's manor states that the inundation of the sea prevents the castle mill from working, and that the house of one tenant, built inside the castle gate, has been taken into the King's hands and given to the Porter.  Titch. Reg., B.L., MS. Loans 29/55, f.27	
-	Ibid., 345  11 June 1341  An extent of the King's manor states that the inundation of the sea prevents the castle mill from working, and that the house of one tenant, built inside the castle gate, has been taken into the King's hands and given to the Porter.  Titch. Reg., B.L., MS. Loans 29/55, f.27  3 July 1341  Following further investigations by the Sheriff, who confirms the damaged state of the mill (amongst other matters), a lower annual value for Portchester is agreed to by the Council.	
-	Ibid., 345  11 June 1341  An extent of the King's manor states that the inundation of the sea prevents the castle mill from working, and that the house of one tenant, built inside the castle gate, has been taken into the King's hands and given to the Porter.  Titch. Reg., B.L., MS. Loans 29/55, f.27  3 July 1341  Following further investigations by the Sheriff, who confirms the damaged state of the mill (amongst other matters), a lower annual value for Portchester is agreed to by the Council.  Cal. Close Rolls, 1341-3, 178-9  Michs. 1343  Richard, Earl of Arundel, in accordance with the King's writ of 10 May 1343, finally accounts for the £20 he had from the Sheriff in 11 Ed. III (1337-8) (cf. §\$79 and 80).	£20 -sd.
8 <sub>5</sub> .	Ibid., 345  11 June 1341  An extent of the King's manor states that the inundation of the sea prevents the castle mill from working, and that the house of one tenant, built inside the castle gate, has been taken into the King's hands and given to the Porter.  Titch. Reg., B.L., MS. Loans 29/55, f.27  3 July 1341  Following further investigations by the Sheriff, who confirms the damaged state of the mill (amongst other matters), a lower annual value for Portchester is agreed to by the Council.  Cal. Close Rolls, 1341-3, 178-9  Michs. 1343  Richard, Earl of Arundel, in accordance with the King's writ of 10 May 1343, finally accounts for the £20 he had from the Sheriff in 11 Ed. III (1337-8) (cf. §\$79 and 80).  P.R. 17 Ed. III, rot. comp. 2d m.ij  25 March 1344  The Sheriff of Hants is to repair as necessary the buildings and bridge of the castle, spending	£20 -sd. (£66 13s. 4d.)
8 <sub>5</sub> .	Ibid., 345  11 June 1341  An extent of the King's manor states that the inundation of the sea prevents the castle mill from working, and that the house of one tenant, built inside the castle gate, has been taken into the King's hands and given to the Porter.  Titch. Reg., B.L., MS. Loans 29/55, f.27  3 July 1341  Following further investigations by the Sheriff, who confirms the damaged state of the mill (amongst other matters), a lower annual value for Portchester is agreed to by the Council.  Cal. Close Rolls, 1341-3, 178-9  Michs. 1343  Richard, Earl of Arundel, in accordance with the King's writ of 10 May 1343, finally accounts for the £20 he had from the Sheriff in 11 Ed. III (1337-8) (cf. §\$79 and 80).  P.R. 17 Ed. III, rot. comp. 2d m.ij  25 March 1344	
8 <sub>5</sub> .	Ibid., 345  11 June 1341  An extent of the King's manor states that the inundation of the sea prevents the castle mill from working, and that the house of one tenant, built inside the castle gate, has been taken into the King's hands and given to the Porter.  Titch. Reg., B.L., MS. Loans 29/55, f.27  3 July 1341  Following further investigations by the Sheriff, who confirms the damaged state of the mill (amongst other matters), a lower annual value for Portchester is agreed to by the Council.  Cal. Close Rolls, 1341-3, 178-9  Michs. 1343  Richard, Earl of Arundel, in accordance with the King's writ of 10 May 1343, finally accounts for the £20 he had from the Sheriff in 11 Ed. III (1337-8) (cf. §\$79 and 80).  P.R. 17 Ed. III, rot. comp. 2d m.ij  25 March 1344  The Sheriff of Hants is to repair as necessary the buildings and bridge of the castle, spending up to 100 marks, by view of John of Scures.  Cal. Close Rolls, 1343-6, 294	
8 <sub>5</sub> . 8 <sub>6</sub> . 8 <sub>7</sub> .	Ibid., 345  11 June 1341  An extent of the King's manor states that the inundation of the sea prevents the castle mill from working, and that the house of one tenant, built inside the castle gate, has been taken into the King's hands and given to the Porter.  Titch. Reg., B.L., MS. Loans 29/55, f.27  3 July 1341  Following further investigations by the Sheriff, who confirms the damaged state of the mill (amongst other matters), a lower annual value for Portchester is agreed to by the Council.  Cal. Close Rolls, 1341-3, 178-9  Michs. 1343  Richard, Earl of Arundel, in accordance with the King's writ of 10 May 1343, finally accounts for the £20 he had from the Sheriff in 11 Ed. III (1337-8) (cf. §\$79 and 80).  P.R. 17 Ed. III, rot. comp. 2d m.ij  25 March 1344  The Sheriff of Hants is to repair as necessary the buildings and bridge of the castle, spending up to 100 marks, by view of John of Scures.  Cal. Close Rolls, 1343-6, 294  8 January 1346  The Sheriff of Hants is to build a new chamber in the castle and repair defects in the hall, chambers and kitchen, against the King's arrival, by view of John Haket, Constable.	

90.	Michs. 1347 The Sheriff of Hants accounts for money spent on repairs to buildings in the castle in 20 Ed. III (Jan. 1346-7) (cf. §§ 88-9).	£38 11s. 11½d.
	P.R. 21 Ed. III, rot. 39 m.ij	
91.	Michs. 1351 The Sheriff of Hants accounts for purchases and wages for making a bridge <i>de novo</i> and repairs to buildings in the castle (? as §87) and for repairs in 25 Ed. III (Jan. 1350-1).  P.R. 25 Ed. III, rot. 32 m.ij	£32 9s. 9d.
92.	15 March 1356 The Prior of Southwick and Philip Daundely are appointed to repair the castle by the advice of the Bishop of Winchester (William Edendon, the Treasurer), to take timber and materials for the works, and carpenters, masons, plumbers and others, putting them to work at the King's wages (arresting and imprisoning contrariants).  Cal. Pat. Rolls, 1354-8, 349-50	
93.	15 May 1356	
93.	Similar order (as last, but to repair 'certain defects in' and to take men 'in the county of Southampton').	
	Ibid., 376	
94.	May 1356—August 1357 The Prior and Daundely account for repairs to castle buildings, including making a chamber 104 ft. long and 25 ft. wide <i>de novo</i> (cf. §99 below).	(£53 14s. 5½a
	P.R. 36 Ed. III, rot. comp. 2(41)	
95•	20 January 1362  John of Edyndon, Constable of Portchester, is to repair the defects of the buildings, walls and turrets where most necessary, spending up to £50 by view of the Abbot of Titchfield and/or	(£50 −s. −d.
	John Botiller.  Cal. Close Rolls, 1360-4, 237	
96.	20 January 1362 John of Edyndon, Constable of Portchester, appointed to take masons, carpenters and other workmen for works on the castle.	
	Cal. Pat. Rolls, 1361-4, 141	
97•	20 January 1362 The Abbot of Titchfield and John Botiller commissioned to survey the works and payments for men and materials necessary for the works.	
_	Ibid., 141	
98.	(1362) Particulars of account for works of John of Edyndon (cf. §100 below, and see table VIII and	(£92 16s. 6½a
	p. 144). P.R.O. E101/479/19 and 20	
99.	Michs. 1362 Enrolment of account for 1356-7 works (cf. §94 above).	£53 14s. 5½0
100	P.R. 36 Ed. III, rot. comp. 2(41) Michs. 1367	
	Enrolment of John of Edyndon's account (cf. §98 above).  P.R. 41 Ed. III, rot. comp. 8 m.j	£92 16s. 6½d
01.	26 February 1369 The Abbot of Titchfield and the Prior of Southwick are commissioned to survey expenditure on repairs to the great gate of the castle, which Thomas atte More, Constable, has been ordered to carry out, spending up to £40.	(£40 -sd.
	Cal. Pat. Rolls, 1367-70, 221	
102.	28 April 1369 Thomas atte More, John Opham and Richard of Bredeford are appointed to take 10 carpenters and 20 hewers of stone for the repair of the castle, working at the King's wages, also carriage for stone and timber, and other materials (arresting and imprisoning contrariants).	

imprisoning contrariants).

### TABLE XIII—continued

February-November 1369 Particulars of account for works of Thomas atte More (see table IX and p. 147). £83 12s. 8d. P.R.O. E101/479/21 This is enrolled on P.R. 41 Ed. III, rot. comp. 11d (i.e. for Michaelmas 1367), where reference is made to the King's writ to the Exchequer of 13 November 1369 and to the Memoranda Roll for 44 Ed. III. The entry, being the penultimate one on the last roll of account, would appear to have been put on to the wrong Pipe Roll. 104. November 1369-November 1374 Draft account of Thomas de la More for garrison expenses includes repairs to buildings in the £,10 10s. 10d. castle, purchases of materials and wages (out of a total of £332 19s. 6d.). P.R.O. E101/531/27 (Enrolled on Foreign Roll 51 Ed. III, rot. E m.ij) 105. 20 March 1376 John Burbache and John of Upham are appointed to take hewers of stone, stonelayers, carpenters, carters and other craftsmen, workmen and labourers for the repair of the castle, and carriage for materials; Adam of Hertyndon, the King's Clerk, is to pay for them (contrariants to be arrested and imprisoned). Cal. Pat. Rolls, 1374-7, 253 106. 20 March 1376 Adam of Hertyngdon is commissioned to pay wages of workmen and for carriage, by view of John of Rouceby and William of Warle (sic), comptrollers of the works. Ibid., 253 107. 26 September 1376 Adam of Hertyndon, King's Clerk, is appointed Clerk of Works for works ordered in the castle, to make a new mill, purchase necessary stone and timber, etc., payment by view and comptrollment of John of Rounceby and by survey of William Barleye. Cal. Pat. Rolls, 1374-7, 344 108. Michs. 1376 Enrolled account of Adam of Hertyndon, Clerk of Works at Windsor, for work at Port-£166 16s. 2d. chester (no details given). Foreign Roll 50 Ed. III, rot. Ed. (5) 100. 26 October 1376 William Barlee is appointed to take carpenters, masons and other workmen for works in the castle, and carriage for materials, spending up to £100. Cal. Pat. Rolls. 1374-7, 388 110. 10 March 1377 William Barly and John North are appointed to take carpenters, hewers of stone and other workmen in Hants for the repair of the castle, working at the King's wages. Ibid., 435 Thomas Stake, lieutenant of the Forest of Bere, is appointed to provide and fell great timber and fuel for the repair of the castle and for the lime kiln there, and to provide carriage. Ibid., 446 112. 8 December 1377 William Barly and John North are appointed to take carpenters, masons and craftsmen in Hants for the repair of the castle. Cal. Pat. Rolls, 1377-81, 80 113. 10 December 1377 Appointment of Thomas Stak, lieutenant of the Forest of Bere, in the same terms as §111. 114. 14 March 1385 Robert Bardolf, Constable of Portchester, is appointed to take timber, carpenters, masons, labourers and materials for various works at the castle, at the King's expense (arresting and

Cal. Pat. Rolls, 1381-5, 543

115.	14 March 1385 The Prior of Southwick is appointed to survey the works of the Constable, and comptrol the expenditure.	
	<i>Ibid.</i> , 551	
116.	April-December 1385  The Prior's counter-roll of particulars of account for works of Robert Bardolf at the castle (see table X and p. 149).	(£75 is. id.)
	P.R.O. E101/479/22	
117.	Michs. 1387 Enrolment of Robert Bardolf's account for works at the castle.  Foreign Roll 10 Ric. II, rot. Dd (4)	£75 is. id.
118.	I May 1390  John Cook, Under-Constable of Portchester, is appointed to repair with all speed the 'great part of the wall on the western side' that fell in February, and is to have prompt payment of expenses, by survey of the Prior of Southwick.	
110	Cal. Pat. Rolls, 1388–92, 251 1 May 1390	
119.	The Prior of Southwick is appointed to comptrol Cook's expenditure.  11. 11. 12. 12. 12. 12. 12. 12. 12. 12.	
120.	Michs. 1391 Enrolment of John Cook's account for repairs to part of the wall on the west side of the castle (searching for foundations and clearing them; bringing freestone from the Isle of Wight, and other materials).	£59 17s. 1d.
	Foreign Roll 14 Ric. II, rot. Dd (5)	
121.	17 March 1396 Richard II writes to the Abbot of Titchfield requesting six oaks for timber for the works at Portchester (see p. 154 and text, p. 182).	
	Titch. Reg. B.L., MS. Loans 29/55, f.146v	
122.	29 April 1396  John Cook of Wykeham and Peter Geveyn are appointed to repair all defects in the castle, paying workmen's wages at the King's charge, by view and comptrol of William Hursle, Prior of Southwick (see text p. 182).	
	Cal. Pat. Rolls, 1391–6, 700	
123.	29 April 1396  Mandate to the Prior to survey and comptrol the expenditure on the works and account to the the Exchequer (see text p. 183).	
	Ibid.	
124.	29 April 1396  John Cook, Peter Gevyn, Walter Walton mason, Walter Weston and Thomas Clevere carpenter, are appointed to arrest the masons, carpenters, sawyers, craftsmen and labourers necessary for the repair and fortification of the castle, to work at the King's charge, and to provide necessary stone, lime, lead, boards, tiles, shingles, timber and materials, with power to imprison contrariants (see text, p. 183).	
	Ibid., 702	
125.	29 April 1396–23 August 1399 The Prior's counter-rolls of the expenditure of John Cook and Peter Geveyn on works at the castle (see tables XI and XII, pp. 151–62 and text pp. 183–205).  P.R.O. E101/479/23 and 24	(£1595 19s. 11d.)
126.	15 March 1397	
	Thomas Godenowe and Richard Waleys are appointed to take and bring to the castle the masons, carpenters, plumbers, craftsmen and labourers necessary for its repair, also stone, timber, tiles, shingles, iron, lead and other materials, with carriage for them, and power to imprison contrariants.	
	Cal. Pat. Rolls, 1396–9, 103	

127.	Michs. 1402 Enrolment of accounts for work of 1396-9 under John Cook and Peter Geweyn (with list of remaining dead stock).	£1899 16s.	5d.
•	Foreign Roll 3 Henry IV, rot. Fd		
128.	27 March 1441 Robert Thorp is appointed Clerk of Works at Portsmouth and Portchester with powers to take men and materials as necessary.		
	Cal. Pat. Rolls, 1436-41, 516		
129.	2 December 1441 The King orders the Exchequer to 'make paiement of resonable summe of money' to Robert Thorp, Clerk of Works, 'upon the reparacion and amendement of our said castel' which, 'as we be fully enformed is defective viz. ruynouse and fieble, where thrugh it is likly in many parties thereof to falle to ground'.		
	P.R.O. E28/70 (2) (cf. E404/58/96)		
130.	11 October 1442 Richard Ledenham is commissioned to take men and materials for the King's works at Portsmouth, Portchester and Odiham.		
101	Michs. 1443		
131.	Enrolled accounts of Robert Thorp include materials and labour expended on works at the castle.	£25 15s.	1 <del>3</del> d.
	Foreign Roll 21 Henry VI, rot. Ad (1)		
132.	John Woodward is commissioned to take men and materials for the King's works at Portsmouth and Portchester.		
	Micho 1446		
133.	Michs. 1446 Enrolled accounts of Robert Thorp include materials (3000 slates, tile, chalk, brick, etc.) and labour expended on works at the castle.	£59 19s.	6d.
194	Foreign Roll 24 Henry VI, rot. A (1) 8 May 1450		
134.	The Constable, Robert Fienys, writes to the King advising him of the 'greet ruyne decay and delapidacion of your castel of Porchestre for hit is so that the gatez ben broken (and) avoided bothe within and withoute, the draughtbrugge fallen downe, the towres, turretts (and barbicans before the gate)house, the wallez beth fallen down and other houses of office in default of reparacion and oversight(faile)sore bothe in their rofez and florez'; he requests the Clerk of Works to be sent 'to take a vieu for the reparacion thereof that hasty remedy may		
	be ordeyned'.  P.R.O. E28/80 (46)		
	Colvin et al., 1963, 792		
135.	Michs. 1455 Enrolled accounts of Robert Thorp include expenditure on the castle.  Foreign Roll 33 Henry VI, rot. R <sup>d</sup> (17)  [This account refers to an earlier period, and although he visited the castle, Thorp spent no money on it between 1453 and 1459: Colvin et al., 1963, 792.]	£18 16s.	2d.
136.	11 November 1460 John Hurley is appointed for life purveyor and Clerk of Works at Portsmouth and Portchester,		
	as the late Robert Thorp.  Cal. Pat. Rolls, 1452-61, 632		
137.	(?) 1489  Note of writ under Privy Seal for money to be delivered from the collectors of customs to Reginald Bray for the repairing of the castle, from time to time.  **Materials for the Reign of Henry VII (Rolls Ser. lxx) ii, 438  **RR O Francisco**		
	P.R.O. E404/228		

138. 28 May and 27 November 1501 Small sums of money paid from the Chamber 'for reparacon don upon the dungeon at Portchester Castell'. Colvin et al., 1975, 291  $(E_{101}/415/3)$ 139. 7-8 March 1527 Payments made to Lord Lisle for 'making of a new store house for the King's ordnance and a £,200 -s. -d. Key (Quay) within the Castle', and to enable him 'at his own costs' to repair timber and lead work in the inner bailey (probably included in the £400 paid for 'building of a stores house and other causes': Archaeologia, xlvii (1883), 335). Byrne, 1981, 1, 185-6; L. & P. Hen. VIII, iv(2), (3656) (P.R.O. SP1/45, pp. 161, 162-5) 140. 20 December 1529 Payment to Lord Lisle for reparations at the castle. £102 15s. 2d. Byrne, 1981, 1, 186; Colvin et al., 1975, 291 L. & P. Hen. VIII, v, 316 (P.R.O. E101/420, no. 11, f.70v) 141. May to October 1535 Purchase of 'purrege stone' slates from Robert Gyllott and Robert Gawdye of Purbeck for the store house at Portchester. Byrne, 1981, 11, 600-1 (459-459a) L. & P. Hen. VIII, ix, (571); x, (780) 142. 4 November 1535 Following the King's visit to the castle, and requests being made for repairs, Sir William Fitz-William writes to Lord Lisle after a Council meeting reporting that 'the King's Highness is contented that the castle of Portchester shall be repaired'. Byrne, 1981, 11, 605(463), 609(467) and 612(472) L. & P. Hen. VIII, ix, (642), (682) and (766) Estimates by Thomas Frymley of timber and lead needed to repair roofs and bridges of the castle (see p. 163). B.L., MS. Lansdowne 31, no. 70 26 May 1583 Allocation of £250 to repair the castle in anticipation of invasion (£100 had been spent by (£250 -s. -d.) May 1584). Colvin et al., 1975, 291; ibid., 1982, 403 Cal. S. P. Dom., 1581-90, 177 (P.R.O. SP12/170, no. 91) 145. (3 August?) Estimates by Thomas Frymleye, master carpenter, for the repairing of the long store house at Portsmouth that came from Portchester. Cal. S. P. Dom., 1581-90, 257 (P.R.O. SP12/181, no. 14) See Cunliffe, 1977, 44, and Colvin et al., 1982, 517-18 146. 18 March 1608 Order to Woodward of Hants to fell 60 timber trees in the Forest of Bere for the use of Sir Thomas Cornwallis. Cal. S. P. Dom., 1603-10, 414 (P.R.O. SP14/31, no. 78; E178/4497) 147. 21 September 1609 John Norden's report to Lord Salisbury on the state of the castle (with rental); (see p. 163 and text pp. 205-6 and pl. XLIII). Cal. S. P. Dom., 1603-10, 544 (P.R.O. SP14/48, no. 46)

# THE TEXTS

# With ELIZABETH GUE and JOHN BLAIR (pp. 183 ff.)

A small number of texts have been selected for publication in full, to illustrate the quality of documentary sources for the castle, and provide examples of different types of record, in addition to making available material of general interest to building historians.

The Faukener survey of 1296 (§§51-2) is chosen as a good example of the process of verifying expenditure by view and survey rather than by making a detailed financial comptrolment.

The Inquisition of 1335 (§77) is of interest in that it lists the arms and victuals of the castle as well as describing its buildings. The subsequent building account (§79) is one of the most intriguing ones in the series for the detail it gives, even though so little can be correlated with known buildings.

Richard II's major building programme of 1396-9 has not only survived but is recorded in exceptional detail in the annual accounts (§125). Some preliminary documents are also given here: a chance survival of a request under Privy Seal for some oaks (§121), and the Letters Patent which initiated the works (§122-4).

Finally, the text of Norden's survey of 1609 (§147) accompanies his drawing of the castle (pl. XLIII), providing a description of the castle at the end of the period dealt with.

The texts have not been translated, but a simple glossary is provided to help those unfamiliar with building terms (p. 206). The language of the accounts is fairly straightforward, although capable of changing from Latin to English or French at whim (cf. §79). The parallel edition of the thirteenth-century accounts for Dover, Winchester and Westminster (Colvin, 1971) provides an excellent primer for learning to read them in the original, and many interesting comparisons with those printed below.

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§§51–2. John le Faukener's Survey of 1296 (P.R.O. E101/683/12)

(i) Writ (28 October 1296)

Edwardus Dei gratia Rex Anglie, Dominus Hibernie 7 Dux Aquitanie dilecto 7 fideli suo Johanno le Faukener Salutem. Mandamus vobis quod statim visis litteris istis in propria persona vestra accedatis ad castrum nostrum de Porcestr' ad supervidendum operaciones quas dilectus fidelis noster Johannes de sancto Johanno Custos castri nostri predicti fieri fecit ibidem; Et de eisdem operacionibus 7 etiam de misis 7 custubus circa easdem operaciones appositis Baronibus de scaccario nostro apud Westm' in octavo sancti Hilarii distincte 7 aperte sub sigillo vestro deficeas; Mandavimus enim predicto Johanni de sancto

Johanne Custodi castri nostri predicti vel ejus locum tenenti quod cum ad idem castrum nostrum accesseritis predictas operaciones 7 misas, custus 7 expensas quas circa predictas operaciones apposuerit vobis plenarie ostendat ex remitatis ibi cum hoc breve Teste P. de Wilugby tenens locum Thesaurari nostri apud Westm' xxviij die Octobris anno regni nostri xxiiij Per J. de Drokenefford Custodiam garderobe.

### (ii) Survey (undated)

Per istud breve accessi ad castrum de Porcestre ad supervidendum operaciones factas per dominum Johannem de sancto Johanne in castro predicto; ubi vidi portam castri interiorem novam factam, secundam portam versus pontem emendatam 7 in

medio pontis unum pontem ... 1 novum factum, super illum pontem unam Brustachiam ligneam novam factam; Preterea in muro versus mare ubi erat parva thurris 7 modica firm . . . 2 7 quasi nulla efforsio vidi ligneam thurrim constructam non tunc coopertam, portam versus mare emendatam portam 7 versus villam que pene diruta fuit inferius 7 superius emendatam; Preterea vidi per loca emendaciones 7 reparaciones in muriis, fossatis 7 domibus factis quibus necessario indigebant 7 illis visis 7 diligenter inspectis computatum particulorum immediatis personis fidedignis 7 testimonium legalium hominum subscriptorum, videlicet Rogeri de Wanstede, Henrici de Burghunte, Ricardi de Bemisse, Roberti Blaunchard, Thome le Ray, Thome Wyting 7 Roberti de Moene 7 aliorum quam plurimum de legalioribus ville predicte qui tunc ibidem presentes fuerunt de misis, custibus 7 expensis de quibus est summa xvij li. viij s. iiij d.

§77. Inquisition of 12 October 1335 (P.R.O. C145/128/19)

(i) Writ dated 28 August.

(ii) Inquisitio capta coram Johanne de Tycchebourne 7 Willelmo de Overtone ad supervidendum victual', ingenia, springald' 7 alias res pro defensione castri de Porcestre in eodem castro existend' assingnat' apud Porcestre die Jovis proxima post festum sancte ffidis virginis anno regni Regis Edwardi tercij a conquestu nono per sacramentum Nicholi de la Bere, Johannis Sygare, Roberti le Ramvyll', Johannis le Ray, Henrici le Ray, Roberti Lengestok, Nicholi Blaunchard, Willelmi de Wanstede, Alexandri le Knave, Willelmi le Knave, Thome Whityng 7 Henrici Sygare ad informandum que 7 cuiusmodi victual', ingenia, springaldi 7 alie res huiusmodi pro competenti municione dicti castri ultra ea que in eodem castro reperiuntur necessar' fuerunt; et que victual', ingenia, springaldi 7 alie res in eodem castro existent' et de quanto idem castrum huiusmodi victual' muniri 7 dicta ingenia, springaldi 7 alie res predicte valeant commode construi seu reparari;

Qui dicunt per sacramentum suum quod nulla

victual' in castro predicto reperiuntur; Dicunt etiam quod victual' subscripta sunt necessar' pro municione dicti castri videlicet: C. qr. frumenti que nunc valet xxvj lj. xiij s. iiij d., pretium qr. v s. iiij d.; lx qr. pisiorum 7 ffabarum que nunc valet xij lj., pretium qr. iiij s.; C qr. avene que nunc valet xiij lj. vj s. viij d., pretium qr. ij s. viij d.; xxx qr. salis que nunc valet iiij lj., pretium qr. ij s. viij d.; x dolea vini que valet xxxiij lj. vj s. viij d., pretium dol' lxvj s. viij d.; x dolea cisere que valet vij lj. x s., pretium dol' xv s.; x boves que valent viij lj., pretium bovis xvj s.; xl porci qui valent viij lj., pretium porci iiij s.; j doleum mellis quod valet x lj.; C carectat' bosce que valet C s.; C qr. carbonum que valet vj lj. xiij s. iiij d.;

Dicunt etiam quod sunt ibidem viii galee non reparate que possunt reparari pro xvj s.; xij bacinetti qui possunt reparari pro xvj s.; et sunt viij bacinetti qui nichil valent; Item sunt ibidem xij aketon' qui non possunt reparari pro putrefactione eorundem; Item sunt ibidem viij haberiones quorum vj nichil valent; Item iij paria platearum que nichil valent; Item sunt ibidem iiijxx lancee 7 vj botell' de darttis; Item j par' de Jaumbyrs; Item vij springaldi qui possunt reparari pro C s.; Item xxx baliste de vyz que possunt reparari pro lx s.; Item lxx baliste de uno pede que possunt reparari pro lxx s.; Item viij arcus balistarum sine teler' que possunt reparari pro xl s.; Item C magni quarell'. CC parvi quarell'; Item x arcus qui nichil valent; Item iiijxx duodene sagittarum;

Dicunt etiam quod armature subscripte sunt necessar' pro municione dicti castri ultra ea que reperiuntur ibidem ut predictum est videlicet: xij aketon' qui valent xvj lj., pretium aketon' xxvj s. viij d.; x haberion' qui valent x lj.; CC magni quarell' qui valent lxvj s. viij d. et non plus quia ducenta capita ferrea ad idem sunt in eodem castro; Item ij<sup>M</sup> parvorum quarell' que valent l s.; Item xx arcus qui valent xxx s.

Dicunt etiam quod nulla vasa enea, plumbea aut lignea sunt in eodem castro de quibus necessarium est videlicet: unus plumbus fornaceus qui potest provideri pro xxx s.; j olla enea contines xx lagen', pretium xxvj s. viij d.; Item ij olle enee minores, pretium xxvj s. viij d.; Item iij pocinetti, pretium xiij s. iiij d.; Item iij patell' pretium x s.

Dicunt etiam quod ultra victual' 7 armaturam

<sup>&</sup>lt;sup>1</sup> One word illegible.

<sup>&</sup>lt;sup>2</sup> Three letters illegible.

predictam edificia ejusdem castri indigent reparationem 7 emendacionem, videlicet quod magna turris ejusdem castri discooperta est in magna deterioracionem murorum ejusdem que potest reparari pro xx votmell' plumbi que valent lx s., et prostipendio plumbator' fundenc' 7 ponenc' dictum plumbum 7 alias expensas circa eandem factas pro magna summitate turris lx s.; Item deficiunt xx fenestre in eadem turri que possunt reparari cum gumphis, vertivellis et alijs necessarijs ad idem pro lx s.; Item est quedam domus juxta eandem turrim que est tota ruinosa 7 fere decasa de qua muri ejusdem domus possunt reparari pro xl lj.; Item carpentria inde cum maeremio hoc prius parato in eodem castro reperto potest fieri ut credunt pro xl lj.; Item plumbum pro coopertura ejusdem ut intelligunt valet l lj.; Item pro fundacione, posicione 7 alijs expensis circa dictum plumbum faciendum appositum valet ut credunt x lj.;

Dicunt etiam quod domus infra intrincecam custodiam sunt discooperte ita quod maeremium putressit per pluviam qui defectus possunt reparari pro x lj. eo quod nulle emende facte fuerunt in eisdem domibus per magnum tempus elapsum; Item sunt due parve turres infra eandem custodiam que sunt omnino decase 7 que sunt valde necessar' pro salva custodia ejusdem castri que possunt reparari pro xx lj.; Item magnus pons ad introitum ejusdem custodie est debilis 7 fere decasus qui potest reparari pro x lj.; Item porta occidentalis discooperta est de plumbo eo quod nunquam plene cooperta sunt que potest reparari pro C s.; Item extra portam orientalem ejusdem castri per inundacionem maris quando reflictuat quod mare inerat dictam portam et devastat terram circa eandem unde defectus potest reparari

Ita quod reparacio fiat circa festum Nativitatis sancti Johannis Baptiste proximum futurum.

Item dicunt quod in forinseca custodia dicti castri sunt diversi 7 magni defectus tam in turris quam in muris qui non possunt estimari; In cujus rei testimonium predicti Juratores huic Inquisitioni sigilla sua apposuerunt Dat' die, loco 7 anno supradictis

Summa totalis CCC iiij\*x iiij lj. v s. iiij d. [in another hand] [Lacks seals]

§79. Particulars of Account of Richard Earl of Arundel, 1337-8 (P.R.O. E101/479/18)

One membrane, written on both sides, the whole cancelled with a single line.

### xx li. xv s. xi d. [Marginated]

(1) Particule compoti Ricardi Comitis Arundell' custodis Castri Regis de Porcestr' de receptis per ipsum factis per manus videlicet Johannis Haket locum tenentis eiusdem Comitis ibid super reparacionem et emendacionem defectuum Castri predicti anno xjo et etiam de expensis per dictum locum tenentem suum appositis pro reparacione et emendacione supradicta anno xijo.1

### (2) Rec' [marginated]

Item reddit compotum de xx li. receptis per manus predicti Johannis de Johanne de Scures nuper vicecomite Comitatus Sutht' super reparacionem et emendacionem defectuum eiusdem Castri anno viz. xijo.2

# (3) Expen' [marginated]

Custus Emendac' Camere Regine [marginated]
In x<sup>mil.</sup> de sclat' emptis pro coopertura dicte camere x s., pretium M<sup>1</sup> xij d.

In lattis emptis pro eadem M¹. CCC, pretium centene iij d., iij s. iij d.

In iiij<sup>mi1.</sup> latnail emptis ij s. iiij d., pretium M<sup>1</sup> vij d.

In ij sextariis calcis emptis iiij s., pretium videlicet quarterij vj d.

Item cuidam coopertori sclatiere ad ponendum predictum sclat'<sup>3</sup> ad tascam vj s. viij d., videlicet pro M<sup>1</sup> viij d.

Item in M<sup>1</sup> shingel emptis pro coopertura eiusdem camere vj s. viij d.

In shingelnail pro eadem M<sup>1</sup> ad x d.

Item cuidam carpentario ad cooperiendum cum eodem et ad corigendum diversas

<sup>&</sup>lt;sup>1</sup> The 11th year of Edward III was 25 January 1337 to 24 January 1338, and the 12th 1338-9.

<sup>&</sup>lt;sup>2</sup> xij is corrected from xj; the latter agrees with the Sheriff's account (\$80).

<sup>3</sup> MS. reads scalt' for sclat'.

defaltas eiusdem camere per viij dietas ij s. iiij d., videlicet pro dieta iiij d.

Item cuidam garconi ei intendenti per idem tempus xij d., per diem videlicet j d. ob.

Item cuidam Fabro de Suthwyk pro j pari grossorum vertivellarum ad ostium dicte camere et etiam pro clavis ad eosdem

Summa xl s. j d. prob.

ls jd [marginated]

(4) Reparacio alteri camere vocate Knighten Chambre [marginated]

Item comp' in stipendiis ij sarratorum sarrancium maeremium emendacionem eiusdem camere contingens videlicet ij bymes, ij walplates, ij liernes, xxiiij cheverons longitudinis xxxvj pedum, iiij laces et bordas pro ij ostiis magnis eiusdem camere, et ij lovers et vj minutis fenestris cum ovesbord<sup>1</sup> per v septimanas xv s., capientium per septimanam iij s.

Item cuidam carpentario emendanti cameram predictam in omnibus opus suum concernentibus ad tascam xx s.

Item cuidam mazoni corigenti muros eiusdem camere dirrutos et reparanti fenestras lapideas et ostia et pynones ad capita et fines eiusdem camere per tres septimanas vij s., videlicet per septimanam ij s. viij d.<sup>2</sup>

Item cuidam garconi ei intendenti per idem tempus ij s. vij d. ob., capiente per septimanam x d. ob.

Item cuidam garconi ibidem operanti per ij septimanas post erectionem et posicionem dicti maeremii pro poynter super dictos muros et obturando, videlicet super les oukynges3 xxj d., capiente ut prius.

Item in stipendio coopertoris eandem<sup>4</sup> cameram cooperientis percepit eandem<sup>5</sup> cooperturam ad tascam per millenam et inveniendo pynnes ad idem, videlicet pro coopertura et posicione xxxmil. de sclat' immediate inferius emptis xx s., videlicet pro millena viij d.

Summa lxvj s. iiij d.6 prob' lxvj s. iiij d. [marginated]

(5) Emptio necessariorum pro eadem camera et alia domo ibidem [marginated]

In xxxvj<sup>mil</sup>· de sclat emptis apud Portesmuth' xxxvj s., pretium M¹ xij d.

In cariagio et portagio eorundem abinde usque ad dictum castrum Porcestr' videlicet per iij leucas per aquam in batellis iiij s.

Item in ix sexter' calcis emptis xviij s., pretium sexter' ij s.

In iij<sup>mil.</sup> latten emptis vij s. vj d., pretium centene vj d.

In xij<sup>mil.</sup> lattenail emptis vij s., pretium M<sup>1</sup>

In CCC.dj de flournail emptis pro les cheverons et les ovesbourd'7 xiiij d., pretium C.

In CC de bordnayl emptis vj d.

In iiij par' vertivell' et viij hokes ad eosdem emptis apud Suthewik pro fenestris ij s.

Item in iij quarter' ferri emptis pro ij par' de grossis vertivellis pro ostiis eiusdem camere et hankes ad eadem iiij s. vij d. ob. qr., pretium lb. ob. qr.

Item cuidam fabro pro factura eorundem vertivellos cum pertinenciis et etiam pro ligacione et reparacione des byemes pro ij lovers de parte ferri supradicti ijs.

Item in ij votmals plumbi emptis pro factura et reparacione gutterarum videlicet inter dictam cameram et pistrinam et camini eiusdem camere xviij d.

Summa iiij li. iiij s. iij d. ob. qr. prob' iiij li. iiij s. iij d. o. [marginated]

(6) Emendacio Turris et aliorum defectuum castri [marginated]

In stipendio j mazonis pro emendacione

<sup>&</sup>lt;sup>1</sup> Probably for eaves-board.

<sup>&</sup>lt;sup>2</sup> The total of vij s. has been corrected from viij s., but the rate left at 2s. 8d. rather than 2s. 4d. which it would then be.

<sup>&</sup>lt;sup>3</sup> 'Over the weeks': two weeks at the above rate  $(10\frac{1}{2}d.)$ comes to 21d.

<sup>4</sup> MS. reads endem.

<sup>5</sup> MS. reads enand'.

<sup>6</sup> The total omits  $\frac{1}{2}d$ .

<sup>&</sup>lt;sup>7</sup> Probably for eaves-board.

turris videlicet a amurer ij grossas fenestras et ad reparandum et perficiendum une grosse crevesce in eadem et alios minutes defectus ibidem per ij septimanas iiij s. viij d., capientis per diem iiij d.

Item cuidam garconi ei intendendo per idem tempus ij s. iiij d., capiente per diem ij d. Item cuidam alii garconi eos adjuvanti per

idem tempus xiiij d., capiente per diem j d.

Calce pro eodem opere precomputata videlicet iiij sext'.

Item eidem mazoni pour amurer quandam vetus posternam en la barbecane per ij dies viij d., capiente ut prius.

Item uni garconum suorum iiij d. et alteri ij d. ut supra.

Item eidem mazoni et dictis garconibus suis pro reparacione unius defalte in muro Warde exterius per unum diem vij d.

Item eisdem ij garconibus pour amurer quandam portam eiusdem castri versus mare et faciend' unum fausse mur contra insidias Galiarum videlicet per iij dies ix d. capientibus ut prius.

Item cuidam daubatori facienti unum murum terren' iuxta pontem castri pro se et garcone suo per ij dies vj d., uno capiente ij d. et altero j d.

Summa xi s.1 prob'

# (7) Emendacio Gutterarum et aliorum de plumbo [marginated]

In v fotmals plumbi emptis pro una guttera inde facienda desuper ostium aule Regis prae cuius defectu quedam pecia muri aule illius dirruta fuit et occasa et etiam pro emendacione coopertur' et defectuum duarum camerarum ultra portas Warde exterioris, necnon defectus aliarum domorum et gutterarum xj s. viij d., pretium fotmall ij s. viij d.

Item in Tyn empto pour soudura ad emendacionem defectuum predictorum xx lb., pretium iij s. iiij d., lb. videlicet ad ij d.

Item in stipendio cuisdam plumbatoris pro

labore suo existentis circa reparacionem defectuum predictorum per unam septimanam ij s. iiij d., capientis per diem iiij d.

Et garconi suo ei intendenti per idem tempus x d. ob., per diem videlicet j d. ob.

Summa xviij s. ij d. ob. prob' xviij s. ij d. ō. [marginated]

### (8) Reparacio Barbecan' et Bretag' [marginated]

In stipendiis ij sarratorum sarrancium bordas ad ostia duorum barbecanorum, et ad bretagium inde faciendum atte Brokene Tour; per unam septimanam iiij s. videlicet cuilibet eorum ij s.

Item in stipendio j carpentarii ad perficiendum illud opus per ij septimanas iiij s.

Item in D. nayl emptis pro eisdem ostiis et bretagio xv d., pretium centene iij d.

In dj' C. ferri empto pro ij par' vertivellorum grossorum cum pertinenciis pro eisdem ostiis iij s.

Item fabro de Suthewik pro eisdem faciendis xviij d.

Summa xiij s. ix d. prob'

#### (9) Factura scaffald [marginated]

In lxvj clavis emptis pro scaffaldis videlicet pro xij turrellis in Warda exteriori castri predicti et infra² quandam peciam muri iuxta quem nemo prius ire poterat ad idem castrum defendendum que continet in longitudine x pedes; xxiiij s., pretium cuiuslibet iiij d.

In prostracione xl arborum quercuum in quodam bosco qui dicitur la Botilleres bere et eas cariando abinde usque ad idem castrum videlicet per ij leucas pro eisdem scaffaldis inde faciendis; iij s. iiij d.

Item in stipendiis ij carpentariorum pro factura dictorum scaffaldorum per unam septimanam iiij s.

Summa xxxj s. iiij d. prob'

<sup>&</sup>lt;sup>1</sup> The total omits 2d.

<sup>&</sup>lt;sup>2</sup> The word *infra* is written above the line, with an insertion mark directing it here, or alternatively to precede *x pedes* in the next line.

(10) Factura barrearum muri et fossati [marginated]

In stipendiis ij carpentariorum pro factura barrearum extra portam occidentalem dicti castri videlicet per j septimanam; iiij s., capientium ut prius.

Item ij sarratoribus sarrantibus partem maeremii ad easdem per ij dies xvj d.,

capientibus ut prius.

Item in factura unius fossati et unius muri terrei embataille iuxta easdem barreas que quidem murus et fossatum continent in longitudine vj pertic' et plus et idem fossatum in latitudine ix ped' fact' ad tascam in toto; x s.

Summa xv s. iiij d. prob'

# (DORSO)

### (11) Custus minoris springaldi [marginated]

In stipendiis ij Ingeniatorum pro uno springaldo fac' quod tenditur cum uno viz per iij septimanas; viij s. iij d., uno videlicet capiente per septimanam ij s. et altero xxj d.

Item in una centena ferri empta pro iiij coleriis, iiij travesayns, vj boltes, et j forlok et ad alia necessaria ad dictum springaldum inde faciendum; vj s.

Item cuidam fabro capienti operacionem predictam ad tascam; vj s. vj d.

Item xl lb. crinium caball' pro les Ropes ad idem tendendum, iij s. iiij d., videlicet lb. ad i d.

Item cuidam ropario pro factura earundem roparum ad tascam; xx d., videlicet pro lb. ob.

Item in v lb. cepis et uncti pro unctura del viz et maeremii eidem springaldo contingentis; vij d. ob., pretium lb. jd. ob.

Item in una noiz ferrea empta de Bette fabro ad idem; ij s.

Summa xxviij s. iiij d. ob. prob'

### (12) Custus maioris springaldi [marginated]

In stipendiis eorundem Ingeniatorum pro uno novo telario faciendo ad maius springaldum quod tenditur per Robinetz et ad perficiendum quod eidem springaldo deficiebat ex arte sua, videlicet per unam septimanam iij s. ix d., capiend' ut prius. Item in ij Ruwellis ereis emptis ad idem; xii d.

Item cuidam fabro pro factura minutarum rerum que ad idem deficiebant ut de boltes forlokes et aliis necessariis de ferro suo proprio ad tascam; x s.

In ij lyens ferri pro la Wyndase eiusdem springaldi ligand' ij d.

In Liiij lb. crinium equorum emptis pro eodem springaldo; iiij s. lb., videlicet ad j d., et ultra vj lb. in toto.

Item cuidam ropario pro Ropes inde faciendo eidem; ij s. ut prius.

In ij lb. cepis emptis ad idem unguendum; iij d.

In xviij lb. canabi emptis pro cordis et faussecordis pro utroque springaldorum predictorum, et etiam pro predicto maiori springaldo tendendo cum la Wyndase; xiij d. ob., pretium lb. ob. q.

Item solut' filatricibus pro filo faciendo videlicet de xv lb. canabi precomputatis; vij d. ob., pro lb. videlicet ob.

Summa xxij s. xj d. prob'

# (13) Emendacio Ganisturarum . . . 1

... Ut in quarellis

In misis et expensis factis circa empcionem lignorum et facturam vj<sup>xx</sup> grossorum quarellorum inde pro predictis springaldis xv s., pretium videlicet cuisdam pecie j d. ob.

Item cuidam fletchario pro ligno et fustubus inde factis ad xiiij<sup>C</sup> minorum quarellorum videlicet pro arbalistis de uno pede; vij s. pretium centene vj d.

Item computat' solut' fabro de Goseport pro capitibus ad eosdem minores quarellos faciendis ex ferro suo proprio; xxviij s. pretium centene ij s.

Item solut' eidem fabro pro factura CC capita maiorum quarellorum ad arbalistas de viz; v s., pretium centene ij s. vj d.

Summa ly s. prob'

<sup>1</sup> This heading stands in the margin for both (13) and (14).

### (14) ... Banderies et haucepiez

Item computat solut' cuidam operario vocato Banderiour et garconi suo ad faciendum et emendandum xl Bander' de garnestur' castri predicti quia debilia et putrida per xviij dietas; vijs. vj d., videlicet Magistro capiente per diem iij d. et garcone ij d.

In una pelle et dimidia albi corii pro eisdem Banderies et ij hautepiez emptis iij s. vj d. In canabo pro filo ad eosdem faciendo, et filerissis pro eodem canabo filando, code cera et pice emptis ad idem filam; xviij d. In emendacionem ij par' de plates de dictis garnestur' iij s.

Summa xv s. vj d. prob'

# (15) Emendacio cooperture domorum post impetum magni venti [marginated]

Item in coopertura aule Regis in Warda interiori solut' cuidam coopertori per iij dies ix d.

Et garconi suo ei deservienti vj d. Sclat et Lym precomputat'

In xij crestes emptis ad eandem xviij d.

Item in coopertura unius stabuli de stramine pro stipendio unius capientis opus ad tascam; iij s.

Item in coopertura maeremii Regis ibidem per preceptum ipsius Regis oretenus pro stipendio videlicet unius carpentarii capientis opus ad tascam artem suam de ligno contingentis, iij s. vj d.

Item cuidam coopertori et garconi suo pro eodem maeremio de stramine cooperiendo per v dies et dj'; xix d. q., magistro videlicet capiente per diem ij d. ob. et garcone j d.

In stramine empto ad eandem cooperturam continente in longitudine iiijxx pedes; iij s.

Summa xiij s. x d. q. prob'
Summa totalis cust' xx li (xvjs. deleted)<sup>1</sup>
prob'

§121. Richard II Requests Six Oaks from the Abbot of Titchfield (17 March, 1396) (Titchfield Register, B.L., MS. Loans 29/55, f.146v-7)

<sup>1</sup> The correct total (including emendations noted above) is £20. 16s.  $2\frac{1}{2}d$ .; without them it would be £20. 16s. Only £20 was allowed (cf. §86).

Litera Ricardi regis Johanni de Romesi abbati de Tychefeld' directa, pro meremio habendo pro reparacione castri de Porcestre anno ejusdem regis xix

Trescher en dieu pource que les mesons 7 edifices deinz nostre chastel de Porcestre busoignent grande reparacion 7 amendement a cause de lour ruinoustee 7 fieblesse, a ce que nous avons entenduz, vous prions tres cherement<sup>2</sup> que pur amour de nous 7 par consideracion de ceste nostre priere, vous nous veullez ottroier sys cheisnes couvenables pur maerisme deinz aucuns de voz bois plus procheins a nostre dit chastel 7 les faire deliverer au conestable de mesme nostre chastel ou a son lieu tenant pour la reparacion 7 amendement des mesons 7 edifices avantdites. Et en ce faisant vous nous ferrez bien grand pleisir paront nous vous volons especialment bon gree savoir. Donne souz nostre Prive Seal a Westm[ester] le xvij jour de marz³

Quas quidem quercos ut in hac eadem litera continetur, idem abbas domino Regi benigne concessit 7 ministris ejusdem regis liberari fecit.

§§122-3. John Cook and Peter Geveyn Appointed by Letters Patent to Repair Castle (29 April 1396) (P.R.O. C66/343 m.15)

De defectibus Castri Regis de Porchestre reparandis

Rex dilectis sibi Johanni Cook de Wykeham 7 Petro Geveyn, salutem. Sciatis quod nos de fidelitate 7 circumspectione vestris plenius confidentes assignavimus vos coniunctim 7 divisim ad omnimodos defectus castri nostri de Porchestre competenter reparandum 7 emendandum 7 ad vadia latomis, carpentariis 7 aliis laboratoribus quibuscumque in hac parte necessariis quociens indiguerit sumptibus nostris solvendum per supervisum 7 contrarotulacionem dilecti nobis in Christo Willelmi Hursle Prioris de Suthwyk. Et ideo vobis mandamus quod circa premissa diligenter intendatis 7 ea faciatis 7 exequamini in forma predicta

<sup>2</sup> MS. reads prious treschment.

<sup>3</sup> As this letter pre-dates the Letters Patent (see following), it may have been dated May in the original, and misread by the transcriber.

In cuius 7c T(este) R(ege) apud Westm' xxix die Aprilis per billam Thesaurarii

William Hursle, Prior of Southwick ordered to survey and comptrol expenditure

Et mandatum est eidem Priori quod huius defectus de tempore in tempus supervideat ac quoscumque denarios per ipsos Johannem 7 Petrum super reparacionem 7 emendacionem castri predicti apponendos applicandos 7 expendendos contrarotulet 7 super compoto suo ad scaccarium Regis fideliter testificetur

In cuius 7c T(este) ut supra per eandem billam

§124. Appointment by Letters Patent for getting Men and Materials for Works (29 April 1396) (P.R.O. C66/343 m.14)

De operariis capiendis pro Rege

Rex dilectis sibi Johanni Cook de Wykeham Petro Geveyn Waltero Walton mason Waltero Weston 7 Thome Clevere carpenter salutem. Sciatis quod nos de fidelitate 7 circumspectione vestris plenius confidentes assignavimus vos coniunctim 7 divisim ad tot lathomos carpentarios sarratores artifices 7 laboratores quot pro reparacione emendacione 7 fortificacione castri nostri de Porchestre necessarii fuerint ubicumque inveniri poterint tam infra libertates quam extra feodo ecclesie dumtaxat excepto eligendum capiendum 7 arestandum 7 eos super operacionibus predictis ponendum ibidem ad vadia nostra eis in hac parte racionabiliter solvendum quamdiu indiguerit, moraturos necnon ad petram, calcem, plumbum, bordas, tegulas, scindulas, maeremium 7 alia quecumque pro reparacione, emendacione 7 fortificacione eiusdem castri necessaria emendum 7 providendun ac eciam ad cariagium sufficiens tam per terram quam per aquam pro eisdem omnibus 7 singulis tam infra libertates quam extra feodo ecclesie similiter excepto pro denariis nostris in forma predicta capiendum; Et ad omnes 7 singulos quos in hac parte contrarios inveneritis sue rebelles arestandum 7 capiendum 7 prisonis nostris mancipandum in eisdem detinendum quousque pro eorum deliberacione aliter duxerimus ordinandum. Et ideo vobis mandavimus quod circa premissa diligenter intendatis 7 ea faciatis exequamini in forma predicta; Damus autem universis 7 singulis Vicecomitibus Maioribus Ballivis Ministris 7 aliis fidelibus 7 subditis nostris tam infra libertates quam extra tenore presencium firmiter in mandatis quod vobis 7 cuilibet vestrum in permissis faciendis 7 exequendis intendentes sint consulentes 7 auxiliantes quociens 7 prout per vos seu aliquem vestrum ex parte nostra fuerit requisiti.

In cuius 7c T(este) R(ege) apud Westm' xxix die Aprilis per billam Thesaurarii

§125. Particulars of Account 1396-9 (P.R.O. E101/479/23-4)

Edited by Elizabeth Gue and John Blair

The accounts comprise four rolls, each of three membranes sewn head-to-foot. They are distributed as follows:

E101/479/23

Rolls 1 (29 April–20 December 1396), 2 (29 January–20 December 1397) and 3 (1 January–24 June 1398)

sewn together at the feet. Endorsed 'Hos tres rotulos liberavit hic prior de Suthewyk infrascriptus per manus suas proprias, quarto die Maii anno primo Regis Henrici quarti [1400]. Et prestitit sacramentum quod omnes summe in eisdem continente vere sunt et legales et debito modo posite.'

#### E101/479/24

Roll 4 (25 June 1398 to 23 August 1399)

Endorsed 'Hunc rotulum liberavit hic prior infrascriptus per manus suas proprias, quarto die Maii anno primo Regis Henrici quarti [1400]. Et prestitit sacramentum quod omnes summe in eodem continente vere sunt et legales et debito modo posite.'

The following text is complete. Standard contractions are expanded, though we have been sparing in extending words which are technical or in any way liable to variations of form or gender, and consequently words agreeing with them. Punctuation and the use of capitals have been

modernized. All the headings occur in the margin of the original, and have here been given numbers for ease of reference. Rates of payment and item costs are underlined in the original, but not here. Totals were omitted (though in roll 2 the word Summa was written after every paragraph): they have been calculated and inserted here in parentheses, and are summarized on table XII (p. 162). Names of known inhabitants of Portchester, occurring in the survey of 1405, are marked with asterisks.

Roll One (29 April 1396–20 December 1396)

m. I

#### I.I Porcestr' castrum

Contrarotulus Willelmi Hursle prioris de Suthwik, assignati per litteras patentes domini R[icardi] nuper regis Anglie de magno sigillo ad contrarotulanda diversa recepta forinseca, misas et expensas facta per Johannem Cook de Wikeham et Petrum Geveyn', assignatos per litteras patentes¹ dicti domini regis super reparatione et emendatione diversorum operum in castro predicto, contrarotulata superius et testificata per predictum priorem, a xxixº die Aprilis anno predicti Regis R[icardi] xix usque xx diem Decembris anno eiusdem regis vicesimo.

### 1.2 Receptio forinseca

Et iidem Johannes et Petrus r' xv s. de capronibus et ramis lx quercuum grossarum et parvarum, venditis cuiuslibet querci pro iij d., captarum et prostratarum in diversis locis infra boscum domini regis de la Bere pro operibus predictis et in eisdem operibus expenditarum infra tempus predictum. De corticibus earundem quercuum nichil receperunt quia capte fuerunt extra calisonam, sic quod cortices dimittere[?] noluerunt. De capronibus et ramis et corticibus omnium earum quercuum domino regi datarum nichil respondent eo quod omnia inde provenientia preter solummodo meremium eis remanserunt donatoribus earundem.

[Rec. 15s.]

### 1.3 Emptio petre<sup>2</sup>

De quibus predicti Johannes et Petrus solverunt pro M<sup>1</sup>. peciis libere petre de quarrera de Bonchurche be Southewight removendis et scapulandis sumptibus suis propriis ac usque mare cariandis ad tascham, quarum qualibet petra una maius et altera minus extendit ad ij pedes, dando pro le C petris xxiij s. iiij d. — xj li. xiij s. iiij d. Ēt pro D largis peciis petre eiusdem quarere removendis et per mold' scapulandis ac usque mare ad tascham cariandis in grosso, quarum qualibet extendit ad ij pedes et dj., dando pro le C petris xxx s — vij li. x s. Et pro xlviij doliis libere petre de Bereston' emptis, dolium ad v s. ij d., pro hostiis, fenestris et caminis inde faciendis — xij li. viij s. Et pro iiijxxx doliis3 de ragplaten'ston' de quarera de Bynnebrigg' iuxta Seint Elene in Insula Vecti removendis, scapulandis et usque mare cariandis ad tascham, dando pro dolio xij d. — iiij li. x s. Et pro M<sup>1</sup>. carettatis de flyntston' colligendis, adunandis et usque castrum cariandis, dando pro qualibet carettata ad tascham j d. — iiij li. iij s. iiij d.

[£40. 4s. 8d.]

### 1.4 Emptio ferri, carbonis et aceris

Et pro iij<sup>mi1</sup>CClxx lb. ferri emptis pro gumphis, vertivellis et diversis ferramentis ac necessariis in dicto castro faciendis infra tempus predictum, dando pro le C iiij s. — vj li. x s. vj d. Et pro xj quarteriis iiij bussellis carbonis maritimi emptis ad fabricam pro predicto ferro fabricando, dando pro le quarterio ij s. — xxiij s. Et pro viij garbis aceris emptis pro obduratione securium et aliorum instrumentorum latomorum, sol' pro garba x d. — vj s. viij d. Et pro uno andfelt ponderis CC lb. empto pro fabro super eundem operando — xl. s. Et pro D lathnail et lx bordnail emptis et expenditis in emendatione veter' logg' latomorum — xi d. In alio antfeld ponderis CCxiiij lb. empto in fabricam predictam, simul cum ij slegges et j pik [?] ... xliiij s. vj d.

[f.12.5s.7d]

<sup>&</sup>lt;sup>1</sup> The Letters Patent printed above, §123.

<sup>&</sup>lt;sup>2</sup> The weight of the stone is given below in 1.10.

<sup>&</sup>lt;sup>3</sup> Four-score + ten = 90.

#### 1.5 Emptio bord' et tegularum

Et pro Cxxxiiij waynscotebord' et vj botmeholt bord' emptis in grosso pro hostiis et fenestris inde faciendis — lvj s. ij d. Et pro eisdem usque mare portandis — vj d. Et pro CCC hurthtighel¹ emptis pro caminis in dicto castro faciendis, sol' pro le C xij d. — iij s. Et pro M¹. albis tegulis de Flaundres apud London' emptis pro lez reredoses caminorum in castro predicto faciendis — viij s. Et pro vj bordes de botmeholt emptis et expenditis circa facturam formul' latomorum, pecia pro xvj d. — viij s. Et pro eisdem cum uno equo usque Porcestr' cariandis ad tascham — xij d.

[£3. 16s. 8d.]

### 1.6 Emptio plumbi et soudur'

Et pro lxxvij lb. de soudure emptis et expenditis pro emendatione diversarum tecturarum plumbi super magnam turrim et alibi super diversis defectis, le lb. pro ij d. — xij s. x d. Et pro xij fother' plumbi emptis de Thoma Middelyngton<sup>2</sup> et expenditis circa cooperturam nove camere predicte, le fother' pro Cvj s. viij d. — lxiiij li.

[£,64. 12s. 10d.]

## 1.7 Emptiones necessarie

Et pro uno pari rotarum nudarum pro caretta, empto et expendito ad cariandum cals' de puteo subtus montem de Portesdoune usque castrum iiij s. Et pro uno pari rotarum nudarum empto pro troclet [?] et expendito ad cariandas petras infra castrum — xiiij d. Et pro ij mattokes emptis et expenditis pro veteribus parietibus frangendis ij s. Et pro iij whelberghes emptis et expenditis pro mort' et ruboise cariandis et removendis, pecia ad x d. — ij s. vj d. Et pro vij tribulis nudis emptis et expenditis pro mort' et aliis necessariis faciendis, pecia pro ij d. — xiiij d. Et pro una grossa corda vocata cable pro meremio supra trahendo et vetere meremio domorum ibidem retrahendo empta et expendita — xxiij s. vij d. ob. Et pro viij boll' et viij meyles pro aqua et mort' imponendis emptis in grosso et expenditis — ij s. Et pro ij novis coveles emptis et expenditis — xx d. Et pro ij baskett' pro

cals' ad carett' portando emptis et expenditis xij d. Et pro iiij crebris emptis et expenditis pro cals' et sabulone mundandis — viij d. Et pro ij ladeles pro positoribus emptis et expenditis — j d. ob. Et pro uno turfyr' empto — vj d. Et pro uno grynston' et ij peciis de uno grynston' fracto emptis in grosso et expenditis in acuatione instrumentorum latomorum — v s. vj d. Et pro xiij lb. pik et rosyn emptis et in soldur' petrarum expenditis - viij d. Et pro coole et filo emptis et in eodem expenditis — vj d. Et pro xviij lb. candel' emptis et pro latomis et carpentariis per noctem operantibus infra domos et expenditis, lb. pro j d. ob. — ij s iij d. Et pro uno chisel empto et expendito pro veteris petris frangendis [illegible interlineation] et removendis — v d. Et pro ij ceruris emptis pro hostiis ij logg' - xiiij d.

[f, 2. 10s. 11d.]

#### m 9

# 1.8 Prostratio ligni, meremii et skaffot

Et pro Ciiijxx carettatis ramorum, roburum et grossi subbosci prostratis in bosco de Kyngesden' et ad carettam redigendis et tall' et in crematione cals' ut inferius expenditis, dando pro prostratione cuiuslibet carettate ob. qa. ad tascham — xj s. iij d. Et pro xxxvj carettatis meremii<sup>3</sup> apud le Bere, Kyngesden' et Burghuntewode prostrandis et shredendis atque de marisco apud le Bere trahendis et in skaffot expenditis, dando pro prostratione cuiuslibet carettate ad tascham ijd — vjs. Et pro xiijeim duodenis clad' in Kingesden' factis ad tascham cum coll' virg' ad eosdem et in skaffot expenditis, dando pro qualibet duodena viij d. - viij s. viij d. Et pro xxiiij quercibus<sup>4</sup> in bosc' domini de Talbot et xij in bosc' Mauritii et Ingelrami de Broyns prostratis, dando pro pecia ad tascham iij d. — ix s.

 $[f_{1}, 14s, 11d]$ 

#### 1.9 Factura cals'

Et pro uno magno puteo pro cals' cremando latitudine xiiij pedum et profunditate xj pedum subtus

<sup>&</sup>lt;sup>1</sup> From Crockerhill, see 1.11 below.

<sup>&</sup>lt;sup>2</sup> A leading merchant of Southampton, from where the lead was shipped (1.10 below): Platt, 1973, 251.

 $<sup>^3</sup>$  Twenty-two from Bere and fourteen from Kingesden, see 1.12 below.

<sup>&</sup>lt;sup>4</sup> For the number of carts and the location of the woods see 1.12-13 below.

Portesdoun' facto ad tascham — vj s. viij d. Et pro predicto puteo per vj vices complendo,¹ cremando et reficiendo cum lucrac' remoss' et fract' cals' sil'² cum ligno ad idem super locum putei predicti talliand' et separand', dando pro qualibet vice cremationis ad tascham xx s — vj li., sic quod de quolibet puteo super cremationem mensurantur Cxlx quarterias³ cals' integr'.

[£6.6s.8d.]

### 1.10 Carigium per mare

Et pro M<sup>1</sup>.D peciis libere petre remotis et scapulatis ad quareram de Bonchirche by Southewight que se extendunt ad ponderem CCCxxij doliorum per diversa batella cariatis de loco predicto usque molendinum de Porcestr' dando pro pondere cuiuslibet dolii xvj d. — xxj li. ix s. iiij d. Et pro iiijxxx predictis doliis de ragston' cariandis per diversa batella de Bynnebrigge usque molendinum predictum, dando pro quolibet dolio viij d. - lx s. Et pro CCxliij doliis sabulonis lucratis et in batellis portatis apud Goseport, le Spite<sup>4</sup> et Stamneshoo,<sup>5</sup> et abinde per diversa batella cariatis ad dictum molendinum, et ibidem eiciendis, sol' pro dolio iiij d. — iiij li. xij d. Et pro iij<sup>mil.</sup>CClxx lb. ferri, xj quarteriis iiij bussellis carbonis maritimi, Cxxxiiij de waynescotebord' et vj botmeholt et j andfelt cariandis per mare [de Suthe6 interlined] in uno batello conductis in grosso — xj s. Et pro M<sup>1</sup>. reredostighel cariatis de Billyngesgate apud London' usque le Poule<sup>7</sup>—xviij d. Et pro eisdem tegulis cariatis de la Poule usque Porcestr' per mare in grosso — v s. Et pro xij fother' plumbi cariatis per mare de Sutht' usque molendinum predictum in grosso ad tascham — xj s. viij d.

[f.29. 19s. 6d.]

<sup>1</sup> Each of the six firings would have used 30 carts of wood if all 180 carts were used (see 1.8).

<sup>2</sup> Perhaps for simul or scilicet.

- <sup>3</sup> The reading is correct, perhaps for 149 (cxlix) or 119 cxix) quarters of whole chalk; the total amount of lime produced was 800 quarters (see 1.11 below).
  - 4 Spitsand, about a mile south of Portsmouth.
- <sup>5</sup> Stamshaw, on Portsea opposite Whale Island (SU 6402).

<sup>6</sup> Southampton.

<sup>7</sup> Presumably Poole, Dorset, though it cost more to bring them on to Portchester; perhaps they were carried as ballast.

### I.II Petr', sabulon' et cals'

Et pro CCCxxij doliis libere petre de Boncherche in Insula Vecta, iiijxx doliis de ragston' de Bynnebrigg' eiusdem Insule et xlviij doliis de Bereston', cariatis de predicto molendino usque portam interiorem castri predicti, dando pro cariagio cuiuslibet dolii j d. — xxxviij s. iiij d. Et pro CCxliij doliis sabulonis cariatis de molendino predicto usque ad interiorem portam, dando pro dolio j d. — xx s. iij d. Et pro iiijxx carettatis cals' dur' scapulatis pro pendentibus ad vousuram hostiorum fenestrarum, ac completur' parietum nove camere in partibus interioribus, dando pro qualibet carettata ij d. — xiij s. iiij d. Et pro CCC hurthtighel cariatis de Crokernhull'8 usque Porcestr' — vj d. Et pro M¹. reredostighell' emptis apud London', et xj quarteriis secol9 estimatis ad iiij dolia cariatis de dicto molendino usque in castrum predictum, dando pro dolio i d. - iiij d. Et pro toto cals' predicto cremato, quod se extendit ad Dccc quarterias continentes iiijxxvij carettatas, cariatis de puteo predicto usque in castrum predictum, sol' pro qualibet carettata iij d. - xxj s. ix d.

[f.4. 14s. 6d.]

### 1.12 Cariagium per terram: skaffot et ligni

Et pro xvij carettatis meremii pro skaffot cariatis de la Bere usque Porcestr', sol' pro quolibet cariagio vi d. — viii s. vi d. Et pro v carettatis eiusdem meremii de la Bere usque Porcestr' cariandis, sol' pro quolibet cariagio viij d. — iij s. iiij d. Et pro xiiij carettatis eiusdem meremii de Kyngesden', sol' pro quolibet cariagio iij d. — iij s. vj d. Et pro xiijeim duodenis clad' que faciunt xj carettatas, sol' pro quolibet cariagio iii d. de Kyngesden' — ii s. iii d. Et pro Ciiijxx carettatis ligni pro cals' cremando prostratis apud Kyngesden' et onerandis et cariandis usque puteum predictum, sol' pro quolibet cariagio ij d. ad tascham - xxx s. Et pro xij fother' plumbi cariatis de molendino predicto ad portam interiorem, dando pro quolibet fouther' j d. xij d.

[£2. 8s. 7d.]

<sup>8</sup> Crockerhill in Fareham (SU 5709).

<sup>9</sup> Sea-coal.

#### 1.13 Meremium

Et pro xxxviii carettatis meremii receptis in bosco domini de Talbot vocatur le Trenche<sup>1</sup> infra metas foreste ibidem et cariatis usque castrum predictum, sol' pro quolibet cariagio x d. — xxxj s. viij d. Et pro lij carettatis meremii pro tabulis et reftres captis in bosco domini regis de la Bere, xiiij carettatis meremii provenientibus de dono Morys Broyn et Ingelrami Broyn,2 vj carettatis meremii provenientibus de dono abbatis de Ticchefeld',3 sol' pro quolibet cariagio viij d. — xlviij s. Et pro xij carettatis meremii de dono prioris de Haylyng4 et viij carettatis meremii de dono Ricardi Wayte<sup>5</sup> cariatis usque castrum predictum, sol' pro quolibet cariagio xij d. — xx s. Et pro vj carettatis meremii de dono prioris de Suthewik apud Burghuntewode, sol' pro quolibet cariagio vj d. — iij s. Et pro vj carettatis meremii de dono abbatis de Nettele<sup>6</sup> cariatis usque castrum predictum, sol' pro quolibet cariagio ij s. x d. — xvij s.

[£5. 19s. 8d.]

### 1.14 Vadia latomorum

Et pro vadiis Walteri Walton' magistri latomorum ordinantis et supervidentis emendationem et reparationem cuiusdam nove camere inter magnam turrim et turrim vocatur Asshtonestower prius diruptam et totaliter decasam, venientis per iij vices et existentis ibidem super reparationem operis predicti cum adventu et recessu eius, per xxxiij dies infra tempus predictum, sibi allocatis pro qualibet vice adventus et recessus iiijor diebus, capientis vj d. per diem — xvj s. vj d. Et pro vadiis Walteri Weston' subcustodis operis predicti existentis et

<sup>1</sup> The 'new Trench below Hambledon' is mentioned in the forest bounds of c. 1300 (Report, 1792, 19). A trench was a clearing beside a road (Rackham, 1980, 155). This was possibly the same as the 'wood of Denmead' mentioned below, 1.16.

- <sup>2</sup> Maurice le Brun held land in Bedenham, across the harbour to the south-west of Portchester (SU 5903), V.C.H. *Hants*, III, 204.
  - 3 cf. §121, printed above, for these.
- <sup>4</sup> The alien priory dependent on Jumièges, at South Hayling.
- <sup>5</sup> Richard Wayte was lord of Wymering, V.C.H., Hants,
- <sup>6</sup> The Cistercian house of Netley, near Southampton (SU 4508).

operantis circa operationes predictas, per Ciiijxx dies infra tempus predictum, capientis vi d. per diem — iiij li. x s. Et pro vadiis xiiijim diversorum latomorum subscriptorum per vices venientium et operantium circa operationes predictas inter secundum diem Februarii et ultimum diem Octobris, videlicet Johannis Mason' de Wight per xlvij dies dj., Johannis Lucas per Cxviij dies, Simonis Sussex' per iiijxx dies, Walteri Hobrond per Cx dies dj., Ricardi Stokell per Cxxiij dies dj., Ade Hobrond per i i jxxxvj dies, Johannis Chaundeler per lx dies, Hugonis Amerose per iiijxxxiij dies, Ricardi Longe per iiijxxxvij dies, Simonis Salman per iiijxxij dies, Thome Dene per lv dies, Thome Blebyer per lxxj dies dj., Johannis Piperyng per Cxxv dies et Johannis Harowedon' per Cxviij dies, quorum quilibet capit vj d. per diem — xxxj li. xviij s. vj d. Et pro vadiis vj latomorum subscriptorum operantium circa operationes predictas inter secundum diem Novembris et xxvj diem Decembris, videlicet Johannis Lucas, Ricardi Stokell, Johannis Piperyng, Ricardi Longe, Ade Hobrond et Hugonis Amerose, cuiuslibet eorum per xliij dies, quorum quilibet capit v d. ob. per diem — Cxviij s. iij d.

[£43. 3s. 3d.]

#### 1.15 Vadia positorum

Et pro vadiis xxiij diversorum positorum subscriptorum venientium per vices et operantium tam super fractione et depositione veterum parietum quam reparationem fundamentorum et novorum parietum camere predicte cum plurimis diversis parietibus mediocribus subtus et superius dictam cameram dividendam, videlicet Galfridi Hamme per xxvj dies, Petri Fussard per iiijxxviij dies, Nicholi Fussard per Ciij dies dj., Thome Fussard per iiijxxxiiij dies dj., Willelmi Mason' per xlvi dies dj., Henrici Dollyng per iiijxxvj dies dj., Johannis Cuppere per iiijxxviij dies, Johannis Stopet per xl dies dj., Johannis Mason' per xliij dies dj., Ricardi Rede per iiijxxj dies dj., Willelmi Sadeler per iiijxxix dies, Ricardi Lattebyer per lv dies, Johannis Netherhavene per iiijxxxix dies dj., Thome Soon per xxx dies, Johannis Soon senioris per xlviij dies, Thome de Lys per xvij dies, Johannis Shete per vj dies, Willelmi Corday per xiiij dies, Thome Gaynesforde per vj dies, Bartholomei Diggesworthe per xx dies, Johannis Shoghe per xxiiij dies, Johannis Soan' junioris per xij dies et Johannis Kyngot per vj dies, quorum quilibet capit v d. per diem — xxiij li. xiij s. iiij d.

[£23. 13s. 4d.]

#### 1.16 Vadia carpentariorum

Et pro vadiis Thome Clevere per Ciiijxx dies et Johannis Ismongere per xxxj dies dj. circa detractionem meremii veteris camere et ordinationem carpentrie nove camere, venientium per vices et operantium circa reparationem eiusdem infra tempus predictum per dies predictos, quorum quilibet capit vj d. per diem — Cv s. ix d. Et pro vadiis xiiij diversorum carpentariorum subscriptorum per vices venientium ibidem et operantium circa operationes predictas, videlicet Johannis Pocok et Willelmi Pocok utriusque per iiijxxij dies, Johannis Chapman et Thome Gardiner utriusque per Cxliij dies dj., Johannis Pays per Cxlij dies, Jacobi Wolfray per iiijxxj dies dj., Willelmi Beche per lxxvj dies dj., Roberti Gondyng per iiijxxxj dies, Willelmi Gibbes per iiijxxxvij dies, Thome Cartere per Cxlj dies, Walteri Snoddon' per Cxxxvij dies dj., Thome Priour per Cxl dies, Nicholi Danyell per lxxvij dies dj., et Simonis Gerneys per lxvj dies dj., inter secundum diem Februarii et ultimum diem Octobris, quorum quilibet capit v d. per diem — xxxj li. vj s. v d. ob. Et pro vadiis v carpentariorum predictorum et subscriptorum operantium circa operationes predictas inter secundum diem Novembris et xxvj diem Decembris, videlicet Johannis Pays, Johannis Chapman, Thome Cartere, Thome Priour et Thome Gardinere, cuiuslibet eorum per xliij dies capiente quolibet eorum iiij d. ob. per diem iiij li. vij d. [ob. interlined]. Et pro vadiis viij aliorum carpentariorum subscriptorum venientium per vices et prosternentium, scapulantium et operantium meremium in bosc' de Denmede, Johannis Lord', abbatis de Ticchefeld, prioris de Suthewik et prioris de Halyng' datum domino regi ad reparationem castri predicti, videlicet Ade Sorman, Alexandri Baret, Willelmi Luberd, Johannis Spark et Willelmi Colier', infra tempus predictum, cuiuslibet per vj dies, et Willelmi atte Mer' per ij dies, quorum quilibet capit v d. per diem — xiij s. iiij d. Et pro vadiis \*Willelmi Ramvill' et \*Johannis Ramvill' operantium circa operationes predictas utriusque per vj dies capientis iiij d. per diem — iiij s.

[f,41. 10s. 2d.]

m.3

# 1.17 Vadia sarratorum

Et pro vadiis iiij sarratorum subscriptorum sarrantium grossi meremii tam in diversis boscis pro aisiamento cariagii quam in castro predicto in salvatione meremii per dietas, videlicet \*Johannis Jolif, Johannis Dien utriusque per xxxj dies, Walteri Norton' et Ricardi [atte cancelled] Quabbere utriusque per xx dies, quorum quilibet capit v d. per diem — xlij s. vj d. Et pro vj<sup>mil</sup>.DClxxiij pedibus tabul' pro camera predicta in partibus inferioribus et superioribus tegenda et florianda sarratione ad tascham, sol' pro le C pedibus xvj d. — iiij li. ix s.

[£6. 11s. 6d.]

### 1.18 Vadia plumbariorum

Et pro vadiis \*Ricardi Plomer et \*Johannis Plomer operantium et emendentium diversos defectus super magnam turrym, facientium unam novam pipam plumbi ad conducendam aquam de turre predicta ad terram, removentium et de novo cooperentium inferiorem turrim predicte magne turre annexam, ac de novo facientium et fundentium plumbum superius emptum, et cum eodem predictam cameram cum guter' pipis et aliis aque eiectionibus cooperiend, et facientium, utriusque ipsorum per lxx dies quorum quilibet capit vj d. per diem — lxx s.

[£3. 10s.]

# 1.19 Vadia fabrorum

Et pro vadiis Johannis Demayn¹ fabri fabricantis et operantis gumphos, vertivellas de gemeaux clav' pro hostiis et fenestris cum tyn dealbat', ac operantis ferramenta grossa per loca in novo opere predicto, per iiijxxiij dies capientis vjd. per diem — xlj s. vj d. Et pro vadiis [Thome interlined] Fynch et Andree Haukyn fabrorum operantium cum predicto Johanne ac facientium, acuentium et

<sup>&</sup>lt;sup>1</sup> From Idsworth (SU 7414); see 1.21 below for the carriage of his equipment from there.

obdurantium diversa necessaria et instrumenta predictorum latomorum, positorum, carpentariorum et aliorum ibidem operantium quotiens necessitas exigerit, utriusque per vices per iiij<sup>xx</sup>iij dies quorum quilibet capit iiij d. per diem — lv s. iiij d.

[£,4. 16s. 10d.]

#### 1.20 Vadia laboratorum

Et pro vadiis \*Thome Byse per xxxj dies dj., \*Johannis Wroght per lv dies dj., \*Thome Martyn per Cxlj dies, Willelmi Parson' per Cxxxij dies, \*Oliveri Hough per Cxxv dies, \*Thome Jourde per iiijxxxiiij dies et \*Thome Meir' per Cxiiij dies, fodientium, removentium et scapulantium grossas petras cals' per vices ad quareram subtus Portesdoun', facientium unum wharf iuxta molendinum predictum pro salvatione libere petre ne salsetur, et auxiliantium ad onerandas carettas per loca cum grossis meremiis, quorum quilibet capit iiij d. per diem — xj li. xj s. Et pro vadiis xxviij laboratorum subscriptorum per vices operantium circa fractionem, remostionem et asportationem murorum veteris camere, scrutantium et fodentium pro terra bona ad fundiment' novi operis assidend', facientium et portantium mort' petras et omnia alia indigentia eis imposita, ac coadiuvantium ad portationem veteris et novi meremii domorum ibidem detract' et renovand', videlicet Ade Pochauns per x dies, \*Ricardi Meir per lxvij dies, \*Ricardi Baron' per xxij dies, Johannis Denier per iiijxxvi dies dj., Johannis Ude per lxxvij dies dj., Johannis Frebaron' per xxxiiij dies dj., Johannis Faryndon' per xlvij dies dj., Ricardi Colyn per xviij dies dj., Willelmi Waterigg' per Cxxj dies dj., Johannis Sklyndon' per iiij dies dj., Walteri Selborne per xxvj dies, Johannis Freke per v dies, Johannis Basset per vij dies dj., Thome Clerk per xxvj dies, Rogeri Sporaunce per lxiiij dies dj., Ricardi Shipton' per xxxv dies, Johannis Port' per iiij dies, Henrici Court per v dies dj., \*Walteri White per vi dies, Johannis Haiward per ix dies dj., \*Thome Baron' per xxxiiij dies dj., Johannis Tippynden' per xxx dies dj., Thome Goudynow per liij dies dj., \*Willelmi Clerk per xlj dies dj., Ricardi Michell per xxxix dies dj., Johannis Chaunder per xxx dies dj., \*Johannis Baron' per iiij dies dj. et \*Johannis Trusselove per ly dies dj., quorum quilibet capit iiij d. per diem — xvj li. ij s. x d.

[£27. 13s. 10d.]

#### 1.21 Vadia provident'

Et pro expensis predicti Johannis Cook per iiijor vices versus Wight' et existentis ibidem per xvj dies super arestatione diversorum latomorum, positorum et laborariorum, ac super visu diversorum quarerarum et ordinatione remoscionis et scapulationis petre in eisdem quarerarum ad reparationem operis castri predicti — xij s. viij d. Et pro passagio eiusdem per viij vices eundi et redeundi x s. viij d. Et pro vadiis unius ballivi itinerantis attachiantis latomos, positores, carpentarios et laboratores in com' Sutht', Sussex et Berkshir' et Wiltes' ad reparationem castri predicti infra tempus predictum, per xxviij dies capientis vj d. per diem — xiiij s. Et pro vadiis unius hominis equitantis usque Bere pro liberis petris ibidem emendis et pro cariagio earundem ordinando per x dies — x s. Et pro vadiis ij plumariorum euntium ad castellum de Mere¹ et ibidem vetus plumbum vidend', redigend' et ponderand', utriusque per viij dies eundorum et redeundorum — viij s. Et pro expensis Walteri Weston subcustodis operis predicti euntis usque Gloucestr'2 cum uno homine et uno equo conduct' ad arestandos ibidem latomos et carianda harnes' et instrumenta sua usque Porcestr' - xvj s. iij d. Et pro harnes' Johannis Demeyn fabri cariand' de Idesworth' usque Porcestr' ad tascham — xx d. Et pro expensis Petri Geveyn clerici per iiijor vices equitantis usque London' pro litteris de privato sigillo directis diversorum personarum pro meremio habendo,3 ac habend' aurum vel inde assign' pro opere predicto perfornando, et ad recipiendum aurum apud Sutht' per viij vices et differeund' et deliberandas predictas litteras, et ad videndas et signandas quercus virtute litterarum dictarum datas per plurima loca — lvj s. viij d.

[£6. 8s. 11d.] [Total: £336. 17s. 4d.]

<sup>&</sup>lt;sup>1</sup> See 3.7 below for the receipt of this lead.

<sup>&</sup>lt;sup>2</sup> Perhaps masons working on the Cathedral cloisters (Harvey, 1974, 227).

<sup>&</sup>lt;sup>3</sup> See, for example, §121, printed above.

Roll Two

(29 January 1397–20 December 1397)

m. I

#### 2. I Porcestr' castrum

Contrarotulus Willelmi Hursle prioris de Suthwik, assignati per litteras patentes domini [regis Ricardi] de magno sigillo ad contrarotulanda diversa recepta forinseca, misas et expensas facta per Joha[nnem Cook de Wi]keham et Petrum Geveyn, assignatos per litteras patentes dicti domini regis super reparatione et [emendatione diversorum operum in] castro predicto, contrarotulata superius et testificata per predictum priorem, a xxix<sup>0</sup> die Januarii anno [predicti regis] vicesimo usque xx diem Decembris anno eiusdem regis vicesimo primo.

# 2.2 Receptio forinseca

Et iidem Johannes et Petrus r' de viij s. de capronibus et ramis xxiiij grossarum quercuum, venditis cuiuslibet querci pro iiij d., prostratarum pro tabulis inde faciendis et sarrandis, captarum infra forestam et boscum domini regis de la Bere ad reparationem et emendationem predict' et in eisdem expenditarum infra tempus predictum. Et de xiij s. viij d. de capronibus et ramis iiijxxij querculis, vendit' cuiuslibet querculi pro ij d., prostrat' in foresta et bosco predictis pro reftres ad novam aulam ibidem inde fact' et in eisdem expen' ut supra. De corticibus earundem nichil receperunt quia capt' extra salisonam pro festinatione operis predicti. De capronibus, ramis et corticibus omnium quercuum domino regi datarum nichil responditur eo quod omnia inde provenientia preter solummodo meremium cis' remanserunt datoribus earundem.

[Rec. £1. 1s. 8d.]

## 2.3 Emptio petr'1

De quibus predicti Johannes et Petrus solverunt pro M¹.M¹.C peciis libere petre de quarera de Bonchirche de Southwight' lucrandis, removendis et per diversas formas scapulandis et sumptibus suis propriis usque mare cariandis, quarum qualibet petra una magis altera minus extendit ad ij pedes, dando pro le C ad tascham xxiij s. iiij d. —

xxiiij li. x s. Et pro Clxij pond' doliis petre de Ber' emptis de ij Creieris de com' Devon', dando v s. pro pond' dolio — xl li. x s. Et pro DC peciis petre libere de guarera de Niton' iuxta Bonchirche be Southwight lucrandis et per diversas formas scapulandis ac usque mare cariandis ut supra, quarum qualibet petra est longitudine ij pedes, dando pro le C xxiij s. iiij d. ad tascham — vij li. Et pro iiij magnis rachiamentis<sup>2</sup> et ix aliis grossis petris de predicta quarera de Nyton' pro vousura porte exterioris lucrandis et scapulandis, dando pro eisdem in grosso ad tascham — vj s. viij d. Et pro Cxxvj pond' doliis de ragplatenston de quarera de Bynnebrigge lucrandis et scapulandis et usque mare cariandis, dando pro pond' dolio xij d. ad tascham — vj li. vj s. Et pro xxij pond' doliis de plastureston' de Purbik<sup>3</sup> emptis pro diversis separationibus inter cameras per loca inde fac', dando pro pond' dolio iij s. — lxvj s.

Summa: [£81. 18s. 8d.]

## 2.4 Emptio ferri, aceris et clavorum

Et pro M<sup>1</sup>.DCC ferri<sup>4</sup> emptis et expenditis in diversis ferramentis, gumphis, vertivellis et aliis necessariis inde faciendis, preter ferrum operatum per lb. emptum ut inferius, le C pro iiij s — lxviij s. Et pro M<sup>1</sup>.M<sup>1</sup>.xlvj lb. ferri operati in ferramentis et vertivellis, sol' pro lb. operato j d. qa. — x li. xiij s. j d. ob. Et pro xij garbis aceris emptis et expenditis in obduratione securium et aliorum instrumentorum latomorum, pretium garbi x d. x s. Et pro Cxiiij lb. aceris de Spayne emptis et expenditis in eisdem, le C pro x s. — xj s. v d. Et pro M<sup>1</sup>.CC spikyngnail emptis le C pro xij d. et expenditis in affirmatione gross' tabul' ibidem, M<sup>1</sup>.DC durnail emptis le C pro vi d., CCl durnail maioris forme emptis le C pro viij d., M¹.CCCC wyndownail et lednail emptis le C pro v d., M<sup>1</sup>. twistnail emptis le C pro iiij d., et viij<sup>mil.</sup>D lathnail emptis le M1. pro xiiij d. et expenditis in factura hostiorum fenestrarum et domorum cooperiendorum — xl s. ix d.

Summa:  $[£17. 3s. 3\frac{1}{2}d.]$ 

<sup>&</sup>lt;sup>1</sup> For stone weights see below in 2.9-10.

<sup>&</sup>lt;sup>2</sup> Possibly the four existing corner responds for the vault of the land gate.

<sup>&</sup>lt;sup>3</sup> For the burning of the Purbeck stone, see 3.14 below.

<sup>4</sup> Presumably 1,700 lb.

#### 2.5 Emptio bord', latten' et carbonis

Et pro CCCj quartronis de waynscotebord emptis apud Sutht' le C pro xxv s. vj d. et expenditis in hostiis, fenestris et aliis necessariis inde faciendis — iiij li. ij s. x d. ob. Et pro liij shaldres carbonis maritimi emptis le shaldr' pro v s. iiij d. expenditis in fabricando cremato cals' pro opere predicto hoc anno — xiiij li. ij s. viij d. Et pro iij quarteriis carbonis ligni emptis in grosso cum cariagio et expenditis in fabr' predict' — ij s. Et pro M¹.CCC lathes emptis le C pro v d. et expenditis circa novam fabricam — v s. v d.

Summa:  $[£, 18. 12s. 11\frac{1}{2}d.]$ 

## 2.6 Emptio tegulorum, pik, rosyn et cer'

Et pro xij<sup>mil</sup>· tegulis pro p[avi]ment'<sup>1</sup> emptis le M<sup>1</sup>. pro v s. iij d. et expenditis in camera regis, capella, et duabus aliis cameris annexis camere predicte [pavi]and' — lxiij s. Et pro iij barell' de pik emptis le barell pro iij s. viij d., CCC lb. rosyn le C pro iiij s. iiij d., et xxiiij lb. cer' le lb. pro vj d., expenditis in coopertura magne porte exterioris castri predicti . . . petr' de Ber' et cum predict posit' et affirmat' — xxxvj s.

Summa: [£4. 19s.]

#### 2.7 Emptiones necessarie

Et pro v whelberewes emptis pecia pro xij d. et expenditis in cariatione rubois petre et cement' infra tempus predictum — v s. Et pro xv tribulis emptis in cement' fac' et aliis necessariis cum eisdem operant', pretium pecie j d. ob. — xxij d. ob. Et pro xj bolles, xij mortermeles et vj potyladels emptis in grosso et expenditis circa premiss' — iij s. Et pro ij tynys pro aqua portanda et custodienda, et xxiiij hapns (?) pro ligatione et emendatione vet' vas' emptis in grosso et expenditis ut supra — ii s. iij d. Et pro vij cribris et riddell' emptis pecia pro ij d. et expenditis ut supra — [j s]<sup>2</sup> ij d. Et pro iij grynstones parvis emptis, fractis et expenditis in securibus et aliis instrumentis latomorum...<sup>2</sup> Et pro ij paribus de belows pro fabr' emptis in grosso — v s. iiij d. Et pro xij ceruris emptis prec'...<sup>2</sup> pro lyj fadmes parv' cord' emptis et expenditis

circa regulac' posit' fac' pariet'<sup>3</sup> — viij d. Et pro [— lb. candelarum]<sup>4</sup> emp' et expen' per latomos et carpentarios infra domos per noctem operantes le lb. . . . ij s.

Summa:  $[£1. 1s. 3\frac{1}{2}d. minimum]$ 

## 2.8 Prostratio meremii et skaffot<sup>5</sup>

Et pro xij quercibus provenientibus de dono comitis Kanc's in parco de Bedhampton prostrandis, shredandis et loppandis, sol' pro pecia iiij d. — iiij s. Et pro xij quercibus provenientibus de dono Willelmi Sturmy [et xij provenientibus]? de dono Johannis Lord prostrandis, shredandis et loppandis, sol' pro pecia iii d. — vi s. Et pro xxiiij [quercibus]<sup>8</sup> prostandis, shredandis et loppandis in bosco et foresta domini regis de la Ber' pro tabulis et planc'... faciendis, sol' pro pecia ij d. — iiij s. De ceteris querculis ibidem captis et prostratis nichil hic quia . . . existens' ad vad' domini regis inferius. Et pro viii carettatis alnetorum prostratis in marisco de Page ... 9 et extra mariscum predictum trahendis, sol' pro carettata j d. — viij d.

Summa: [14s. 8d.]

m.2

## 2.9 Cariagium per mare

Et pro M¹.M¹.C peciis libere petre de quarera de Bonchirche et DC peciis libere petre de quarera de Nyton be Southwight, cum iiij grossis peciis pro rachiamentis et ix aliis peciis consimilis petre, ponderis Diiij×xiiij dol' ponderat', per diversa batella cariatis de locis predictis usque molendinum de Porcestr', sol' pro pondere cuiuslibet dolii xvj d. — xxxix li. xij s. Et pro Cxxvj doliis de ragplaten'ston' cariatis per diversa batella de Bynnbrigge be Northewight usque molendinum predictum, sol' pro pondere cuiuslibet dolii viij d.

<sup>&</sup>lt;sup>1</sup> From Southampton, see 2.9 below.

<sup>&</sup>lt;sup>2</sup> The ends of the lines are lost.

<sup>&</sup>lt;sup>3</sup> i.e., line for stringing out the walls.

<sup>4</sup> cf. 1.7 above.

<sup>&</sup>lt;sup>5</sup> For the number of the carts and the location of the woods see 2.12 below.

<sup>&</sup>lt;sup>6</sup> Thomas de Holand, Earl of Kent, died in April 1397 and was succeeded by his son Thomas (created Duke of Surrey, q.v. in 2.12 below).

<sup>&</sup>lt;sup>7</sup> The figure is supplied from 2.12 below.

<sup>8</sup> The same as those mentioned in 2.2 above.

<sup>9</sup> cf. John of Pagham, 2.11-12 below.

— iiij li. iiij s. Et pro Dlxiij doliis sabulonis lucrandis per ripam iuxta Gosepo[rt], le Spite et le Benche¹ iuxta Portesmouth et per diversa batella usque molendinum predictum cariandis, sol' pro cariagio cuiuslibet dolii iiij d. — ix li. vij s. viij d. Et pro xij<sup>mtl</sup>. de pavimentighell et CCCj quartronis de waynscotbord per batella cariandis de Sutht' usque molendinum predictum ad tascham in grosso — x s.

Summa: [£53. 13s. 8d.]

#### 2.10 Petr' et sabulonis

Et pro Clxij doliis de Berston', Diiijxxxiiij [doliis interlined] petre de Bonchirche et Nyton', Cxxvj doliis de ragplaten'ston de Bynnebrigge, Dlxiij doliis sabulonis, xijmil. de pavimentighell' et CCCi quartronis de waynscotbord, ponderis xvj doliorum, cariandis de molendino predicto usque custodiam interiorem, sol' pro cariagio cuiuslibet dolii i d. - vi li. xxi d. Et pro liij shaldr's carbonis maritimi, xxij ponderibus doliorum de plastr' cariatis de molendino predicto usque custodiam interiorem castri predicti, sol' pro quolibet shaldr' [et interlined] dolio j d. — v s. xj d. Et pro C carettatis terre pro cameris terreandis, cariatis de fossato castri usque custodiam predictam, sol' pro quolibet cariagio ob. — iiij s. ij d. Et pro DCvj carettatis cals' per diversis carettis cariatis de quarera subtus Portesdoun' usque castrum predictum infra compotum sol' pro qualibet carettata ij d. — Ci s. Et pro viij carectat' libere Petr' pro rachiament' et al' gross' principal' vousour' ibidem carriat' per terram de quarera de Nyton usque Shamelord'2 per latitudinem Insule predicte, videlicet per vij leucas, sol' pro cariagio cuiuslibet carettate xvj d. - x s. viij d. [Cariagium per

<sup>1</sup> A sand-bank some 900 yards (800 m.) south of the castle (SU 624035); shown on maps of c. 1665 as 'Stone-bench' at the limit of Portchester's common (Hodson, 1978, nos. 3a and 20), and still in the mid eighteenth century (Hodson, 1978, no. 14c). I am indebted to Sarah Peacock of the Portsmouth City Records Office for identifying this (copies of maps are in P.C.R.O. DC/PM 2/7, 8A and 12).

<sup>2</sup> 'Shamblers' or Shamlord, the old name for Cowes, on the north side of the Island (SZ 5095) (Kökeritz, 1940, 121). Possibly the size or the fragility of the stone made it simpler to cart it the length of the Island rather than shipping it from Niton. terram added in margin against last few lines referring to 2.10-12].

Summa: [£12. 3s. 6d.]

#### 2.11 Skaffot

Et pro xviij carettatis querculorum et alnetarum recepta in foresta domini regis de Bere et expenditis in skaffot inde fac' circa reparationem predictam, sol' pro quolibet cariagio viij d. — xij s. Et pro xxj carettatis alnetarum captis in marisco Johannis Pageham³ apud le Ber' et expenditis in skaffot ut supra, sol' pro quolibet cariagio vj d. — x s. vj d. Et pro xviij duodenis clad' factis in Borhuntewode et expenditis in skaffot ut supra, cariatis abinde usque castrum predictum in grosso ad tascham — iii s. vj d.

Summa: [f.1.6s.]

#### 2.12 Meremium

Et pro xvj carettatis meremii provenientibus de xij quercibus datis domino regi per Willelmum Sturmy extra boscum suum de Belony, 4 sol' pro quolibet cariagio ix d. — xij s. Et pro xij carettatis meremii captis in bosco Johannis Pageham<sup>5</sup> in custodia domini regis existenti apud le Ber' sol' pro quolibet cariagio vj d. — vj s. Et pro xiiij carettatis meremii provenientibus de xij quercibus de dono Johannis Lord extra boscum suum apud le Loveden',6 sol' pro quolibet cariagio x d. — xj s. viij d. Et pro xvj carettatis meremii grossi factis in xvj grossis trabibus pro aula ibidem, provenientibus de xij quercibus datis domino regi extra parcum de Bedhampton' per ducem Surr',7 sol' pro quolibet cariagio ij s. vj d. - xl s. Et pro iiijxxxiiij carettatis meremii cariatis extra boscum domini regis in foresta de Ber', sol' pro quolibet cariagio viij d. — lxij s. viij d. Et pro vj carettatis meremii receptis de bosco domini regis de Kyngesden, sol' pro quolibet cariagio iij d. -- xviij d.

Summa: [£6. 13s. 10d.]

<sup>&</sup>lt;sup>3</sup> Possibly near Creech Pond, shown on the 1st edition 1-in. O.S. map at SU 638103.

<sup>&</sup>lt;sup>4</sup> Belney, in Southwick, V.C.H., Hants, III, 163.

<sup>&</sup>lt;sup>5</sup> The Pagham family held land in Cosham, V.C.H., Hants, III, 168.

<sup>&</sup>lt;sup>6</sup> Lovedean in Catherington (SU 6812).

<sup>&</sup>lt;sup>7</sup> Thomas de Holand, Duke of Surrey (September 1397-November 1399, Powicke and Fryde, 1961) was lord of Bedhampton, V.C.H., *Hants*, III, 143.

#### 2.13 Vadia latomorum

Et pro vadiis Walteri Walton' magistri latomorum ordinantis et supervidentis reparationem et situm nove aule et coquine cum panetria, botelria et aliis novis cameris eisdem annexis ibidem de novo inceptis, ac emendationem et reparationem turris magne porte ad ward exteriorem cum duplici vousura, existentis ibidem ac venientis et redeuntis per xxxiiij dies, capientis vj d. per diem — xvij s. Et pro vadiis Walteri Weston' subcustodis latomorum et operis predicti ordinantis et supervidentis reparationem et emendationem predict' per CClxiiii dies infra tempus predictum, capientis vi d. per diem — vi li. xij s. Et pro vadiis xxix diversorum latomorum subscriptorum per vices venientium et operantium circa operationes predictas inter secundum diem Februarii et ultimum diem Octobris, videlicet Johannis Maschall' per Cxvij dies, Thome Mascall per Clij dies, Thome Blebyer per Cviij dies, Janyn Triol per xij dies, Thome Dene per Ixviij dies, Ricardi Stukell per CCvij dies, Johannis Ducheman per Clvj dies, Willelmi Arnold' per Cxl dies, Roberti Bridde per Cxxix dies, Johannis Vernago per Cxxxix dies, Richard Kyngeston' per Cxx dies, Johannis Clifforde per Cxx dies, Thome Barry per lxxv dies, Mathei Argent per iiijxxxix dies, Ricardi Saltere per iiijxxx dies, Ricardi Goodzene per Clj dies, Willelmi Antrons per Cxxxv dies, Petri Palmer' per CCxx dies, Johannis Lucas per Ciiijxxxij dies, Ricardi Lange per Cxxxvj dies, Johannis Chaundeler per Cxxviij dies dj., Johannis Palmere junioris per Clxxvj dies, Willelmi Sadler per Clvj dies, Johannis Davy per Cxxij dies, Johannis Boket per Cxlv dies, Johannis Piperyng per lxviij dies, Ricardi Appatha per lxxv dies, Ade Hobrond per lij dies, Johannis Harowedon' per CCxij dies, quorum quilibet capit vj d. per diem — iiijxxxij li. x s. iij d. Et pro vadiis iiijor diversorum latomorum subscriptorum venientium per vices et operantium circa operationes predictas infra tempus predictum, videlicet Johannis Cupper' per Clxvij dies, Petri Fusard' per Cij dies, Johannis Rolf per Cxvij dies, Johannis Netherhavene per Clxxj dies, quorum quilibet capit v d. ob. per diem — xij li. xv s. iij d. ob. Et pro vadiis Ricardi Rede operantis circa operationes predictas infra tempus predictum per xlij dies, capientis v d. per diem - xvij s. vj d. Et pro vadiis x latomorum subscriptorum operantium circa operationes predictas inter secundum diem Novembris et xxiiij diem Decembris, videlicet, Thome Mascall', Ricardi Stukell', Johannis Ducheman, Johannis Vernago, Ricardi Goodzene, Petri Palmere, Johannis Lucas, Ricardi Lange, Willelmi Sadlere et Johannis Beket, cuiuslibet eorum per xliiij dies, quorum quilibet capit v d. ob. per diem — x li. xx d.

Summa:  $[£123. 13s. 8\frac{1}{2}d.]$ 

# 2.14 Vadia positorum

Et pro vadiis xxxj positorum subscriptorum venientium per vices et operantium circa reparationem et facturam predictarum nove aule, coquine et camerarum inceptarum, ac emendationem et reparationem turris magne porte predicte wardie exterioris, cum dupplici vousura de novo fact' in turry predicta, inter secundum diem Februarii et ultimum diem Octobris, videlicet Johannis Soon per Cl dies, Walteri Corday per Cxx dies, Thome Soon per xxvij dies, Johannis Showe per lx dies, Johannis Rous per Ciiijxxxv dies, Johannis Gye per Clxvij dies, Walteri Hobrond' per Ciiijxxv dies, Nicholi Fusard per Ciiij dies, Thome Fussard' per liiij dies, Thome Gaynford' per lxxviij dies, Roberti Mortimer per lx dies, Johannis Palmere senioris per Cxxiij dies, Johannis Merman junioris per lx dies, Ricardi Gay per xxiiij dies. \*Willelmi Jolif per liiij dies, Johannis Mereman senioris per lx dies, Thome Netherhavene per Cliij dies, Simonis Jolyf per liiij dies, Thome de Lys per xviij dies, Willelmi Mason' per xij dies, Johannis Kyngot per xviij dies, Petri atte Rye per xlv dies, Ricardi Lattebyer per xviij dies, Bartholomei Diggesworth' per xviij dies, Galfridi Hamme per vj dies, Ricardi Erl per xx dies, Johannis Mason de Lys per xij dies, Johannis Spelly per vj dies, Johannis Wynchestr' per iij dies, Thome Hethe per vi dies et Johannis Payn per lxx dies, quorum quilibet capit v d. per diem - xlj li. v s.

Summa: [£41. 5s.]

## 2.15 Vadia carpentariorum

Et pro vadiis Thome Clevere magistri carpentariorum et custodis novi operis ordinantis et operantis circa carpentriam nove aule, coquine et camerarum predictarum inceptarum, ac de novo

ordinantis reparationem tecte turris de le port coleys ad portam wardie interioris, existentis super operationibus predictis infra tempus compoti per CClxiij dies, capientis vj d. per diem — vj li. xij s. Et in vadiis xv carpentariorum subscriptorum per vices venientium et operantium ibidem circa operationes predictas inter secundum diem Februarii et ultimum diem Octobris, videlicet Thome Priour per Ciiijxxxix dies dj., Thome Cartere per CCxvj dies, Thome Gardiner' per CCx dies, Walteri Snoddon' per CCvij dies, Roberti Gondyng per Cj dies, Johannis Pays per Clxiiij dies, Willelmi Luberd' per Cxiiij dies, Johannis Spark per lxxviij dies, Thome Thruston' per liiij dies, Ade Horn per lxvj dies, Johannis Chapeman per lxvj lies, Thome Tannere per lx dies, Simonis Ude per lx dies, Willelmi Colier' per liiij dies, et \*Johannis Ramvile per xij dies, quorum quilibet capit v d. per diem — xxxiiij li. xij s. iij d. ob. Et pro vadiis v carpentariorum subscriptorum operantium circa operationes predictas inter secundum diem Novembris et xxiiij diem Decembris, videlicet Thome Priour, Thome Cartere, Thome Gardyner, Walteri Snoddon' et Roberti Gondyng, cuiuslibet eorum per xliiij dies, quolibet eorum capiente iiij d. ob. per diem — iiij li. ij s. vj d.

Summa:  $[£45.6s.9\frac{1}{2}d.]$ 

#### 2.16 Vadia sarratorum

Et pro vadiis iiij<sup>or</sup> sarratorum subscriptorum sarrantium grossi meremii per dietas, videlicet Johannis Dien et Ricardi atte Quabbe utriusque per v dies, Roberti Ponfolde et Roberti Sawiar' utriusque per vj dies, quolibet capiente v d. per diem — ix s. ij d. Et pro vij<sup>m11</sup>. CCC pedibus tabul' sarrat' ad tascham per sarratores predictos ad auxilium reparationis novi edificii predicti, sol' pro le C pedibus xvj d. — iiij li. xvij s. iiij d.

Summa: [£5.6s.6d.]

# m.3 2.17 Vadia plumbariorum

Et pro vadiis ijorum plumbariorum, videlicet \*Ricardi Plomer et \*Johannis Plomer, fundentium et de novo cooperientium le port' colyestower, ac emendentium et reparantium cooperturam turris supra artilriam et turris orientalis eiusdem wardie, utriusque per xlviij dies utroque capiente vj d. per

diem — xlviij s. Et pro conventione unius finiatoris plumbi ad purgandos cineres provenientes de plumbo fuso in anno preterito, unde purgavit M¹.C plumbi¹ in grosso ad tascham — ix s.

Summa: [£2. 17s.]

#### 2.18 Vadia fabrorum

Et pro vadiis Johannis Dymeyn per Cxxviij dies capientis vj d. per diem, Nicholi Welles per Cxl dies capientis v d. per diem, Andree Haukyn per CClxiiij dies capientis iiij d. per diem et Thome Fynch per l dies capientis iiij d. per diem, fabricantium et operantium gumphos, vertivellas, ferramenta et alia necessaria indigent' ad opus predictum preter illis superius emptis, ac acuentium, emendentium et obdurantium diversa necessaria et instrumenta predictorum latomorum, positorum carpentariorum et aliorum ibidem operantium ut necessitas exigerit infra tempus compoti — xj li. vii s.

Summa:  $[f_{11}, 7s.]$ 

#### 2.19 Vadia coopertorum

Et pro vadiis Roberti Helier' et Thome atte Knolle coopertorum petr', utriusque per xij dies dj. utriusque capientis v d. per diem, Ricardi atte Knolle et Ricardi Hunte eorum servientium, utriusque per xij dies dj. capiente utroque iiij d. per diem, cooperientium novam fabricam factam ad portam maris in castro predicto ac emendentium diversos defectus in wardia interiore infra tempus predictum — xviij s. ix d.

Summa: [18s. 9d.]

#### 2.20 Vadia crem' cals'

Et pro vadiis iiijor hominum subscriptorum frangentium cremantium cals' ad opus predictum cum carbone maritimi superius empto et in crematione eiusdem ac in fabrica predicta expendito infra tempus compoti, videlicet Willelmi Corday per CC dies capientis v d. per diem, Johannis Forest per Cxviij dies, Johannis Shereston' per Cxxxvj dies dj. et Willelmi Forche per xxxvj dies quolibet capiente iiij d. per diem — ix li. ij d.

Summa: [f.9. -s. 2d.]

<sup>&</sup>lt;sup>1</sup> Probably pounds. See also 3.7 below.

#### 2.21 Vadia fodienc' petras

Et pro vadiis Ricardi Michel et \*Thome Byse fodientium, lucrantium et scapulantium petras tam pro cals' inde cremando quam pro vousura inde facienda et muros novi operis implend' in partibus interioribus ad quareram subtus Portesdoune, utriusque operantium circa operationes predictas per Cxl dies utroque capiente iiij d. per diem — iiij li. xiij s. iiij d.

Summa: [£4. 13s. 4d.]

#### 2.22 Vadia laboratorum

Et pro vadiis l diversorum laboratorum subscriptorum per vices venientium et laborantium ad faciendas et portandas morter' et petras ad predictos positores, cariantium grossas petras ad cemetarios, fodientium et scrutantium pro secura terra ad fundament' nove aule predicte assidend', ac facientium omnia alia onera eis imposita, inter secundum diem Februarii et ultimum diem Octobris, videlicet Thome Goodynow per CC dies, Willelmi Waterrigg' per CC dies, Johannis Worthorp per Cxij dies dj., Johannis Anneys<sup>1</sup> per Cxxxij dies dj., Johannis Beche per iiijxxxj dies, Johannis Pelet per Clxvj dies dj., \*Johannis Mair per Cxliiij dies dj., \*Ricardi Mair per Cxxxviij dies dj., Rogeri Poraunce per Cxxxix dies dj., \*Thome Martyn per lij dies, Willelmi Parson' per Cxx dies, Johannis Typpenden' per iiijxxxij dies, Walteri Pertrich' per lviij dies dj., Willelmi Geffrey per iiijxxxij dies dj., Johannis Criston' per lvij dies, Willelmi Selder' per lxiij dies, Alexandri Harowedon' per iiijxxiiij dies, Willelmi Borogh per 1 dies, Jacobi Barry per Cxviij dies, Johannis Denyer' per iiijxxiiij dies, Johannis Ude per lxx dies dj., Johannis Seward per lxxix dies, Johannis Gille per xvj dies, Ricardi Colyn per xxxvj dies, Johannis Kirsyngton' per xxxiij dies, Ricardi Tebaud' per v dies di., Willelmi Kyng' per lv dies dj., Johannis Bowde per x dies, Johannis Wayte per Ciiij dies dj., \*Oliveri Huwe per lxxvj dies, Johannis Haiward per lxiiij dies dj., Thome Archer per lj dies dj., Thome Faukener per v dies dj., Walteri Dedeler' per xlij dies dj., Johannis Smyth' per iiij dies, \*Johannis Baron' per xxxiiij dies dj., Ade Pochaunce per xviij dies dj., Henrici Camayle per xxxiiij dies, Johannis Chaunder per xj dies, Johannis Clevere per xviij dies, Johannis Faryngdon' per xj dies, Johannis Selborne per v dies di., Johannis Dewyth per ix dies, Ricardi Killam per iiij dies dj., Thome Porteshey per iiij dies dj., Johannis atte Chambr' per x dies, Johannis Whitsyde per x dies dj., Johannis Nyton' per iij dies, Willelmi Skynnere per iij dies dj. et Thome Kille per iij dies dj., quorum quilibet capit iiij d. per diem — l li. x s. iiij d. Et in vadiis iiijor laboratorum subscriptorum laborantium circa operationes predictas inter secundum diem Novembris et xxiiij diem Decembris, videlicet Thome Goodynow, Willelmi Waterigg', \*Johannis Mair, et Willelmi Parson', cuiuslibet eorum per xliiij dies, quolibet eorum capiente iij d. ob. per diem li s. iiii d.

> [£53. 1s. 8d.] [Total: £495. 16s.  $9\frac{1}{2}d$ .]

Roll Three

(1 January 1398–24 June 1398)

m . I

3.1 Porcestr' castrum

Contrarotulus [Willelmi Hursle interlined] prioris de Suthewyk, assignati per litteras patentes domini R[icardi] nuper regis de magno sigillo ad contrarotulanda diversa recepta forinseca, misas et expensas facta per Johannem Cook de Wykeham et Petrum Geveyn, per litteras patentes dicti domini regis assignatos super reparatione et emendatione diversorum defectuum castri predicti, contrarotulata superius et testificata per predictum priorem, a primo die Januarii anno regni Regis Ricardi vicesimo primo usque xxiiij diem Junii anno eiusdem regis vicesimo secundo, neutro die computo.

## 3.2 Receptio ad receptam scaccarii [ followed by gap]

# 3.3 Receptio forinseca

Et predicti Johannes et Petrus r' viij s. de lxiiij querculis prostratis infra boscum et forestam domini regis de la Bere pro reftres ad novam aulam et coquinam inde faciendi, vendit' cuiuslibet querculi pro j d. ob. et in eisdem expenditis. De

<sup>1</sup> Later appears as a smith: 3.20 and 4.19 below.

corticibus eorundem nichil eo quod nulli inde capi potuerunt quia extra salisonem.

[Rec. 8s.]

instrumentis cementariorum et carpentariorum acuendis — viij s. vj d.

[£24. 8s. 7d.]

#### 3.4 Emptio petr'1

De quibus predicti Johannes et Petrus [solverunt pro struck out and replaced by computant in Clxi magnis peciis de Bereston' ponderantibus iiijxx dolia emptis et expenditis circa reparationem castri ibidem, dolium ad v s. - xx li. Et pro ix<sup>C</sup> peciis large petre de Bonchirche by Southe Wyght' removendis, scapulandis et usque mare ad tascham cariandis, quarum quelibet petra longitudinis duorum pedum, expenditis in reparatione castri predicti, sol' pro C xxiij s. iiij d. — x li. x s. Et pro C doliis de platen'ston' de Bynbrigg' removendis et scapulandis ac usque mare cariandis et expenditis in reparatione predicta, sol' pro operatione dolii xij d. — C s. Et pro xxxix peciis large petre longitudinis iij pedum lucrandis et scapulandis ibidem, vocatis noweles,2 expenditis ut supra ad tascham — xvj s. Et pro xx peciis petre de Bonchirche pro rachementis et clavibus vousur' selarij magni turris, lucrandis et scapulandis et expenditis in eodem in grosso ad tascham — x s.

[£,36. 16s.]

#### 3.5 Emptio ferri, aceris et carbonum

Et pro vj<sup>m11</sup>.D lb. ferri emptis et expenditis super reparatione et emendatione diversorum necessariorum in castro predicto infra tempus predictum, sol' pro C iij s. iiij d. — x li. xvj s. viij d. Et pro CClxiiij lb. fermenti operati emptis et expenditis in castro predicto, sol' pro lb. j d. qa. xxvij s. vj d. Et pro iiijxxxiiij lb. aceris de Spayne emptis et expenditis circa durationem securium et aliorum instrumentorum cementariorum, sol' pro lb. j d. ob. — xj s. ix d. Et pro xlvj chaldr' carbonum maritimi emptis et expenditis circa combustionem cals' et fabricationem ferri predicti, unde prec' le chaldr' de v chaldr' v s. iiij d., de xv chaldr' le chaldr' ad iiij s. vj d., et de xxvj chaldr' le chaldr' ad v s. — xj li. iiij s. ij d. Et pro ij grinstones emptis et expenditis in fabric' pro

#### 3.6 Emptio bord', tegularum, pyk, rosyn et olei

Et pro lx waynscotbord emptis et expenditis in ostiis, fenestris et aliis necessariis inde faciendis infra castrum predictum tempore huius compoti—xv s. x d. Et pro CCCC pavyngtill' emptis et expenditis circa pavuram private camere, sol' pro C x d. — iij s. iiij d. Et pro ij bord' de pepiler³ emptis et expenditis in ij cofr' pro morterio et petris hauriendis — iiij d. Et pro j barell de pyk empto et expendito in ferramentis, vertivellis et aliis necessariis denigrandis — iij s. iiij d. Et pro xxiiij lb. de rosyn emptis et expenditis in cement' pro petris affirmandis et adiungendis — viij d. Et pro vj go et dj. olei⁴ emptis et expenditis in maeremio aule pro sole et vento asserb' ungendo — vj s. vj d.

[£1. 10s.]

#### 3.7 Emptio et finiatio plumbi, cum cariagio eiusdem

Et pro xiiij fotheres et dj. fothere plumbi emptis in Munydep' le fothere pro Cx s., expenditis super cooperturam novarum aule et coquine, cum cetero plumbo — lxxix li. xv s. Et pro uno fothere viij<sup>c</sup> lb. plumbi purato et finiato de cineribus plumbi predicti in grosso ad tascham et expendito in cooperturam aule et coquine predictarum — xiiij s. Et pro predictis xiiij fotheres et dj. plumbi de Munydep' usque Porcestr' per mare preter vij leucas cariandis in grosso ad tascham, le fothere pro x s. — vij li. v s. Et pro xviij<sup>mil.</sup> [ix<sup>C</sup> interlined] lb. plumbi receptis de Willelmo Stourton' subconstabulario castri domini regis de Mere in comitatu Wiltes',5 per indenturam inter nos inde confectam virtute litterarum dicti domini regis de prenominato sigillo eidem Willelmo inde directarum, per terram cariandis de Mere usque Porcestr' et ibidem expenditis super cooperturam predictarum aule et coquine et duorum novorum femorallorum super easdem existentium, sol' pro cariagio

<sup>&</sup>lt;sup>1</sup> The weight of the stone is given in 3.10 below.

<sup>&</sup>lt;sup>2</sup> i.e. (stair) newels.

<sup>&</sup>lt;sup>3</sup> i.e. poplar.

<sup>&</sup>lt;sup>4</sup> Probably 6½ gallons.

<sup>&</sup>lt;sup>5</sup> Mere Castle in Wiltshire (ST 812323) was part of the Duchy of Cornwall, and Richard II (as Duke of Cornwall) apparently dismantled the castle (Colvin *et al.*, 1963, 471).

quorumlibet ij<sup>mil.</sup> ad tascham xiij s. iiij d. — vj li. Et pro predictis xiiij fotheres et dj. cariandis de mari usque in custodiam interiorem castri predicti, sol' pro dolio j d. — xiiij d.

[£,93. 15s. 2d.]

#### 3.8 Custus de skaffot cum cariagio eiusdem

Et pro vj<sup>xijs</sup> cladarum factis in bosco domini regis de Kyngesden' et expenditis super reparationem operis predicti, sol' pro factura duodene viij d. — iiij s. Et pro prostratione subbosci pro scaffot et ij carettate virgarum pro ligatura eiusdem skaffot et in eodem expendit' — xiiij d. Et pro factura duarum longarum cladarum expenditarum pro camera fabri deportanda — viij d. Et pro cariagio predictarum cladarum, skaffot et virgarum de Kyngesden' usque castrum per vj carettatas, sol' pro car' iij d. — xviij d. Et pro iiij cariagiis maeremii cariatis de bosco domini regis de la Bere usque castrum et in skaffot expenditis, sol' pro car' viij d. — ij s. viij d.

[10s.]

#### m.2

# 3.9 Emptiones necessarie

Et pro una corda longitudinis xiij fadmorum ponderanti xxxiij lb. empta et expendita circa tractionem maeremii et petrarum, pretium lb. j d. ob. qa. — iiij s. ix d. Et pro xiij melis, xij boll' vj ladull' emptis et expenditis in portatione et operatione morteri et petrarum — iij s. iiij d. Et pro ciueris ligandis et emendendis et viij hopis emptis pro eisdem — viij d. Et pro uno novo cribro empto et expendito in cals' purgando et iij aliis veteribus crebris emendandis expenditis in eodem per vices — xv d. Et pro iiij steycordis pro maeremio, mort' et petr', emptis et expenditis circa tractionem eorundem — iij s. iiij d. Et pro uno belw empto et expendito in mundatione petrarum dentaille<sup>1</sup> — iiij d.

[13s. 8d.]

#### 3.10 Batillagium petre et carbounis

Et pro predictis ix<sup>C</sup> liberis petris batillandis de Bonchurche usque Porchestr' que faciunt CCxxv

<sup>1</sup> The meaning of this is not clear, unless the bellow was used by masons to keep carving clean as they worked it.

dolia in pondere, iiij petre ad dolium, sol' pro dolio xvj d. — xv li. Et pro dictis xxxix petre pro nowels batillandis ut supra, que ponderant xiij dolia, sol' pro dolio xvj d. — xvij s. iiij d. Et pro predictis C doliis de ragplaten'ston' batillandis de quarrera de Bynbrigg' usque Porchestr', sol' pro dolio viij d. — lxvj s. viij d. Et pro dictis xx peciis petre pro rachimentis et clavibus ponderantibus x dolia, videlicet ij petre ad dolium, sol' pro dolio xvj d. — xiij s. iiij d. Et pro batillagio xx chaldr' carbounis maritimi cariandis de Southampton' usque Porchestr', sol' pro le chaldr' viij d. — xiij s. iiij d. De residuo cariagii carbounis nichil per mare nisi de conventione marinariorum.²

[£20. 10s. 8d.]

# 3.11 Batillagium zabulonis et ferri

Et pro CCCxv doliis et dj. zabulonis lucratis et cariatis de la Spyte iuxta Goseport usque molendinum castri expenditis in reparatione castri, sol' pro batillagio dolii iiij d. — Cv s. ij d. Et pro iij doliis et D lb. ferri³ batillatis de Sutht' usque Porchestr' in grosso — iij s. iiij d.

[£5.8s.6d.]

# 3.12 Cariagium maeremii per terram

Et pro xxix carettatis maeremii cariatis de bosco domini regis de la Bere usque castrum predictum circa reparationem coquine, sol' pro quolibet cariagio viij d. — xix s. iiij d. Et pro xx carettatis veteris maeremii cariatis de custodia interiori usque carpen' et expenditis in plankis pro terragio nove aule, carettata ad j d. — xx d.

[£1. 1s.]

## 3.13 Cariagium petre, zabulonis et cals' per terram

Et pro CCxxv doliis libere petre, xiij doliis petre pro nowels, x doliis petre pro rachementis, C doliis de ragplaten'ston', xlvj chaldr' carbounis maritimi, iij doliis ferri, j dolio de grynstones, rosyn, pyk et aceris et CCCxv doliis dj. zabulonis, cariatis a

<sup>&</sup>lt;sup>2</sup> Of 46 chaldrons of coal that were purchased, only 20 were paid to be shipped from Southampton; the remainder was perhaps brought directly to Portchester at an inclusive price.

<sup>&</sup>lt;sup>3</sup> If this figure only includes the 6,500 lb. of iron (3.5 above), then each tun was of 200 lb.

molendino ibidem usque in castrum predictum, sol' pro dolio j d. — lix s. v d. ob. Et pro predictis iiijxx doliis libere petre de Bereston' cariatis de molendino predicto usque in castrum, sol' pro dolio j d. — vj s. viij d. Et pro lxij carettatis de flynt' collectis super ripam maris et cariatis in castrum predictum et expenditis in reparatione predicta, sol' pro cariagio j d. — v s. ij d. Et pro CCCCxxiiij carettatis cals' cariatis de Portesdoune usque in castrum et expenditis circa vousur' celar' magni turris et cremationem cals', sol' pro carettata ij d. — lxx s. viij d. Et pro cals' cremato de puteo cariando in custodiam interiorem in grosso ad tascham — iij s. iiij d.1

 $[£7.5s.3\frac{1}{2}d.]$ 

# 3.14 Opera ad tascham

Et pro ij celariis magni turris voutendis cum duplicibus pendentibus cum materiis provisis costagio domini regis in grosso ad tascham per conventionem factam cum Johanne Abyndon'—xx li.² Et pro xxij doliis de plastour de Purbyk³ cremat' expenditis et operatis per diversa loca castri predicti, dolium ad tascham pro iij s. iiij d. —lxxiij s. iiij d. Et pro fimo veteri et robus' veterum parietum de castro predicto abducendis in grosso ad tascham — xxvj s. j d. Et pro ij molendinis equinis de novo reparatis in carpentria, petr', molar' et aliis quibuscumque indigentiis, in grosso ad tascham — vij li. x s. viij d.

[£,32. 10s. 1d.]

#### 3.15 Vadia latomorum

Et pro vadiis Walteri Walton' magistri latomorum ordinantis et supervidentis reparationem aule, coquine et aliorum edificorum ibidem per iiij vices infra tempus computi cum adventu, recessu et existentia ibidem, per xl dies ut computavit capientis vj d. per diem — xx s. Et pro vadiis Walteri Weston' subcustodis operis et latomorum sub-

scriptorum supervidentis et ordinantis reparationem predictam, per Cxlvj dies infra computi capientis vj d. per diem — lxxiij s. Et pro vadiis x diversorum latomorum subscriptorum, videlicet Thome Mascall', Johannis Duchman, Johannis Vernago, Johannis Beket, Ricardi Godzene, Ricardi Henley, Johannis Lucas, Ricardi Stukill, Walteri Hull et Willelmi Sadler, operantium super reparatione nove aule et coquine et aliarum domorum infra existentium inter festa Circumcisionis Domini et Purificationis Beate Marie,4 cuiuslibet eorum per xxij dies capientis v d. ob. per diem — C s. x d. Et pro vadiis Willelmi Rous per predictos xxij dies capientis iiij d. ob. per diem viij s. iij d. Et pro vadiis Thome Mascall' per iiijxxxiiij dies, Johannis Duchman per iiijxxij dies, Johannis Vernago, Johannis Beket et Ricardi Godzene cuiuslibet per Cxiiij dies, Ricardi Henley per iiijxxxvij dies, Johannis Lucas et Ricardi Stukill utriusque eorum per lviij dies, Walteri Hulle per lv dies, Ricardi Longe per xij dies, Johannis Chaundeler per ix dies et dj., Willelmi Sadlere per xxiiij dies, Roberti Denton' xxj dies et Galfridi Chirche per xix dies, existentium super reparatione predicta inter festa Purificationis Beate Marie et Nativitatis Sancti Johannis Baptiste<sup>5</sup> infra tempus compoti, quorum quilibet capit vj d. per diem — xxj li. xv s. ix d. Et pro vadiis Johanni Mersh' per lij dies et Willelmi Rous per Cxij dies infra tempus predictum operantium circa reparationes predictas, utriusque capientis v d. per diem — lxviij s. iiij d. Et pro vadiis Ricardi Reede per vj dies operantis circa reparationes predictas infra tempus predictum, capientis v d. ob. per diem — ij s. ix d.

[£35. 8s. 11d.]

m.3 3.16 Vadia positorum

Et pro vadiis xix positorum subscriptorum per vices existentium et operantium super reparatione et emendatione predictarum aule, coquine, et aliorum edificiorum infra easdem existentium, videlicet Johannis Soon, Johannis Forst, Johannis Houton', \*Willelmi Jolyf et Walteri Reynald cuiuslibet

<sup>&</sup>lt;sup>1</sup> The separation here of chalk brought to the castle for building and burning from the lime brought from the pit suggests that some lime may have been burnt in the castle (see also 4.13 below).

<sup>&</sup>lt;sup>2</sup> This was not a double vault like the two-tier vault in the land gate, but two vaults side by side in the cellars. Abingdon also worked as a layer, 3.16 below.

<sup>&</sup>lt;sup>3</sup> The Purbeck was purchased in 1397, 2.3 above.

<sup>4 1</sup> January-2 February.

<sup>&</sup>lt;sup>5</sup> 2 February-24 June.

eorum per lvj dies, Johannis Merman et Johannis Gy utriusque per liij dies, Petri Fosard, Willelmi Corday et Walteri Corday cuiuslibet eorum per xxxv dies, Nicholi Fosard, Thome Fosard et Johannis Rikman cuiuslibet eorum per xlj dies, Walteri Hobrond per xxix dies, Ricardi Lathebury et Johannis Abyndon' utriusque per xxiij dies, Bartholomei Dungeworth' et Henrici Dollyng' utriusque eorum per xij dies, et Petri Burdeux per xviij dies, inter festa Purificationis Beate Marie et Nativitatis Sancti Johannis Baptiste, quorum quilibet capit v d. per diem — xv li. iiij s. vij d.

[£15.4s.7d.]

# 3.17 Vadia carpentariorum

Et pro vadiis Johannis Vale et Thome Clevere magistrorum carpentariorum utriusque per Cxlvj dies circa ordinationem et operationem carpentrie nove aule, coquine et aliorum edificorum infra easdem existentium, venientium per vices et operantium circa reparationes predictas infra tempus predictum, utriusque capientis vi d. per diem — vij li. vj s. Et pro vadiis vj diversorum carpentariorum subscriptorum per vices venientium et ibidem operantium circa operationes predictas, videlicet Thome Cartere et Thome Gardyner utriusque eorum per Cxviij dies, Thome Priour per Cx dies, Walteri Snoddon' per iiijxxxij dies, Roberti Godyng per lvj dies, et Jacobi Wolfy per lxx dies, inter primum diem Januarii et xxiiij diem Junii infra tempus predictum, quorum quilibet capit v d. per diem - xj li. xv s.

[£,19. 1s.]

#### 3.18 Vadia sarratorum

Et pro ij<sup>mil</sup>·vij<sup>C</sup>xxxix pedibus tabularum et maeremii sarratis ad tascham et expenditis in reparatione ac coopertura predictarum aule et coquine, sol' pro le C pedibus xvj d. — xxxvj s. vj d.

[£1. 16s. 6d.]

## 3.19 Vadia plumbariorum

Et pro vadiis \*Ricardi Plomer et \*Johannis Plomer emendantium diversos defectus wardie exterioris supra portam vocatam le Wateryate, ac removentium et emendantium gutteras et alias aque eiectiones circa le quenechambre, utriusque per viij dies capientis vj d. per diem — viij s.

[8s.]

# 3.20 Vadia fabrorum

Et pro vadiis Johannis Anneys fabri fabricantis et operantis gumphos vertivellas de gemeaux clav' pro ostiis et fenestris cum staneo dealbat' ac operantis ferramenta grossa per loca in novo opere predicto, per Cxxxix dies capientis vj d. per diem — lxix s. vj d. Et pro vadiis Andree Haukyn fabri operantis cum predicto Johanne ac facientis, acuentis et obdurantis diversa necessaria et instrumenta predictorum latomorum, positorum, carpentariorum et aliorum ibidem operantium quotiens necessitas exigerit, per Cxxxix dies capientis iiij d. per diem — xlvj s. iiij d. Et pro vadiis Johannis Broun conducti in auxilium predictorum Johannis et Andree ad fabricandum et operandum circa premissa per xiiij dies, capientis iij d. per diem — iij s. vj d.

[£5. 19s. 4d.]

# 3.21 Vadia crem cals'

Et pro vadiis duorum hominum subscriptorum frangentium et cremantium cals' ad opus predictum cum carbone maritimo superius empto et in crematione eiusdem ac in fabric' predicta expendito infra tempus compoti, videlicet Johannis Chaundeler per lxx dies capientis v d. per diem — xxix s. ij d., et Willelmi Watrigg' per lxx dies capientis iiij d. per diem — xxiij s. iiij d.

[f.2. 12s. 6d.]

## 3.22 Vadia laborariorum

Et pro vadiis xxvj laborariorum subscriptorum per vices venientium, laborantium, facientium et portantium mort' petras ad predictos positores, cariantium grossas petras ad cementarios, et fodientium, removentium et scapulantium grossas petras cals' per vices ad quareram subtus Portesdon' ac facientium omnia alia onera eis imposita, inter festa Purificationis Beate Marie et Nativitatis Sancti Johannis Baptiste, videlicet Johannis Beche per lxxij dies, Ricardi Michell' per lxx dies et dj., Ricardi Chaundeler per liij dies et dj., \*Ricardi Meir per lxx dies dj., Johannis Watrigg' per lxxvj

dies et dj., Johannis Sherston' per lxviij dies, Thome Hay per xlvij dies, \*Johannis Meir per lj dies, Willelmi Person' per xv dies dj., Rogeri Prauns per xlviij dies, Willelmi Kyng per xlv dies dj., Johannis Seward per xlviij dies, \*Oliveri Howe per xl dies, Johannis Port' per xxxv dies, Jacobi Barry per xxxviij dies, Johannis Whale per xx dies, Ricardi Colyn per xxx dies, Johannis Salter per xx dies, Adam Pochaunce per xxiiij dies dj., \*Johannis Jolif per xj dies, Roberti Humfrey per x dies, Ricardi Gore per iiij dies dj., Willelmi Quyk' per xv dies dj., Roberti Machon' per vj dies, \*Johannis Wrought et Roberti Passon' utriusque eorum per v dies et dj., quorum quilibet capit iiij d. per diem xv li. x s. vj d. Et pro vadiis Johannis Shepherd et Johannis Flachere removentium et abducentium fractiones petrarum inter cementarios utriusque per xvij dies per vices infra compotum, utriusque capientis per diem iiij d. — xj s. iiij d.

[£,16. is. 10d.]

## 3.23 Vadia provisorum

Et pro vadiis \*Johannis Whityng' et Thome Godynow provisorum per vices attachiantium latomos, positores, carpentarios laboratores et alios ad reparationem operis predicti, indigent' ac facientium providentiam de maeremio, petre et cariagio tam per terram quam per mare, videlicet unius per xlj dies et alterius per lix dies, utriusque capientis v d. per diem — xlj s. viij d.

[£2. 1s. 8d.] [Total: £323. 3s.  $3\frac{1}{2}d$ .]

Roll Four (25 June 1398–23 August 1399)

т. т

#### 4. 1 Porcestr' castrum

Contrarotulus prioris de Suthwyk, assignati per litteras patentes domini R[icardi] nuper regis de magno sigillo ad contrarotulanda diversa recepta forinseca, misas et expensas facta per Johannem Cook' de Wykeham et Petrum Geveyn, assignatos per litteras patentes dicti domini regis super reparatione et emendatione diversorum defectuum castri predicti, contrarotulata superius et testificata per predictum priorem, a xxv die Junii anno

regni Regis Ricardi secundi xxij<sup>do</sup> usque xxiij diem Junii abinde proxime sequens uterque die computo, videlicet per annum integrum, et a predicto xxiij<sup>o</sup> die Junii usque xxiij diem Augusti anno predicti Regis Ricardi xxiij<sup>o</sup>, videlicet per ix septimanas.

# 4.2 Receptio ad receptam scaccarii [followed by gap]

#### 4.3 Receptio forinseca

Et dicti Johannes et Petrus r' viij s. iij d. de capronibus et ramis lxvj querculorum prostratorum in bosco et foresta domini regis de la Bere pro reftres ad duas novas turres inceptas iuxta cameram regine ibidem, ac ad inde faciendum unum femorallum super coquinam de novo ibidem factam. De corticibus eorundem nichil quia capt' extra salisonam.

[Rec. 8s. 3d.]

#### 4.4 Emptio petrarum1

De quibus predicti Johannes et Petrus solverunt pro M<sup>1</sup>.M<sup>1</sup>. peciis large petre libere de Bonchurche by Soughwyght' removendis, scapulandis et usque mare ad tascham cariandis, quarum quelibet petra de M<sup>1</sup>.CC est longitudinis duorum pedum, et de viij<sup>C</sup> peciis quelibet petra longitudinis duorum pedum et dj., sol' pro le C petris xxiij s. iiij d., expenditis in reparatione et emendatione castri predicti — xxiij li. vj s. viij d. Et pro CC doliis de platen'ston' de Bynbrigge removendis et scapulandis ac usque mare ad tascham cariandis, sol' pro operatione dolii petrarum xij d., expenditis in reparatione et emendatione predictis — x li. Et pro iiij<sup>C</sup> grossis<sup>2</sup> pendantigheles emptis et expenditis in les reredosses caminorum ibidem, le C pro iij s. iiij d. — xiij s. iiij d. Et pro iiijxx doliis de Bereston' emptis et expenditis circa reparationem castri predicti, dolium ad v s. — xx li.

[£54]

#### 4.5 Emptio ferri, clavorum et carbonum

Et pro M¹.M¹.CC lb. ferri emptis et expenditis super reparatione operis predicti, ut in vertivellis,

<sup>1</sup> The weight of the stone is given in 4.10 below.

<sup>2</sup> Apparently these were of stone, though their carriage is not given below.

clavis, gumphis et aliis necessariis ad opus predictum indigentibus, sol' pro le C iij s. iiij d. — lxxiij s. iiij d. Et pro CCCClxiij lb. fermenti operati emptis et expenditis in castro predicto, sol' pro lb. j d. qa. — xlviij s. ij d. ob. qa. Et pro CCC lb. j quart' ferri largi vocati brodyre emptis et expenditis in magnis vertivellis ostii nove aule et aliorum ostiorum ibidem, sol' pro le C iiij s. — xiij s. Et pro xlv chaldr' carbonum maritimi emptis et expenditis circa combustionem cals' et fabricationem ferri predicti, unde pretium le chaldr' de v chaldr' v s. x d., de xv chaldr' v s. viij d. et de xxv chaldr' v s. ij d. — xij li. iij s. iiij d. Et pro M¹.M¹. lathnaill' emptis et expenditis in celura supra dress', M¹. ad xiiij d. — ij s. iiij d.

 $[£19. -s. 2\frac{3}{4}d.]$ 

#### 4.6 Emptio bord' rosyn et cere

Et pro C waynescotbord' emptis et expenditis in ostiis, fenestris et aliis necessariis faciendis infra castrum predictum tempore huius compoti — xxv s. Et pro j quart' de rygolebord' empt' pro ostiis nove aule et coquine et ad moldas inde faciendas — xviij s. iiij d. Et pro v<sup>C</sup> lathun emptis et expenditis circa celur' supra dress', sol' pro le C vj d. — ij s. vj d. Et pro dj. C de rosyn emptis et expenditis in cement' pro petris affirmandis et adiungendis — ij s. Et pro ij lb. cere emptis et expenditis in eodem, lb. ad vij d. — xiiij d.

[£2.9s.]

## 4.7 Emptio soudur' et vitri

Et pro lxvij lb. de soudur' emptis et expenditis in factura longas pipas aule et coquine per quas aqua descendit ad terram et ad emendationem aliorum defectuum in castro predicto, lb. ad ij d. — xj s. ij d. Et pro CCxvj pedibus vitri fact' de porturatura in scutis, bagiis et borduris pro fenestris aule, magne camere, capelle, domus scaccarii et alte camere adiacentis, cum fenestris tresantie, coquine et base camere subtus magnam cameram, sol' pro pede xiiij d., et v pedibus plani vitri pro fenestra supra tresantiam camere magne, sol' xij d. pro pede — xij li. xvij s.

[£13.8s2d.]

### 4.8 Custus de skaffot cum cariagio eiusdem

Et de xv carettatis alnetorum prostratis apud le

Bere et extra mariscum ibidem trahendis et in skaffot ibidem expenditis, sol' pro carettata i d. xv d. Et pro eisdem xv carettatis de Bere usque castrum predictum cariandis, sol' pro qualibet carettata vj d. — vij s. vj d. Et pro v duodenis cladaram factis in bosco domini regis de Kyngesden' et in skaffot expenditis super reparationem operis predicti, sol' pro factura duodene viij d. iij s. iiij d. Et pro prostratione subbosci pro skaffot et virgarum in Kyngesden' et expendit' in ligatura eiusdem skaffot - xij d. Et pro cariagio predictarum cladarum, virgarum et skaffot cariand' usque castrum in iiij carettatis, sol' pro carettata iij d. — xij d. Et pro x carettatis de skaffottymber prostratis in foresta de Bere et cariatis usque castrum predictum et in eodem expenditis, sol' pro prostratione et cariagio cuiuslibet carettate viij d. - vj s. viij d.

[f, 1. -s. 9d.]

# 4.9 Emptiones necessarie

Et pro una longa cable ponderanti Cxij lb. empta et expendita circa tractionem magni maeremii nove aule et coquine, pretium lb. i d. ga. — xi s. viij d. Et pro ij steycordes emptis, videlicet j de xv fadmes et j de xiij fadmes, iiij trays ad trahend' mort' et petras, et una corda pro campana operatorum, et xxiiij fadmes de lyne pro cement' emptis et expenditis in eisdem, ponderantibus in toto lviij lb, pretium lb. j d. ob. — vij s. iij d. Et pro x magnis boll' emptis et expenditis in portatione et operatione morteri et petrarum --- xx d. Et pro vj tribulis ad faciend' mort' et ij barwes ad cariand' tam mort' quam petras, emptis et expenditis circa premissa — ij s. iiij d. Et pro uno corio equino empto et expendito in factura de belwes pro fabr' — ij s. Et pro ligatione emendat' ij vates, iiij coueles et aliorum instrumentorum expendit' infra tempus compoti — ij s. iiij d. Et pro xxvj lb. candelarum emptis et expenditis ad operandum per noctes inter festa Omnium Sanctorum et Purificationis Beate Marie, 1 lb. ad i d. ob. — iii s. iii d. Et pro xv quart' carbonum lignei emptis et expenditis in finura plumbi et fabric', quart' ad iiij d. — v s. Et pro cariagio eiusdem de Rampes-

<sup>1</sup> I November-2 February.

don' usque Porchestr' — xviij d. Et pro viij ceris cum clavibus pro ostiis diversis infra castrum affirmandis emptis et expenditis in eisdem, pecia ad vij d. — iiij s. viij d.

[f.2. 1s. 8d.]

#### m. 2

# 4. 10 Batillagium petrarum, carbonum et bord'

Et pro predictis M<sup>1</sup>.M<sup>1</sup>. peciis libere petre batillandis de Bonchirche usque Porchestr' que faciunt v<sup>c</sup>lxiiij dolia in pondere, unde de M¹.CC petris minoris forme iiij petre ad dolium et de viij<sup>C</sup> petris maioris forme iij petre ad dolium, sol' pro dolio xvj d. — xxxvij li. xij s. Et pro predictis CC doliis de ragplaten'ston' batillandis de quarera de Bynbrigg' usque Porchestr', sol' pro dolio viij d. — vj li. xiij s. iiij d. Et pro batillagio de x chaldr' carbonum de Hampton' usque Porchestr', sol' pro le chaldr' viij d. — vj s. viij d. Et pro batillagio de v chaldr' carbonum de Portesmouth' usque Porchestr' — xx d. Et pro residuo cariagii carbonum nichil per mare quia de conventione marinariorum.<sup>2</sup> Et pro batillagio de predictis waynscotbord', rygole et lath' de Southampton' usque Porchestr' — xxij d. [£,44. 15s. 6d.]

### 4.11 Batillagium zabulonis

Et pro CCClxiij doliis zabulonis lucratis et cariatis de la Spyte iuxta Goseport usque molendinum castri et expenditis in reparatione predicta, sol' pro batillagio dolii iiij d. — vj li. xij d.

[£6. 1s.]

#### 4.12 Cariagium maeremii per terram

Et pro lvij carettatis maeremii cariati de bosco domini regis de la Bere usque castrum predictum et expenditi in reparatione aule et coquine ac aliarum domorum ibidem, sol' pro quolibet cariagio viij d. — xxxviij s.

[£, 1. 18s.]

4.13 Cariagium petrarum, zabulonis, cals' et flynt per terram

Et pro predictis v<sup>C</sup>lxiiii doliis libere petre, CC

<sup>1</sup> Ramsdean, in Langrish (SU 7022) near Petersfield.

doliis de ragplaten'ston', iiijxx doliis de Bereston', xlv chaldr' carbonis maritimi et CCClxiij doliis zabulonis cariatis a molendino ibidem usque in castrum predictum, sol' pro dolio j d. — Ciiij s. iiii d. Et pro CCCCv carettatis de flynt collectis iuxta Portesdon' et cariatis in castrum predictum et expenditis in reparatione predicta, sol' pro carettata ij d. - lxvij s. vj d. Et pro v<sup>c</sup>liiij carettatis cals' cariatis de Portesdon' usque in castrum et expenditis in vousur' parietis et crematione cals' ibidem,3 sol' pro carettata ij d. — iiij li. xij s. iiij d. Et pro iiijxxxix carettatis terre pro cameris terreandis cariatis de fossato castri usque custodiam interiorem, sol' pro quolibet cariagio ob., iiij s. j d. ob. Et pro cals' cremato cariando de puteo usque in custodiam interiorem in grosso ad tascham per tempus compoti — vij s. iiij d. Et pro una carettata straminis empta cum cariagio eiusdem et expendita in coopertura murorum<sup>4</sup> — xvj d.

[f, 13. 16s. 11 $\frac{1}{2}d$ .]

### 4.14 Vadia latomorum

Et pro vadiis Walteri Walton' magistri latomorum ordinantium et supervidentium reparationem ij novorum turrium et aliorum edificorum ibidem per vices infra tempus compoti, cum adventu, recessu et existentia ibidem per xl dies ut computavit capientis vj d. per diem — xx s. Et pro vadiis Walteri Weston' subcustodis operis et latomorum subscriptorum supervidentis et ordinantis reparationem predictam, per iij<sup>C</sup>xxvj dies infra compotum capientis vj d. per diem — viij li. iij s. Et pro vadiis viij diversorum latomorum subscriptorum per vices venientium et operantium circa operationes predictas inter festa Omnium Sanctorum et Purificationis Beate Marie<sup>5</sup> infra tempus huius compoti, videlicet Thome Mascall', Johannis Vernago, Johannis Beket, Ricardi Godzene et Ricardi Stukill' cuiuslibet eorum per lxiij dies, Ricardi Henley et Ricardi Wynchcombe utriusque eorum per xl dies, quorum quilibet capit v d. per diem - viij li. iiij s. vij d. Et pro vadiis Willelmi Rous per lxiij dies infra tempus predictum

<sup>&</sup>lt;sup>2</sup> Of 45 chaldrons of coal that were purchased (4.5 above) only 15 were paid to be shipped from Southampton (see 3.10 above).

<sup>&</sup>lt;sup>3</sup> This again implies lime-burning in the castle (see 3.13 above).

<sup>4</sup> See below, at end of 4.15 for the use of the straw.

<sup>&</sup>lt;sup>5</sup> 1 November 1398 to 2 February 1399, i.e. winter work at lower rates.

operantis circa operationes predictas, capientis iiij d. ob. per diem — xxiij s. vij d. ob. Et pro vadiis Johannis Vernago per Cxxiij dies, Thome Mascall per ij Clxiij dies, Johannis Beket per CCl dies, Ricardi Godzene per CCxij dies, Ricardi Henley per Cxl dies, Roberti Denton' per xlij dies, Galfridi Churche per xxxvj dies, Johannis Lucas per Ciiijxxxvj dies, Ricardi Longe per iiijxxxvij dies dj., Ricardi Stukill per CClx dies, Johannis Chaundeler per lxviij dies, Willelmi Sadler per lviij dies, Johannis Davy iiijxxxviij dies dj., Johannis Abyndon' et Johannis Palmere utriusque per xviij dies, Adam Hobrond lxxviij dies dj., Ricardi Wynchecombe per lij dies, Roberti Brid' per iiijxxxiiij dies, Johannis Mongfolk per xlj dies, Johannis Mason' per iiij dies, Johannis Edon per xlviij dies dj., Willelmi Littilburgh' per xxiij dies dj., Thome Denyas per xxiiij dies et Johannis Colette per xj dies, Willelmi Richard' per Cx dies, Johannis Baker' per Cx dies et Ade Bardolf' per Cxxxv dies, operantium super reparatione et emendatione castri predicti inter festa Purificationis Beate Marie et Omnium Sanctorum in anno integro supradicto, et inter xxiij diem Junii et xxiij diem Augusti deinde proxime sequentes,1 quorum quilibet capit vj d. per diem — lxv li. v s. ix d. Et pro vadiis Johannis Cuppere per xvij dies, Ricardi Rede per xlvj dies et Roberti Pyntill' per xlj dies, operantium super reparatione predicta infra tempus predictum, quorum quilibet capit v d. ob. per diem - xlvij s. viij d. Et pro vadiis Willelmi Rous per CClxiij dies super reparatione predicta infra tempus compoti, capientis v d. per diem — Cix s. vij d.

 $[£,91. 14s. 2\frac{1}{2}d.]$ 

# 4.15 Vadia positorum

Et pro vadiis v positorum subscriptorum per vices

<sup>1</sup> This ought to mean work done from June to November 1398 and from February to August 1399, i.e. work done at full rates outside the winter, before All Saints 1398 and after the Purification in 1399. Although the words used in the account might almost be taken to imply that no work was done between June and November 1398, this is unlikely, and made impossible by there being only 203 days after the Purification in the time of account, and recorded work done by four men being in excess of this period. Similar dating clauses are used below.

venientium et operantium circa pavuram nove coquine et fracturam murorum pro gutir' extra coquinam predictam, faciend' et dealbat' murorum predictorum nove aule, coquine et camerarum infra domum inter festa Omnium Sanctorum et Purificationis Beate Marie infra tempus predictum. videlicet Johannis Soon per Ivij dies, Bartholomei Dungeworth et Johannis Gy utriusque eorum per xlij dies, Willelmi Corday per iiij dies dj. et Walteri Corday per vi dies, quorum quilibet capit iiii d. ob. per diem — lvj s. ix d. ob. qa. Et pro vadiis xxx diversorum positorum subscriptorum per vices venientium et operantium circa reparationem et facturam nove aule, coquine, camerarum et duorum turrium incept' ad reparand' de novo inter festa Purificationis Beate Marie et Omnium Sanctorum in predicto anno integro, et inter xxiij diem Junii et xxiij diem Augusti deinde proxime sequentes, videlicet Walteri Hulle per Clv dies, Johannis Soon per ij clv dies, Johannis Netheraven' per xlv dies, Johannis Merman senioris per Clxiiij dies, Johannis Merman junioris per C dies dj., Johannis Houton' per xxxvj dies dj., \*Willelmi Jolif per Ciij dies dj., Johannis Gy per CClix dies dj., Walteri Reynald' et Walteri Hobrond' utriusque eorum per 1 dies, Johannis Rikman per li dies, Ricardi Lathebury per lxxiii dies di., Bartholomei Dungeworth per Ciiijxx dies dj., Willelmi Corday per Clix dies, Walteri Corday per Cxliij dies dj., Henrici Dollyng per lxxij dies dj., Petri Burdeux per xviij dies, Nicholi Fosard' per lxxj dies dj., Stephani Russell' per xij dies, Willelmi Tannere per iiijxxxiiij dies dj., Stephani Tannere per lij dies dj., Johannis Herberd' per vi dies, Johannis Forst per xxxij dies dj., Willelmi Mason' per xviij dies dj., Ricardi Gay per iiijxxv dies dj., Thome Netheraven' per iiijxxv dies, Johannis Palmere per iiijxxvi dies, Rogeri Rumsev per xxxiiij dies, Johannis Rumsey per vj dies, Walteri atte Hulle per xix dies operantium super reparatione predicta infra tempus predictum, quorum quilibet capit v d. per diem — lij li. xiij s. iiij d. Et pro parietibus duorum turrium in partibus orientali et boriali castri predicti cum terra et stramine cooperiend' per yeme in grosso ad tascham — vj s. viij d.

 $[£,55. 16s. 9 \frac{3}{4}d.]$ 

## 4.16 Vadia carpentariorum

Et pro vadiis [Johannis Vale et struck out; canc' quia servus et locumtenens computant' quibus allocantur vadi sua interlined; provideatur de vadiis Johannis Vale quia clericus predict' computantium marginated Thome Clevere magistr' carpentariorum et custod' novi operis ordinant' et supervident' circa carpentriam nove aule, coquine, pantr', butill' et camerarum infra easdem ac existent' super operationibus predictis infra tempus compoti, [utriusque struck out] per [iij cxxvj altered to iii [Cxxiiii] dies, et Johannis Ismonger per vj dies, cuiuslibet capientis vj d. per diem — [xvj li. ix s. altered to viij li. iiij s. vj d. altered to viij li. vj s.] Et pro vadiis vj diversorum carpentariorum subscriptorum ibidem existentium et operantium circa operationem predictam inter festa Omnium Sanctorum eti Purifications Beate Marie infra tempus compoti, videlicet Thome Cartere, Thome Gardyner, Thome Priour, Walteri Snoddon', Roberti Godyng et Thome Tannere, cuiuslibet eorum per lvij dies capientis iiij d. ob. per diem vi li. viii s. iii d. Et pro vadiis xix carpentariorum subscriptorum per vices venientium et operantium ibidem circa operationes predictas inter festa Purificationis Beate Marie et Omnium Sanctorum in anno integro supradicto, et inter xxiij diem Junii et xxiij diem Augusti extunc proxime sequentes, videlicet Thome Priour per CC dies, Roberti Godyng per CCx dies, Simonis Jerveys per iiijxxxvij dies dj., Thome Tannere per CCxxix dies, Johannis Pays per iiijxxxviij dies, Johannis Beche per lj dies, Simonis Paye per lix dies, Jacobi Wolfy per xvij dies, Johannis Chapman per xxxvi dies, Ricardi Emery per lxv dies, Thome Pye per xij dies, Roberti Pye per xvj dies, Johannis Serle et Thome Thurston' utriusque eorum per ix dies, Johannis Colier' per x dies, Johannis Colswayn per xxvj dies, Thome Cartere per CClxvj dies, Thome Gardyner per CClxvij dies et Walteri Snoddon' per CClxix dies, quorum quilibet capit v d. per diem — xxxviij li. ix s. iiij d. ob.

 $[£53. 3s. 7\frac{1}{2}d.]$ 

m.3

4.17 Vadia sarratorum

Et pro iiijmil. pedibus tabularum et maeremii

sarratis ad tascham et expenditis in reparatione ac coopertura predicte aule et coquine ac camerarum, sol' pro le C xvj d. — liij s. iiij d.

[£2. 13s. 4d.]

## 4.18 Vadia plumbariorum

Et pro vadiis ij plumbariorum fundentium et de novo cooperientium novam aulam, coquinam et cameras ac facientium et pendentium pipas plumbi per quas aqua descendit a summitate domorum usque terram, videlicet \*Ricardi Plomer per iiijxxy dies et \*Johannis Plomer per iiijxxy dies utriusque capientis vj d. per diem — iiij li. xiij s.

# 4.19 Vadia fabrorum

Et pro vadiis Johannis Anneys fabri fabricantis et operantis gumphos vertivellas de gemeaux clavos pro hostiis et fenestris cum staneo dealbat' ac operantis ferramenta grossa per loca in opere predicto inter festa Omnium Sanctorum et Purificationis Beate Marie infra compotum, per lvij dies capientis v d. per diem — xxiij s. ix d. Et pro vadiis eiusdem Johannis existentis et operantis super reparatione predicta inter festa Purificationis Beate Marie et Omnium Sanctorum in anno integro supradicto, et inter xxiij diem Junii et xxiij diem Augusti deinde proxime sequentes, per CClxiij dies capientis vj d. per diem — vj li. xj s. vj d. Et pro vadiis Andree Haukyn fabri operantis cum predicto Johanne ac facientis, acuentis et obdurantis diversa necessaria et instrumenta predictorum latomorum, positorum, carpentariorum et aliorum ibidem operantium quotiens necessitas exigerit, per iij<sup>c</sup>xxvj dies infra tempus compoti, qui capit omni die operabili per annum iiij d. --Cviij s. viij d. Et pro vadiis Johannis atte Cote fabri operantis circa operationem predictam infra tempus predictum, per xlix dies capientis iiij d. per diem — xvj s. iiij d.

[£14. -s. 3d.]

# 4.20 Vadia crem' cals'

Et pro vadiis v hominum subscriptorum per vices frangentium cremantium cals' ad opus predictum cum carbone maritimo superius empto et expendito infra tempus compoti, videlicet Johannis Chaundeler per lxiij dies et Bartholomei Dungeworth' per xxviij dies utriusque eorum capientis v d. per diem, et Willelmi Watrigg' per CCx dies, Johannis Sherston' per xxxv dies et Johannis Saundr' per iiijxxiiij dies quorum quilibet capit iiij d. per diem — vij li. vij s. vij d.

[£,7.7s.7d.]

## 4.21 Vadia laboratorum

Et pro vadiis ix diversorum laboratorum subscriptorum per vices venientium et laborantium ad faciendas et portandas mort' petras ad predictos positores, cariantium grossas petras ad cementarios, fodientium ac facientium omnia alia onera eis imposita inter festa Omnium Sanctorum et Purificationis Beate Marie infra tempus compoti, videlicet Johannis Watrigg' per liiij dies, Johannis Beche per xxxvij dies dj., Johannis Sherston per xxxviij dies \*Willelmi Clerc' per xj dies, \*Johannis Wroughte per v dies dj., Ricardi Colyn per xxvij dies dj., Johannis Seward' per xxvj dies dj., Roberti Machoun per lij dies et Johannis Haiward' per xi dies, cuiuslibet eorum capientis iii d. per diem - lxv s. ix d. Et pro vadiis l diversorum labora.orum subscriptorum per vices venientium et laborantium circa operationes predictas infra tempus compoti, videlicet Johannis Beche per Clxvj dies dj., Ricardi Michell per Cxxvij dies dj., \*Johannis Meir per liij dies dj., \*Ricardi Meir per xxiiii dies, Johannis Sherston' per Clxviij dies dj., Rogeri Prauns per Cliiij dies dj., Willelmi Kyng per xxviij dies dj., \*Oliveri Howe per xxviij dies, Johannis Seward per Clxiij dies dj., Jacobi Barry per Cxliij dies, Ricardi Colyn per Clv dies, Adam Pochaunce per xxiij dies, Willelmi Quyk' per xlvij dies, Willelmi Parson per Cxx dies, Johannis Haiward per CCxiiij dies, Roberti Passon' per xlj dies, \*Johannis Wroughte per Ciiij dies dj., Roberti Machoun per Cxix dies, \*Willelmi Cok per xvij dies dj., Johannis Burwell per j diem dj., Walteri Coupere per x dies, Ricardi Baker per xxvj dies, Johannis Wayte per Cxlj dies dj., Thome Godynow per lxix dies, Willelmi Botiller, Johannis Miller', Johannis Willy et Johannis Hupton' cuiuslibet eorum per iiij dies dj., \*Willelmi Clerk alias dictus Jeffrey, Johannis Watrigg et Willelmi Dedeler cuiuslibet eorum per lxxviij dies, Thome Plomer per xvij dies, Willelmi Suche per xxxiij dies dj., Johannis Norton' senioris per xxvj dies, Johannis Norton' junioris per xxx dies dj., Johannis Shepherde per iiijxxv dies, Johannis Tribe per xv dies dj., \*Johannis Baron et Edwardi Hasilden' utriusque per xxvij dies dj. Ricardi Blays per xxxv dies dj., Roberti Baker' per lxviij dies, Thome Compe, Walteri Druet et Thome Beche cuiuslibet eorum per iiij dies, Johannis Mason' per xv dies dj., Ricardi Laurence per x dies, Michaelis George per lvij dies, Johannis Combe per xxxv dies dj., Reginaldi Apres per xxiiij dies dj. et Simonis Melprest' per viij dies dj., quorum quilibet capit iiij d. per diem — xlviij li. xv s. x d.

[£,52. i.7d.]

## 4.22 Vadia provisorum

Et pro vadiis \*Johannis Whityng' provisoris per vices attachiantis latomos, positores, carpentarios, laboratores et alios ad reparationem operis predicti indigent', ac facientis providentiam de maeremio, petre, plumbo, carbone, ferro et cariagio tam per terram quam per mare, per Cxviij dies capientis v d. per diem — xlix s. ij d. [£2. 9s. 2d.]

[Total: £442. 10s. 10d.]

§147. Norden's Survey of 1609 (P.R.O. SP14/48 no. 46) (see also pl. XLIII)

Righte honorable accordinge to your honorable pleasure deliverd I, in my iunruye towardes the New forest came to Portchester and viewed the castle: wherin I observed their particulars, viz

The house, for the moste parte, is verye ruynous, by reason the leade hath bene cutt and imbezeled, wherby the water hath had issue to the timber and rotted it.

Ther was a verye fayre and spacious hall, to which was an assent by a fayre stone stepps. the roofe coverid with lead, ready to fall by the reasons afforesayd.

There are also manne spacious (though darke and malincolye roomes) both above and belowe, of like condition by robbinge the leade, few of them nowe of any use.

There are 3 towers wherin are like roomes, one mayne tower of them, of 4 storyes double raunged: covered with leade, the timber of everye storie verie

defective by meanes afforesayde. It standeth verye high, and annoyeth the reste of the howse by raflexe of the chimneye smoake and therfore is thought fitt to have it taken lower by the haulfe. and I thinke the takinge of it downe will be nere as chargeable as the materialls wilbe valuable.

The leades aboute the castle and over the roomes not used, contayne 113.20 foote, which maye be worth nere 300 li which may be taken to his Ma.ties use, and the places (if use be to made of the same buyldinges) may be covered with some lighter matter, for that the leade so oppresseth the decayd timber, that it maketh the roofes nowe perrilous to be gone under. as also the olde timber muste be taken awaye for the moste part, and supplyed with new which will require greater charge, then I thinke wilbe necessarye consideringe there are other partes of sufficient content for a great man's use.

Sr Thomas Cornwallys hath reedefied one part of the howse, and hath bestowed (as may be thought) above 300 li therin.

There is also a buyldinge not longe since in part newlie erected contayninge 4 fayre lodging chambers above and as manne roomes for office belowe. The coveringe hath bene of slate, nowe, almoste uncoverid, the rafters and other timber lying open to the weather: and daylie decaye. which maye be repayred, and the windowes glazed for some 30 li.

The lande within the walls of the castle, besides the church yarde is 5 acres and haulfe and without the walls 3 acres worthe by yeare, about viij li.

There is also a ground lyinge upon Portsdowne a myle from the castle contayninge 24 acres,

havinge the name of a warren, but moste fitt for coppice, now worth in wood xxx s. per acre and may be worth ij s vj d the acre per annum to be lett.

There is a fayre house without the walls and within the trenche of the castle, in the occupation of one Mr Serle whoe claymeth to holde the same, after the custome of *Auntiente Demeisne* (the custome of the mannor) wherunto belonge 3 acres of lande within the same trenche. all worth about vj li per annum.

It is to considered, that forasmuche as this house and Lande is within the site of the castle, and parcell of the same, I se not howe it coulde bicome custumarye lande wherin your Lordship may be pleased, some further inquiry may be had. for it may be found his Ma.ties or some reasonable composation, drawn iustlie from the tenante. It hath never bene examined, because the castle hath not bene possessed by anne that were absolutelye intrussid in the same.

I thought it my dutye to advertise your Lordship herof by reason that upon this chaunge of governors of *Portesmouth* the next may pretend to have this with it, though it be noe member of that office but hath passed formerlie by a particular graunt when there was noe convenient house for the same governour within *Portesmouth* humbly referringe the consideration herofe unto your Honor.

We proceede in the sale of woodes as we may in the New foreste restinge evermore as redye as I am deeplye bound to hold your Lordship my uttermoste true service.

J. Norden

#### **GLOSSARY**

acer: steel
acuo: to sharpen
aduno: to gather in

aketon: 'haketon', padded tunic album corium: white-tawed leather

alnetum: alder andfelt: anvil

arbalistus: arblast, crossbow

arbor: tree
arcus: bow

arcus balista: arblast, crossbow

aula: hall

bacinettus: 'basnet', light helmet

balista: crossbow

— de viz: crossbow with winch

<sup>&</sup>lt;sup>1</sup> Probably for 'intrusted' or 'interested'.

banderies: crossbow belts (?) daubator: dauber, plasterer dealbatio: whitewashing, plastering, daubing batella: boat demitto: to shred batillo: to ship dolium: tun; pondus dolii: 'tun-tight', tunful boscus: wood domus: house, building botelria: buttery dress': dresser? botmeholt: a type of board bretagium: brattice, wooden palisade/fortification duodena: dozen bussellus: bushel edificium: building emptus: bought, purchased calisona/salisona: season eneus/ereus: brazen calx: lime, chalk equus: horse camera: chamber evesbourd: eaves-board caminum: chimney campana: bell faber: smith canabis: hemp fadm: fathom capella: chapel femorallum: louver capro: bent timber/rafter fenestra: window, window-shutter carbo ligni: charcoal ferramentum: ironwork, window-bar? carbo maritimus: sea-coal ferrum: iron; ferrum operatum: worked iron caretta (-ecta), carettata: cart, cart-load, char of filatrix: spinster filum: bow-string celura: ceiling, canopy fimus: clay, dung centena: hundred finiatio: refining; finiator: refiner cera: wax fodio: to dig cera/cerura: lock formula: template, pattern cepis: tallow fornaceus: furnace chaldr': chaldron, measure of coal fossatum: ditch cheveron: rafter (as capro) fother: a weight of lead cineres plumbi: lead ash fotmel/votmel: fother civera: barrow frango: to break clada: hurdle fundacio: founding, smelting clavis: key, keystone, nail fundamentum: foundation coole: tub fustus: shaft cooperto: to roof, cover coopertura: covering, roofing galea: helmet coquina: kitchen galia: galley corium: hide garba: sheaf - equinum: horse-hide; album corium: of whitegarco: boy, workmate tawed leather garnestura: provisioning cortex: bark gemeaux: hinge (with plates) covele: 'kevel', wedge/hammer gumphus: hinge hook craier: small boat crebrum/cribrum: sieve crestes: ridge-tiles haberio: hauberk, haubergeon crinis caballus (equorum): horse-hair harnesium: equipment custodia: ward, bailey hautepiez: footwinch for crossbow custus: cost hostium/ostium: door

ingenia: engine ingeniator: engineer instrumentum: tool

aumbyrs: greaves

lagena: gallon latomus: mason leuca: league/mile lierne: tie-beam ligatura: binding

lignum: wood; ligneus: wooden

lover: louver

lucro: to collect, 'win'

mariscum: marsh

meremium: (maer-): timber

meyle: large bowl

molendinum: mill; -- equinum: horse-mill

molda: template, pattern

mundo: to clean murus: wall

noiz: nut nowell: newel nudus: unshod

obduratio: hardening

oleum: oil olla: pot oretenus: verbal ostium/hostium: door ovesbord: eaves-board

panetria: pantry paries: wall patella: bowl, pan pavura: paving pelle: pelt pendentia: vault pertica: perch

petra: stone; libera petra: freestone

pica: pitch pistrina: bakery platea: armour plate

plumbum: lead; plumbeus: leaden

pocinettus: posnet, metal pot pondus/pondero: weight/to weigh

pons: bridge porta: gate

port coleys: portcullis

positor: layer, setter (of stone)

pretium: price prostratio: felling puteus: pit pynones: gables

quarera: quarry

quarrellus: quarrel, crossbow bolt

quarteria: quarter (dry measure, 8 bushels)

quartronus: hundredweight quercus: oak; querculus: small oak

rachimentum/rachementum: arch respond ragplaten'stone: a type of stone slab

ramus: branch

reparatio: building work (not necessarily 'repair')

ridellus: sieve

robinetz: catch or winding gear for springald, as

wyndase

robur: pollard, dead timber

robus/rubois: rubble

rota: wheel

ruwellus: cog-wheel, pulley

rygolebord: variety of imported board

sabulo|zabulo: sand sagitta: arrow

salisona/calisona: season

sarrator: sawyer

scapulo/scarpulo: 'scapple', trim stone or timber

scindula: shingle sclat: slate secol: sea-coal securis: axe septimana: week sexter: sester, a measure

shaldre: chaldron, measure of coal

solutus: paid soudura: solder

springald: large stationary engine, of crossbow type

staneum: tin; (dealbat': white)

stipendium: pay

stramen: straw

subboscus: underwood

tabula: plank
tascha: task(work)
tecta/tectura: roof

tegula: tile

teler/telarium: tiller of crossbow/springald

terragium: flooring

terra: earth; terreus/terrenus: of earth

terreo: to earth (a floor)

trabes: beams

tresancia: 'tresance', passage

tribulum: shovel
turris (thurris): tower

unctum: grease

vadium: wage

vertivella: hinge (eye part fitting on hook-gumphus)

vices: times/occasions

virga: withy vitrum: glass

viz: winch on crossbow or springald

votmel/fotmel: fother
vousura: vault, voussoir

vouto: to vault

waynscotebord: imported board

wyndase: windlass, winch for crossbow or springald

zabulo/sabulo: sand

7 = et

# VI. MEDIEVAL POTTERY

By BARRY CUNLIFFE

# INTRODUCTION

THE medieval pottery recovered from within the inner bailey is not particularly plentiful. Only one cesspit was found, floors were for the most part kept clean, while rebuilding and later disturbance had removed virtually all the stratified levels in the buildings around the western part of the courtyard. Closely stratified occupation deposits were, however, found in the east and south-east ranges while the courtyard, in both the western and eastern parts of the site, was made up at intervals throughout the fourteenth century with tips of debris often containing quantities of sherds. Since there is no evidence that rubbish was temporarily dumped in the castle, but on the contrary the inner bailey was kept clean, pottery found in these make-up levels is likely to represent contemporary rubbish rather than the redeployment of old rubbish-heaps.

The policy adopted in publishing the pottery here has been to conflate broadly contemporary layers found in close proximity into a series of groups, lettered A to P, and to illustrate the material from each of these groups fully. The choice of material has been liberal: all distinctive vessels have been illustrated with the exception of small rim-sherds. Where a number of vessels of a similar type occur in a single layer the majority of them have been illustrated and all significant variants are included. To give some indication of the totality of the collection a simple summary table (table XIV), listing the total number of sherds in all groups, is offered: the subdivisions have been kept simple but indicate the relative proportion of the major types and fabrics. A detailed statistical analysis has not been thought desirable since groups excavated in their totality are few and of limited content, while the more prolific layers in the courtyards have only been sampled.

The collection makes an interesting comparison with the broadly contemporary material already published from the outer bailey (Cunliffe, 1977, 132–93). The conditions of deposition were, however, very different since most of the pottery from the outer bailey comes from rubbish-pits and gullies. Some of the pits, particularly those in the northern part of the site, may indeed have been used for the deposition of rubbish brought out from the castle. Another difference is that while the bulk of the material in the outer bailey is of eleventh- to thirteenth-century date, most of that from the inner bailey belongs to the fourteenth century. The two collections are therefore to some extent complementary.

I would like to express my particular thanks to Mr Ken Barton, F.S.A., for several inspiring discussions about the pottery and for his criticism and advice. Mr John Hurst, F.S.A., kindly commented upon selected vessels.

## CHRONOLOGICAL AND ECONOMIC CONSIDERATIONS

# The Ceramic Sequence

In Volume III of this series a ceramic sequence was proposed for the medieval period at Portchester (Cunliffe, 1977, 132-6). Six broad phases were distinguished:

- 1. The Saxo-Norman Tradition (1000-1100)
- 2. The Early Medieval Tradition (1100-1200)
- 3. The Developed Medieval Tradition (1200-1300)
- 4. The Late Medieval Tradition (1300-1400)
- 5. The Ultimate Medieval Tradition (1400-70)
- 6. The Painted Ware Tradition (1470–1570)

The dates are, of course, approximate and it hardly needs emphasizing that one tradition develops almost imperceptibly into the next. Even so the scheme has a validity and will be adopted here.

# I. The Saxo-Norman Tradition (1000-1100)

Material of this phase is sparse: only two stratified groups were found, group A comprising material found in an occupation layer sealed in a hollow close to the west side of the north wing, and a small collection of material from the top of pit 124. In addition to this, sherds of Portchester ware type were found in later occupation layers (see table XIV), having no doubt been disturbed from their original levels, no longer surviving, by later medieval activity. The range of types conforms precisely to the Portchester ware assemblage previously described (Cunliffe, 1976, 153–94). No imports from either elsewhere in Britain or abroad were found.

# 2. The Early Medieval Tradition (1100-1200)

Pottery of this tradition is represented by only one stratified group, group Da, from an occupation layer in the western part of the inner bailey. The types include coarse flint-gritted cooking pots, nos. 35–9, an unglazed pitcher, no. 34, and a dish with socketed handle, no. 33. Other vessels of the 'early medieval tradition' were found in later groups (e.g. unglazed pitchers, nos. 15, 62, 63 and 138, cooking pots, nos. 48, 50, 71, 76, 167, 168 and 198) and presumably represent rubbish survival. Even so the total quantity recovered is small, presumably because contemporary rubbish was systematically removed from the inner bailey at this time.

# 3. The Developed Medieval Tradition (1200-1300)

Four groups belong to this tradition: groups B, C, Db and E. All the major types are included, cooking pots in sandy fabrics, less heavily flint-gritted, wheel-turned with precisely moulded rim-profiles (e.g. nos. 10–12, 19–27, 40–5, etc.) and pitchers with strap-handles and ribbed necks (e.g. nos. 13, 28, 59 and 60). In addition more elaborate pitchers of non-local origin occur (e.g. nos. 9, 64, 65 and possibly no. 58). The range of types has expanded to include socketed-handled dishes (no. 57), pipkins (no. 56) and curfews (no. 61).

Strictly the material included in groups B, C, D and E has a terminal date of 1320, and since much of it is likely to have been in use, or was recently created rubbish, when the building programme of 1320 began, the collection must be biased towards the date-range, say, of 1280–1320. In this context it is interesting to find fine hard sandy fabrics being used for the pipkins (no. 56) and for cooking pots such as nos. 42–5, but in the case of the cooking pots the fabrics of the majority still contain occasional flint grits. The use of the neck cordon on cooking pots, a technique which was to become popular later in the fourteenth century, had now begun (no. 54).

# 4. The Late Medieval Tradition (1300-1400)

In Volume III the 'late medieval tradition' was characterized by an improvement in pottery technology, the common occurrence of fine sandy fabrics for most types including cooking pots, and an increased range of forms. Few groups were then known from Portchester and those that were, were not in direct stratigraphical relationship to each other. The material from the inner bailey considerably augments our knowledge of the ceramics of this period and allows us to consider change within the fourteenth century. Simply stated, groups F, G, H, I and J date to the first half of the fourteenth century (1320–c. 1350) while groups K, L, M and possibly O, belong to the second half (c. 1350–96).

The generalizations noted above for fourteenth-century ceramics as a whole hold good: the variety of vessels has increased (pipkins, nos. 119, 178, curfews, nos. 116, 165, 208, costrels, no. 117, dishes, nos. 111–15 and 179–83) and potting techniques have improved. In addition the variety of the pitchers available is now greater, but balanced against this should be noted a conservatism in the basic range of forms — cooking pots with everted rims continue to dominate and glazed pitchers, usually with strap-handles, show little change in form or technology when compared with pottery of the preceding century. The only significant difference would appear to be that pottery was now available from a greater number of sources (p. 213).

In comparing the earlier and later fourteenth-century groups, two significant points emerge: the earlier groups appear to contain more vessels of cooking-pot type decorated externally with applied cordons (e.g. nos. 103, 105–8 and 110), while the later groups have a greater percentage of wares devoid of flint grits.

# 5. The Ultimate Medieval Tradition (1400-70)

Although, strictly, group N belongs to this period, the quantity of material is so limited and the likelihood of earlier rubbish being included in it is so great that little can be said of it.

# 6. The Painted Ware Tradition (1470-1570)

The only group from the inner bailey belonging to this phase is group P. Among the illustrated pottery white-painted ware is represented only by the cooking pot (no. 215), but a number of small sherds of similar types were found. Brown glazes also now appear (nos. 220–2). Everted-rimmed cooking pots continue to be made, as do pitchers, but pitcher handles tend to be more oval in section (no. 221) and the glaze is thinner and often more apple-green in colour.

The imported wares, from France (?) (no. 21) and the Rhineland (nos. 217–18 and 223–4), are also typical of this period.

## Production Centres, Distribution and Markets

Some aspects of production and distribution, represented in the collection of medieval pottery from Portchester, have already been discussed (Cunliffe, 1977, 136-7), where attention was drawn to the importance of the production centres at Wickham Common and Orchard Street, Chichester, to the supply of Portchester. Wickham Common, in particular, with its substantial waster-heaps, must have had a considerable output during the thirteenth and fourteenth centuries and there can be little doubt that the majority of the pottery in use at Portchester derived from this source. Since the kilns have not been excavated and the important stratified groups from Bishop's Waltham and Oyster Street, Portsmouth, remain unpublished there is little more that can usefully be said.

Another local kiln at Bentley in northern Hampshire has recently been published (Barton and Brears, 1976, 71–5). The fabrics are similar to those found at Portchester and the forms are comparable. Cooking pots with applied strips were produced at the kiln, together with a range of pitcher sherds, all of which have general parallels among the Portchester material. In particular, attention should be drawn to the technique of the grid-stamping of applied pellets, which occurs at Bentley and at Portchester (nos. 121 and 137), but is otherwise uncommon. Comparisons can also be made between the Bentley products and pitchers found in the outer bailey at Portchester (Cunliffe, 1977, 132–96, nos. 261, 265, 307 and 324).

Some pottery would also seem to have reached Portchester from the west country. The pitcher fragment no. 191 would appear to be Dorset red-painted ware, while the use of pellets applied to rims of jugs (e.g. nos. 144 and 187) is a technique with a west country bias to its distribution (Jope, 1951, 137–42).

## Imported Wares and Status

Surprisingly little imported (i.e. non-British) pottery was found in the inner bailey. This conforms with the nature of the collection recovered from the outer bailey discussed in Volume III (Cunliffe, 1977, 137). Among the earliest of the imports recovered were the vessels made in a cream-coloured fabric copiously tempered with grits — the so-called 'Normandy gritty ware', for which a thirteenth-century date is usually argued. In all, nine fragments of this ware were found, seven of them from trench C35, though from different layers (layers 7, 8, 12, 13 and post-hole 8). Of these, two, nos. 180 and 186, are illustrated, the rest being sherds of no distinctive form. It is quite possible that all seven sherds belong to a single vessel which was smashed nearby, the sherds subsequently being incorporated in later layers. Another vessel (no. 213) was found in a context which must be dated, by associated wares, to the sixteenth century. The sherd was large and the layer contained no recognizable rubbish survival. Either the type should be dated to the sixteenth century (which is later by several centuries than is conventional) or this individual vessel had remained in use long after its date of manufacture. A further suggestion offered by Mr K. Barton is that the vessel may have been made in England, in Surrey or in the region of Poole.

Later French imports are rare. The total collection is composed of two pitchers from Rouen (nos. 129 and 136), together with a few body sherds from vessels of similar origin and two pitchers from Saintonge (nos. 190 and 192).

In the sixteenth century, the one small group of this date recovered (group P) includes a number of imports, stonewares from the Rhineland (nos. 217 and 222-4), and a jug from the south Netherlands (no. 218).

If it can be accepted that the sample of pottery recovered fairly reflects the range in use (bearing in mind the chronological gaps), it would suggest that the occupants of the castle used an unexceptional range of ceramics mostly of local origin, the only notable point being the comparatively high percentage of pitchers in comparison with other types. We may, however, assume that the King's table was graced with pewter and silver, the surviving pottery representing the more domestic aspects of life in the castle.

TABLE XIV

Quantity of Potsherds by Groups

Group	Portchester ware	Cooking pots— coarse with grits	Cooking pots— sandy	Unglazed pitchers— coarse with grits	Tripod pitchers— glazed	Pitchers	Other types	Imports
A	133		_					
В	2	_	19	I	4	68	-	2 glazed pitchers (no. 9)
$\mathbf{C}$	6	93	51	_	2	129	2	
$\mathbf{D}$	3	171	_	1	I	9		_
${f E}$	Ī	17	976	16		544	2	1 Normandy gritty
F	10	66	83		<del></del>	15	-	_
G	2	37	113		I	48		2 (?) glazed pitchers
H	_	24	914		7	649	20	12 glazed pitchers (nos. 129, 136)
I	_	170	146	_	2	93	3	1 Normandy gritty 4 glazed pitchers
J		9	47			53		
K		_	8			9		<del></del>
L	15	58	186	I	_	<b>2</b> 69	4	6 Normandy gritty (nos. 180, 186) 2 glazed pitchers (nos. 190, 192)
$\mathbf{M}$	-	I		_	_	I	_	
N	4	12	20		_	24	2	
О	-	_	14			14	_	

# THE POTTERY IN ITS GROUPS (figs. 63-74)

In the pages to follow 17 groups of pottery are illustrated. Each group has been assigned a date-range based on historical evidence, the justifications for which are set out above (pp. 120-33). The trench and layer location for each of the illustrated sherds is given, together with

a unique number prefixed M with which the individual vessel is marked. In the brief discussion which follows, each group and its sub-divisions are considered and comments on individual vessels or the general characteristics of the assemblage are offered. It should be stressed that, although a selection has been made, we have included all rims and distinctive sherds except for those groups in which the publication of every rim sherd would be highly repetitive. In that case a selection of the better-preserved examples has been made. Vessels which might be considered to be residual have been included in the interests of objectivity.

# Group A. Pottery from Earliest Deposit: Eleventh-Century (fig. 63, nos. 1–8)

- 1. Cooking pot. Grey sandy ware with fine flint grits. Lightly oxidized on the surfaces. C51 layer 23
- 2. Cooking pot. Fabric as 1. C51 layer 23 M843.
- 3. Cooking pot. Fabric as 1. C51 layer 23 M844.
- 4. Cooking pot. Fabric as 1. C51 layer 23 M840.
- 5. Cooking pot. Grey sandy ware with fine flint grits. C51 layer 23 M845.
  6. Cooking pot. Fabric as 5. C51 layer 23 M841.
- 7. Cooking pot. Fabric as 1. C51 layer 23 M838.
- 8. Dish. Fabric as 5. C51 layer 23 M839.

The group of pottery illustrated here comes from a single occupation layer sealed by redeposited material presumably derived from an early medieval construction trench for phase 1 or 2 of the keep. All the vessels illustrated here are of Portchester ware type, which has been discussed in detail in Volume II of this series (Cunliffe, 1976, 187-9) and for which a tenth- or early eleventh-century date is proposed.

# Group B. Outside East Range: Late Twelfth- to Early Thirteenth-Century (fig. 63, nos. 9–12)

- o. Pitcher. Buff sandy ware. Thick green glaze streaked with brown externally. Applied strips as decoration. C50 layer 23 M833.
- Cooking pot. Grey sandy ware with flint grits. Oxidized externally. C50 layer 23 M831.
- Cooking pot. Grey sandy ware with copious flint grits. C50 layer 23 M830.
- 12. Cooking pot. Grey sandy ware with flint and chalk grits. C50 layer 23 M832.

This collection comes from a single deposit which pre-dates the construction of the east range and therefore is most likely to date to the beginning of the thirteenth century.

The group, though small, provides an interesting insight into the types in use at this time. The cooking pots, though wheel-turned, are copiously flint-gritted. The pitcher with its thick glossy green glaze is an unusually sophisticated type for this comparatively early date.

# Group C. Associated with First Phase East Range: Early Thirteenth-Century (fig. 63, nos. 13-18)

- 13. Pitcher. Coarse grey sandy ware with fine flint grits. Fired red on the internal surface. External thick green glaze. C46 layer 19 M735.
- 14. Dish. Hard red sandy ware. Fired to grey externally. C48 layer 39 M754.
- Pitcher handle. Coarse grey sandy ware with flint grits. Not glazed. C46 layer 19 M737.
- 16. Cooking pot. Grey sandy ware with occasional flint grits. Oxidized on the surface and with spots of glaze. C50 layer 16 M812.
- 17. Cooking pot. Grey ware with flint grits. Fired red on the surfaces. C46 layer 19 M736.
- 18. Pipkin? Hard grey sandy ware. Dark green glaze inside. C50 layer 16 M813.

## **EXCAVATIONS AT PORTCHESTER CASTLE**

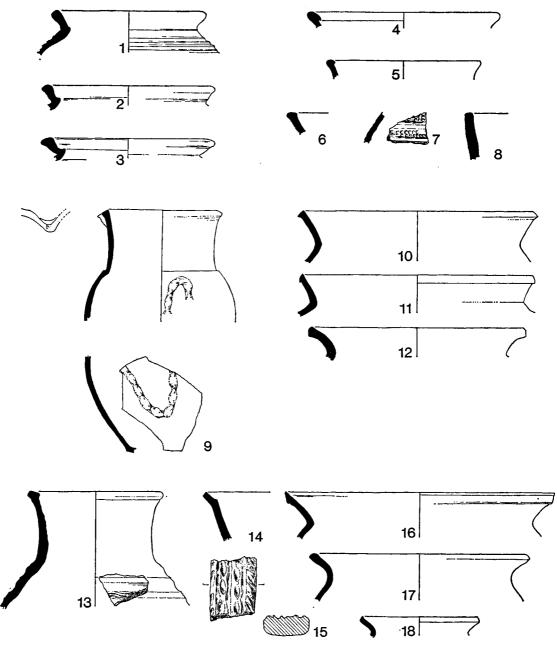


Fig. 63. Medieval pottery: Group A, 1-8; Group B, 9-12; Group C, 13-18 (1/4)

This group derives from layers associated with the first phase of the east wing for which a date early in the thirteenth century is suggested. It is possible that the construction of the building may correlate with a building record of 1229 (p. 124). The pottery is consistent with an early thirteenth-century date, coming at a point when the fabrics were becoming finer and more assured. The sherd count (table XIV) shows that the majority of the cooking pots were

still being made in flint-gritted fabrics but the forms were now wheel-turned (as, for example, nos. 16 and 17). Large numbers of sherds of glazed pitchers were recovered but many, like the illustrated example, were still in fabrics lightly tempered with crushed flint grit. The handle from the unglazed pitcher (no. 15) may be rubbish survival from an earlier period. In Volume III we suggested that these vessels were twelfth-century (Cunliffe, 1977, 133-4), but they could have continued in use into the thirteenth century. Strap-handles were more common than rods.

# Group D. West Range: Early Levels, Pre-1320 (fig. 64, nos. 19-39)

- 19. Cooking pot. Red sandy ware with some flint grits. C31 layer 37 M601.
- 20. Cooking pot. Coarse grey sandy ware with flint grits. Fired variously black to red. C41 layer 6 M664.
- 21. Cooking pot. Coarse grey sandy ware with copious flint grits. C41 layer 6 M663.
- 22. Cooking pot. Reddish-brown sandy ware with flint grits. C41 layer 6 M660.
- 23. Cooking pot. Light grey sandy ware with flint grits. C41 layer 6 M657.
- 24. Cooking pot. Coarse grey sandy ware with copious flint grits. C41 layer M655.
- 25. Cooking pot. Grey sandy ware with flint grits. C41 layer 6 M656.
- 26. Cooking pot. Dark grey sandy ware with flint grits. C41 layer 6 M658.
- 27. Cooking pot. Reddish sandy ware with flint grits. Fired grey externally. C41 layer 6 M659.
- 28. Pitcher. Very coarse grey sandy ware. External green/brown glaze. C41 layer 6 M661.
- 29. Pitcher handle. Hard red sandy ware. Patchy dark green glaze. C41 layer 6 M662.
- 30. Cooking pot. Hard grey sandy ware with some flint grits. C42 layer 43 M677.
- 31. Cooking pot. Coarse dark grey sandy ware with flint grits. C42 layer 43 M678.
- 32. Cooking pot. Coarse grey sandy ware with copious flint grits. Fired buff-light red on the surface. C42 layer 46 M679.
- 33. Pan with socketed handle. Grey sandy ware with flint grits. C42 layer 47 M680.
- 34. Pitcher. Coarse grey sandy ware with flint grits. C42 layer 47 M685.
- 35. Cooking pot. Coarse grey sandy ware with copious flint grits. C42 layer 47 M681.
- 36. Cooking pot. Coarse grey sandy ware with copious flint grits. C42 layer 47 M682.
- 37. Cooking pot. Coarse grey sandy ware with flint grits. C42 layer 47 M683.
- 38. Cooking pot. Coarse grey ware with flint grits. C43 layer 36 M702.
- 39. Cooking pot. Coarse dark grey sandy ware with copious flint grits. Fired light red on the surfaces. C43 layer 36 M701.

The pottery illustrated here comes from a variety of layers in the western part of the inner bailey all of which pre-date the period 4 building phase which dates to 1320-6. Nos. 20-1, come from the filling of the gully (F1, p. 61), no. 32 from pit 261 (p. 57) and nos. 33-7 from an occupation layer pre-dating the gully. Nos. 38-9 come from the hollow (F7, p. 63).

Typologically and stratigraphically this composite group should be divided into two chronological phases: (a) nos. 33-9; (b) nos. 20-32. The pottery of phase (a) is typical of the 'early medieval tradition', for which a date-bracket of 1100-1200 is suggested (Cunliffe, 1977, 133-4), whereas the pottery of (b), with the more tightly moulded rim-profiles and with less heavily gritted fabrics, belongs to the 'developed medieval tradition', broadly dated 1200-1300. No precise dates can be proposed. The sherd count shows that pitchers were rare in comparison with cooking pots.

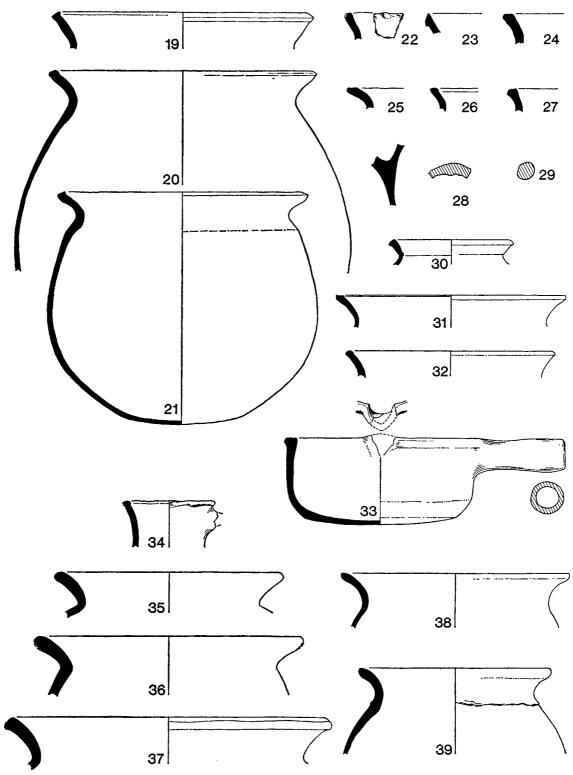


Fig. 64. Medieval pottery: Group D, 19–39  $(\frac{1}{4})$ 

Group E. East Range: Early Levels, Pre-1320 (figs. 65-6, nos. 40-65)

- 40. Cooking pot. Hard grey sandy ware. Dark green glaze on inside of rim and inside lower part of vessel. Some traces of glaze on shoulder. C48 layer 40 M755.
- 41. Cooking pot. Grey sandy ware with some flint and chalk grits. Fired reddish. Splashes of green glaze outside rim. C48 layer 37 M751.
- 42. Cooking pot. Hard grey sandy ware with occasional flint grits. Spots of green glaze externally. C48 layer 40 M756.
- 43. Cooking pot. Grey sandy ware with flint grits. C48 layer 37 M752.
- 44. Cooking pot. Red sandy ware with occasional flint grits. C50 layer 15 M811.
- 45. Cooking pot. Hard grey sandy ware. Internal green-brown glaze. C50 layer 15 M809.
- 46. Cooking pot. Fine hard red sandy ware, occasional grits. Glaze spots on inside of rim and on shoulder. C48 layer 40 M757.
- 47. Cooking pot. Black ware with finely crushed flint and chalk grits. Oxidized on external surface. C50 layer 22 M817.
- 48. Cooking pot. Buff sandy ware with copious flint grits. C50 layer 22 M818.
- 49. Cooking pot. Grey sandy ware with flint grits. C50 layer 22 M823.
- 50. Cooking pot with spout. Grey sandy ware with flint grits. C50 layer 22 M824.
- 51. Cooking pot. Grey sandy ware fired red. C50 layer 15 M808.
- 52. Cooking pot. Red sandy ware. Internal green-brown glaze. C50 layer 22 M821.
- 53. Cooking pot. Hard grey sandy ware fired light brown externally. C50 layer 22 M819.
- 54. Cooking pot. Red sandy ware slightly reduced on the surface. Occasional glaze spots. C50 layer 15 M810.
- 55. Cooking pot or pipkin. Pinkish buff sandy ware. Traces of glaze low down on the inside. C48 layer 40 M758.
- 56. Dish with socketed handle. Grey sandy ware, oxidized on the surface. Green-orange glaze internally. C50 layer 17 M816.
- 57. Pitcher. Grey sandy ware oxidized internally. External green glaze. Some remnants of decoration of applied ferruginous strips or pellets. C48 layer 40 M834.
- 58. Pitcher. Pinkish buff sandy ware. External green glaze. C50 layer 22 M820.
- 59. Pitcher. Grey-buff sandy ware. Green glaze externally. C50 layer 17 M815.
- 60. Pitcher. Grey sandy ware fired buff. Light green external glaze. C50 layer 22 M829.
- 61. Curfew. Grey sandy ware with copious flint grits, fired reddish brown on surface. C50 layer 17 M814.
- 62. Pitcher. Grey sandy ware with copious flint grits. Oxidized on the surfaces. C50 layer 22 M825.
- 63. Pitcher. Grey sandy ware with copious flint grits. Scored decoration. C50 layer 22 M822.
- 64. Pitcher. Red sandy ware. Orange external glaze over decorative applied strips of red clay. C50 layers 16, 22, 23 M827.
- 65. Pitcher. Red sandy ware. Dark green glaze streaked with orange. Decoration applied. Pot cut from wheel with a wire. C50 layer 22 M828.

This collection from the eastern part of the site comes from layers pre-dating construction period 4, which can be assigned to 1320-6, but post-dating the construction of the east range (?1229). Nos. 40-3, 46, 55 and 57 are from occupation within the range, the rest are from the courtyard just outside the range. Nos. 47-50, 52, 53, 58, 60, 63 and 65 are from layers of make-up and may therefore represent material collected from earlier deposits. Nos. 44, 45, 51, 54, 56, 59 and 61 come from a contemporary occupation level.

By virtue of its stratigraphical position the group is likely to have comprised pottery in use

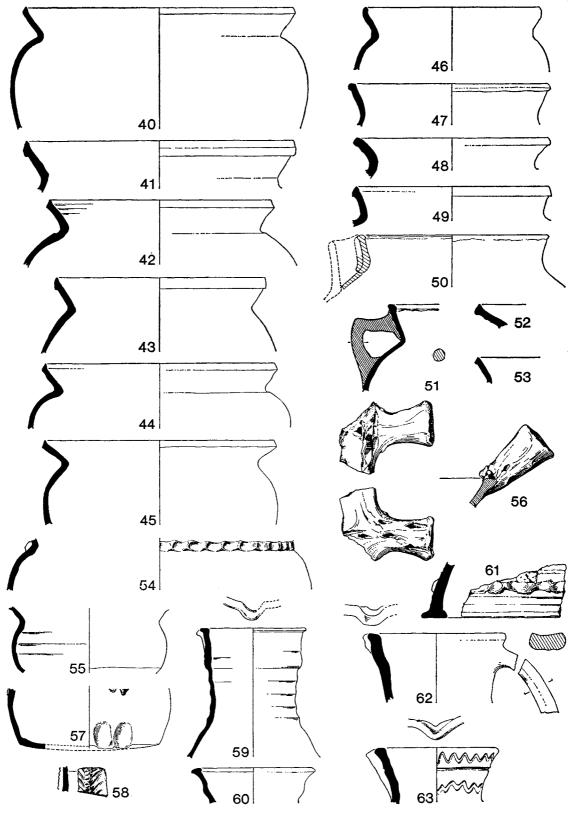


Fig. 65. Medieval pottery: Group E, 40-63 (1/4)

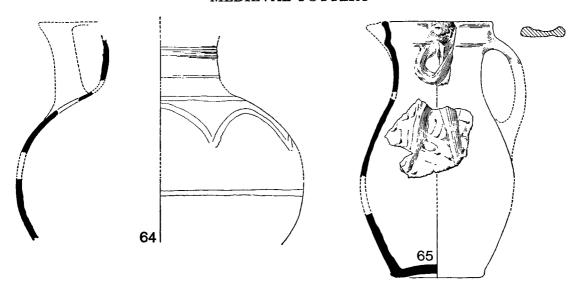


Fig. 66. Medieval pottery: Group E, 64-5 ( $\frac{1}{4}$ )

during the period 1230–1320. The cooking pots were for the most part precisely made in sandy fabrics, some still lightly tempered with small amounts of grit but a percentage were now in grit-free fabrics. Internal glazes were also being introduced. The heavily gritted vessels, including nos. 47–50 and the two unglazed pitchers, nos. 62 and 63, belong to the 'early medieval tradition' of the twelfth century. While these may be rubbish survival, individual vessels could have continued in use for some time. Glazed pitchers were common, some of them decorated with plastic moulding (nos. 58 and 65, which is a faced pitcher), others with applied strips and pellets. Other types include the curfew (no. 61) and the socketed-handled dish (no. 57).

# Group F. West Courtyard Construction Levels: c. 1320-6 (fig. 67, nos. 66-71)

- 66. Pitcher. Fine hard sandy ware fired light red. Thick glossy dark green glaze inside and out. C42 layer 41 M675.
- 67. Cooking pot. Hard grey sandy ware with flint grits. C40 layer 32 M653.
- 68. Cooking pot. Coarse grey ware with copious flint grits. Glaze spots. C42 layer 42 M676.
- 69. Cooking pot. Hard grey sandy ware with some flint grits. Internal glaze spot. C42 layer 41 M672.
- 70. Cooking pot. Fine hard sandy ware fired pinkish internally but dark grey on the surfaces. C42 layer 41 M673.
- 71. Cooking pot. Coarse grey ware with copious flint grits. Internal glaze spots. C42 layer 41 M674.

This group comes from layers in the western part of the site which were deposited during the construction phase of period 4 (1320-6). No. 67 is from a layer of pebble metalling, the rest come from beneath the later kitchen from make-up layers.

The group is too small to be of much significance, but a high percentage of the cooking pots are in well-made sandy fabrics with little or no flint-grit tempering.

# **EXCAVATIONS AT PORTCHESTER CASTLE**

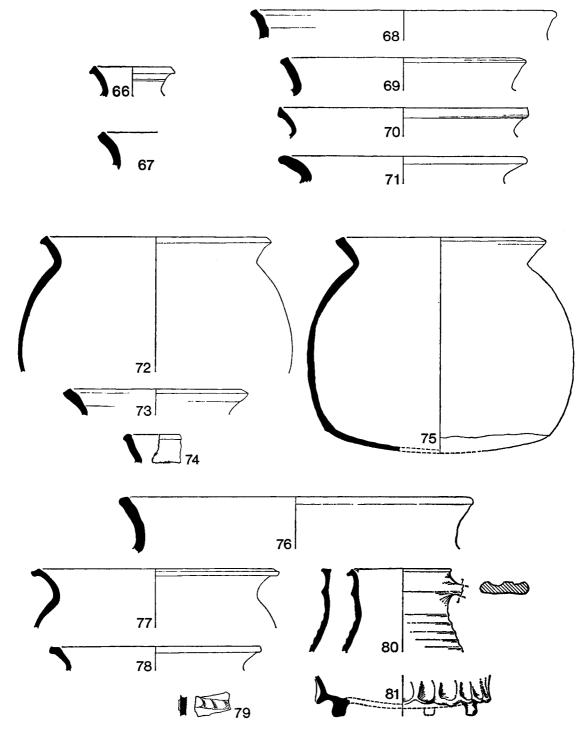


Fig. 67. Medieval pottery: Group F, 66-71; Group G, 72-81 (1/4)

Group G. Western Courtyard: c. 1320-50 Levels (fig. 67, nos. 72-81)

- 72. Cooking pot. Grey sandy ware with flint grits. Occasional glaze spots. C32 layer 11 M604, M605.
- 73. Cooking pot. Hard grey sandy ware fired buff externally. C32 layer 11 M602.
- 74. Cooking pot. Grey sandy ware with flint grits. C32 layer 11 M603.
- 75. Cooking pot. Light grey-brown sandy ware with flint grits. C32 layer 12 M606.
- 76. Cooking pot. Coarse grey sandy ware with copious flint grits. Fired pinkish on outside surface. C39 layer 17 M640.
- 77. Cooking pot. Grey sandy ware with flint grits. Fired light red externally. C40 layer 18 M646.
- 78. Cooking pot. Hard grey sandy ware with some flint grits. C42 layer 40 M671.
- 79. Cooking pot. Hard grey sandy ware with some flint grits. Spots of green glaze internally. C42 layer 40 M670.
- 80. Pitcher. Hard fine sandy ware fired buff to light grey. Patchy light green glaze. C42 layer 40 M669.
- 81. Pitcher with tripod base. Hard grey sandy ware with external light green glaze. C40 layer 18 M647.

This group is derived from several layers in the western part of the site which belong to the interval between construction periods 4 and 5 (i.e. 1320–c. 1350). Nos. 72–5 come from pit 243, nos. 78–80 from an occupation layer in the area of the later kitchen, nos. 77–81 from a rubble accumulation in the courtyard and no. 78 from an occupation layer in the corner room of NW2.

Although flint-gritting of the cooking-pot fabric is still practised, sandy fabrics with little tempering predominate. The sample is too small to allow detailed discussion but the nature of the deposits, which for the most part represent occupation levels *in situ*, would suggest that earlier rubbish is unlikely to be included in any significant quantity.

Group H. East Range and Courtyard: 1320-50 Levels (figs. 68-70, nos. 82-139)

- 82. Cooking pot. Red sandy ware reduced externally. Occasional spots of orange glaze. C50 layer 14 M795.
- 83. Cooking pot. Grey sandy ware with some flint grits. C50 layer 11 M777.
- 84. Cooking pot. Grey sandy ware with flint grits fired light red. C50 layer 11 M778.
- 85. Cooking pot. Grey sandy ware with flint grits. C46 layer 12 M727.
- 86. Cooking pot. Red sandy ware. Spots of orange glaze on rim and inside. C50 layer 14 M703.
- 87. Cooking pot. Red sandy ware with occasional flint grits. Reduced outer surface. Occasional spots of green glaze externally. C50 layer 14 M799.
- 88. Cooking pot. Buff sandy ware, reduced externally. Occasional spots of green glaze externally. C50 layer 14 M796.
- 89. Cooking pot. Grey sandy ware with flint grits. C45 layer 57 M719.
- 90. Cooking pot. Grey sandy ware with flint grits. C46 layer 12 M732.
- 91. Cooking pot. Sandy ware with flint grits fired red throughout. C45 layer 57 M718.
- 92. Cooking pot. Coarse grey sandy ware with copious flint grits. C46 layer 12 M728.
- 93. Cooking pot. Grey sandy ware with occasional flint grits. Fired reddish brown. Spots of glaze on rim. C49 layer 11 M769.
- 94. Cooking pot. Grey ware with copious flint grits. Fired red on the surfaces. C46 layer 12 M725.
- 95. Cooking pot. Grey sandy ware with occasional small flint grits. Fired to red on the surfaces but the external surface finally reduced to grey. C46 layer 12 M726.
- 96. Cooking pot. Grey sandy ware with flint grits. C46 layer 12 M731.

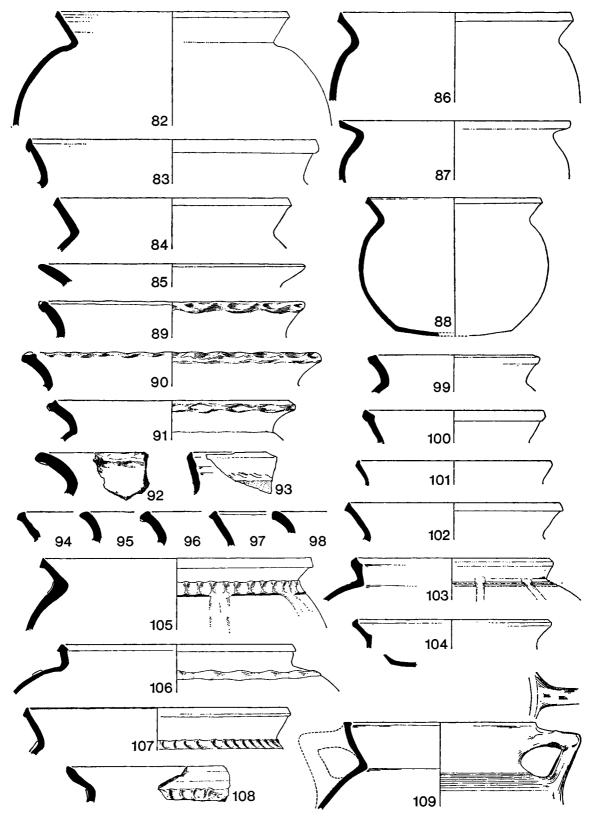


Fig. 68. Medieval pottery: Group H, 82-109 (1)

- 97. Cooking pot. Grey sandy ware with flint grits. Fired light red outside. C45 layer 44 M713.
- 98. Cooking pot. Dark grey sandy ware with flint grits. C46 layer 12 M729.
- 99. Cooking pot. Grey sandy ware with shell, chalk and flint grits. Fired red on the surfaces. C46 layer 12 M730.
- 100. Cooking pot or dish. Hard grey sandy ware. Fired red on the surfaces. C48 layer 20 M748.
- 101. Cooking pot. Light red sandy ware. C49 layer 11 M768.
- 102. Cooking pot. Hard grey sandy ware with occasional fine flint grits. C48 layer 31 M750.
- 103. Cooking pot. Hard grey sandy ware. Fired reddish-brown. C50 layer 12 M785.
- 104. Pipkin? Hard red sandy ware. Even orange glaze internally. C50 layer 12 M786.
- 105. Pitcher. Red sandy ware with green-brown glaze. Scored decoration. C50 layer 14 M802.
- 106. Cooking pot. Dark grey sandy ware. C49 layer 11 M766.
- 107. Cooking pot. Grey sandy ware with occasional flint grits. Fired light reddish-brown. Applied strip in neck angle. Glaze spots inside rim. C50 layer 12 M784.
- 108. Cooking pot. Red sandy ware with occasional flint grits. Occasional glaze spots internally. C50 layer 14 M803.
- 109. Cooking pot. Grey sandy ware fired light red on the surface. Orange and green glaze on inside of rim. C50 layer 12 M781.
- 110. Cooking pot? Light red sandy ware. Light green glaze internally towards bottom. Applied strips externally. C50 layer 14 M807.
- 111. Dish. Grey sandy ware fired light brown. Internal green glaze. C49 layer 11 M770.
- 112. Chimney? Grey sandy ware with flint grits. C45 layer 44 M712.
- 113. Dish. Red sandy ware. Spots of green glaze on the rim. C50 layer 14 M801.
- 114. Dish handle. Hard red ware. Spot of green glaze internally. C50 layer 11 M776.
- 115. Dish creamer with handle. Grey sandy ware. Fired red brown. C50 layer 12 M787.
- 116. Curfew. Reddish brown sandy ware. Applied strips on the surface. C50 layer 14 M804.
- 117. Costrel. Grey sandy ware with speckled green-brown glaze. C50 layer 12 M782.
- 118. Dish? Grey sandy ware with flint grits. Internal green glaze. C50 layer 12 M788.
- 119. Skillet with socketed handle. Coarse dark grey sandy ware with flint grits. Thick green glaze internally. C45 layer 55 M717.
- 120. Pitcher. Red sandy ware with external orange-green glaze. Body decorated with applied strips of ferruginous clay. C50 layer 11 M779.
- 121. Pitcher. Red sandy ware, knife-trimmed. Sparse orange glaze externally. Decoration of grid-stamped pellets. Possibly from Poole. C50 layer 14 M797.
- 122. Pitcher. Red sandy ware. Orange glaze. Decoration of vertical ferruginous strips and pellets and applied strips with stab marks. C50 layer 12 M792.
- 123. Cooking pot. Red sandy ware with occasional flint grits: glaze spots on the rim. Applied strips. West Sussex type. C50 layer 14 M805.
- Pitcher. Hard grey sandy ware fired to light red on the surfaces. Thick dark green and orange glaze externally. C45 layer 57 M720.
- Pitcher. Red sandy ware. Thick dark green glaze. Face on front type possibly from West Sussex. C50 layer 11 M775.
- 126. Pitcher. Hard grey sandy ware. Dark green-brown glaze. Decoration of scored lines. C50 layer 12 M791.
- 127. Pitcher. Grey sandy ware. Green glaze. C50 layer 12 M783.
- 128. Pitcher. Grey sandy ware with oxidized surface. Thick dark green glaze externally. Decoration of applied pellets. C50 layer 11 M772.
- 129. Pitcher. Pinkish buff ware with external light green glaze. Applied strips. C48 layer 20 M749.

# **EXCAVATIONS AT PORTCHESTER CASTLE**

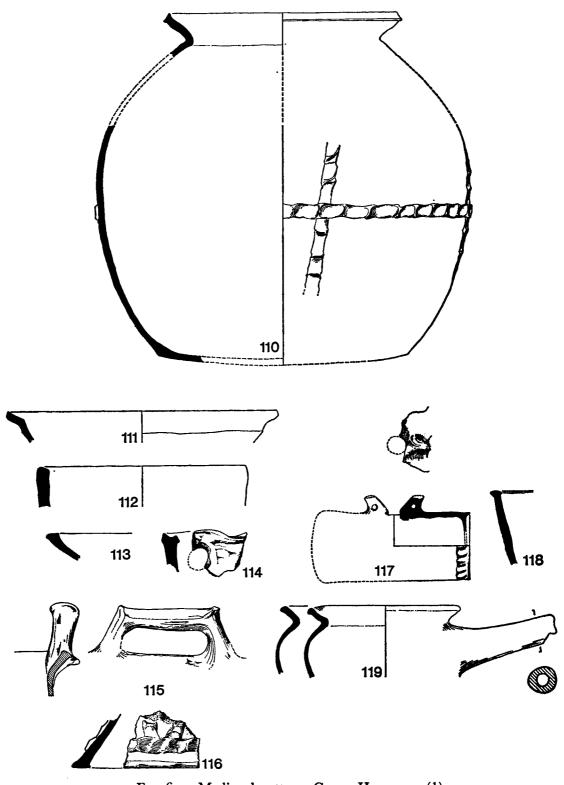


Fig. 69. Medieval pottery: Group H, 110-19 (1)

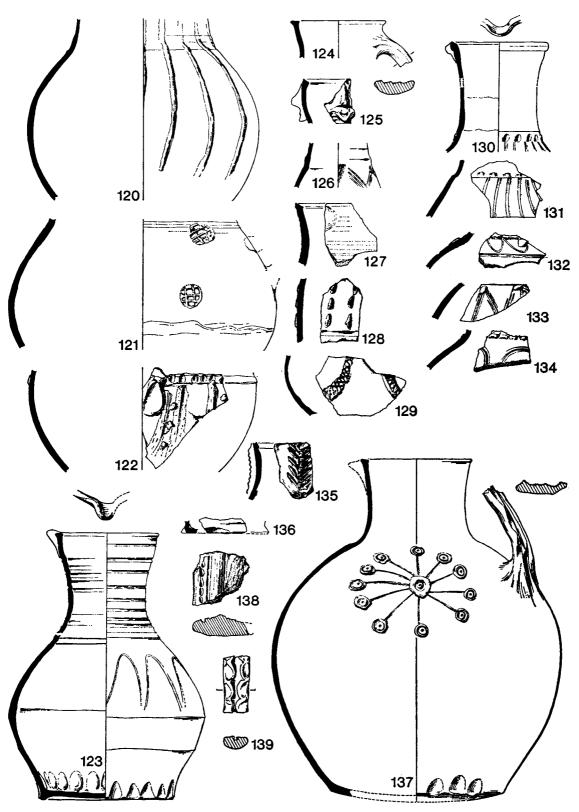


Fig. 70. Medieval pottery: Group H, 120-39 (1)

- 130. Pitcher. Hard grey ware oxidized on the surfaces. Thick green glaze externally. White slip inside the neck from the rim downwards. C50 layer 14 M806.
- 131. Pitcher. Red sandy ware. Green-brown glaze. Decoration of scored lines and stab marks. C50 layer 12 M790.
- 132. Pitcher. Hard red sandy ware with thick green-brown glaze. Decoration of scored lines and applied pellets. C50 layer 11 M771.
- 133. Pitcher. Red sandy ware. Thick orange-brown glaze. Decoration of scored lines and applied pellets. C50 layer 12 M789.
- 134. Pitcher. Red sandy ware. External dark green glaze. Decoration of scored lines with applied pinched strip in neck angle. C50 layer 11 M773.
- 135. Pitcher. Grey sandy ware oxidized on surface. Thick green glaze. Decoration of applied and moulded strip. C50 layer 11 M774.
- 136. Pitcher. Fine white ware with pale green glaze streaked brown. C49 layer 11 M767.
- 137. Pitcher. Red sandy ware. Dark orange glaze with brown spots, externally. Decoration of scored lines and applied pellets of ferruginous clay stamped after application. C50 layer 14 M800.
- 138. Chimney. Coarse grey ware with flint grits fired red externally. Scored and stabbed. C50 layer 14 M798.
- 139. Pitcher handle. Hard grey sandy ware. External light green glaze. C46 layer 12 M733.

This collection of pottery was selected from a volume of material found in and just outside the east range in layers deposited between the construction levels of period 4 and period 5 (i.e. c. 1320-50). Nos. 89, 91, 97, 100, 102, 112, 119, 124 and 131 are from occupation layers within the range: nos. 93, 101, 106, 111 and 136 are from a rubble accumulation in the southeast range: the rest are from make-up layers within the courtyard adjacent to the east range.

This large collection of pottery gives a clear idea of the range of ceramics in use in the first half of the fourteenth century. The cooking pots were for the most part made in fine sandy fabrics, fired to red or ochre, but still with occasional flint-tempering. Faceting of the rims (e.g. nos. 89–92) is not uncommon. Many of the cooking pots were decorated with horizontal and vertical applied finger-impressed strips. The glazing of the inside of the base is now quite common. The pitchers exhibit a wide range of decorative techniques of which a representative selection is illustrated. The handle (no. 138) is of a type which originated in the twelfth century: in all probability it was derived from earlier rubbish. Two of the pitchers, nos. 129 and 136, were imported from Rouen. The face-on-rim pitcher, though similar in form to no. 136, differs from it in fabric and is most likely to be of British manufacture. The curfew, costrel, pipkin an drange of dishes are indicative of the wider variety of ceramic products now in use.

# Group I. Courtyard Building Levels: Mid Fourteenth Century (fig. 71, nos. 140-53)

- 140. Cooking pot. Red sandy ware with occasional flint grits. C35 layer 9 M617.
- 141. Cooking pot. Dark grey sandy ware with flint grits. C35 layer 9 M618.
- 142. Cooking pot. Grey sandy ware with occasional flint grits. Fired light red externally. C35 layer 9 M620.
- 143. Cooking pot. Red sandy ware with occasional flint grits. C35 layer 9 M625.
- 144. Pitcher. Fine hard grey sandy ware. External glossy dark green glaze. C41 layer 7 M666.
- 145. Pitcher. Hard grey sandy ware with external green glaze. Applied strip and pellet in dark brown. C41 layer 7 M668.

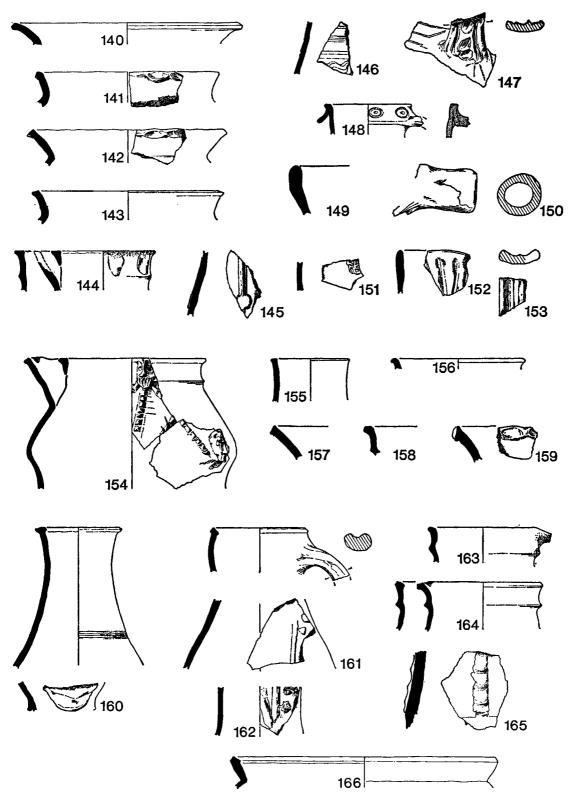


Fig. 71. Medieval pottery: Group I, 140–53; Group J, 154–64; Group K, 165–6 ( $\frac{1}{4}$ )

- 146. Pitcher. Hard red sandy ware. White slip with sgraffito decoration under thin green glaze. C35 layer 9 M619.
- 147. Pitcher. Fine hard light brown sandy ware. Thick external green glaze. C35 layer 9 M622.
- 148. Pitcher. Hard grey sandy ware. Thick dark green glaze externally. C35 layer 9 M626, 623.
- 149. Bowl. Coarse grey sandy ware with occasional flint grits. C35 layer 9 M624.
- 150. Handle of bowl. Coarse grey sandy ware with flint grits. Fired red externally. C35 layer 9 M621.
- 151. Pitcher. Hard grey sandy ware fired light red on surfaces. Light green glaze externally. C43 layer 27 M697.
- 152. Pitcher spout. Hard red sandy ware. Glossy green glaze externally. C41 layer 7 M667.
- 153. Pitcher handle. Hard grey sandy ware with green glaze on the outer face. C43 layer 27 M698.

The pottery illustrated here comes from the western part of the site in contexts related to the building phase of period 5, dating to the middle of the fourteenth century. Nos. 140–3, 146–50 come from pit 244, nos. 144–5 and 152 come from the foundation-trench of the kitchen wall; the rest from cobble layers within the courtyard.

There is little that needs be said of this group, except that the types found are similar to other groups of the same date from elsewhere in the castle. Among the sherds not illustrated are four fragments from a pitcher of western French origin.

## Group J. East Range and Courtyard: Mid Fourteenth Century (fig. 71, nos. 154-64)

- 154. Pitcher. Grey sandy ware fired to light red on the inner surface. Thick green glaze externally. C45 layer 48 M714.
- 155. Pitcher. Hard grey sandy ware fired light brown with thick green glaze externally. C45 layer 22 M710.
- 156. Pitcher? Hard grey sandy ware. Thick external green glaze. C45 layer 48 M715.
- 157. Cooking pot. Grey sandy ware with flint grits. Fired light red externally. C45 layer 39 M711.
- 158. Pitcher. Fine light grey sandy ware. External dark green glaze. C45 layer 22 M709.
- 159. Cooking pot. Grey sandy ware with flint grits. Fired light red on the surfaces. C45 layer 48 M716.
- 160. Pitcher. Grey sandy ware fired to light red on the interior surface. Thick dark green glaze externally. C46 layer 9 M723.
- 161. Pitcher. Grey sandy ware fired light red on the surfaces. External apple-green glaze: applied pellets brown. C46 layer 3 M722.
- 162. Pitcher. Grey sandy ware fired light red on the surfaces. External green mottled glaze: pellets under dark brown. C46 layer 13 M734.
- 163. Pitcher. Grey sandy ware fired light red on the surfaces. External green-brown glaze. C46 layer 9 M724.
- 164. Pitcher. Grey sandy ware with occasional flint grits, fired red on the surfaces. External orange glaze. C46 layer 3 M721.

Pottery from within the east range from construction levels belonging to the mid fourteenth-century building phase of period 5.

The sample is small but conforms to the general types from contemporary layers found elsewhere in the castle. The pitcher decorated with faces, while of French form, appears to be in a British fabric.

## Group K. East Range and Courtyard: 1350-1400 (fig. 71, nos. 165-6)

- 165. Chimney? Coarse red sandy ware with copious flint grits. C45 layer 17 M705.
- 166. Cooking pot. Hard grey sandy ware fired red outside. C45 layer 17 M703.

Pottery from an occupation layer in the east range belonging to the period c. 1350–1400, broadly contemporary with the construction of Assheton's Tower.

The types are consistent with a late fourteenth-century date.

## Group L. West Ranges and Courtyard: 1350-1400 (fig. 72, nos. 167-96)

- 167. Cooking pot. Coarse black ware with flint grits. C35 layer 13 M630.
- 168. Cooking pot. Coarse grey sandy ware with flint grits. C35 layer 13 M632.
- 169. Cooking pot. Coarse grey sandy ware with flint grits. Fired brown externally. C39 layer 11 M637.
- 170. Cooking pot. Hard grey ware with some flint grits. C35 layer 12 M629.
- 171. Cooking pot. Hard grey ware with some flint grits. Fired light brown externally. C39 layer 11 M639.
- 172. Cooking pot. Fine grey sandy ware with occasional flint grits. C42 layer 31 M699.
- 173. Cooking pot. Hard reddish sandy ware fired dark grey externally. C43 layer 20 M693.
- 174. Cooking pot. Hard red sandy ware. C40 layer 15 M644.
- 175. Cooking pot. Hard red sandy ware fired to light brown on the surface. C43 layer 16 M691.
- 176. Cooking pot. Grey sandy ware with flint grits. C47 layer 3 M741.
- 177. Cooking pot. Grey sandy ware with flint grits. C47 layer 3 M742.
- 178. Skillet. Hard red sandy ware with occasional flint grits. Speckled orange and green glaze externally. Deep thumb-print at base of handle. C39 layer 11 M638.
- 179. Dish. Grey sandy ware fired light red externally. C34 layer 6 M610.
- 180. Pitcher? Cream-coloured sandy ware with some larger quartz grains. C35 layer 13 M631.
- 181. Dish. Hard brownish sandy ware. Internal speckled green glaze. Knife-trimming externally. C43 layer 9 M688.
- 182. Meat dish. Hard sandy ware fired red throughout. Internal orange and green mottled glaze. Knife-trimming externally. C43 layer 9 M689.
- 183. Skillet. Hard grey brown sandy ware with green-brown internal glaze. External surface fired dark grey: knife-trimming. C39 layer 27 M641.
- 184. Cooking pot. Hard sandy ware fired to light red on the surface. C43 layer 18 M692.
- 185. Pitcher. Grey sandy ware. External dark green glaze. C47 layer 3 M739.
- 186. Cooking pot in cream-coloured fabric with quartz grits. C35 layer 12 M628.
- 187. Pitcher. Fine red sandy ware. External brown glaze with green specks. C43 layer 21 M696.
- 188. Pitcher. Hard grey sandy ware fired to red on the surface. C43 layer 16 M690.
- 189. Hand from a jug. Red sandy ware. External dark green glaze. C35 layer 7 M616.
- 190. Pitcher? Fine cream ware. Dark green external glaze. C43 layer 20 M694.
- 191. Pitcher? Buff sandy ware. Applied red slip band with speckles of pale yellow glaze over. C47 layer 3 M740.
- 192. Aquamanile. Hard grey sandy ware fired red inside. External thick dark green glaze. C40 layer 9 M643.
- 193. Pitcher. Saintonge ware. Fine cream ware. Dark green glaze over lip. C40 layer 9 M648.
- 194. Pitcher handle. Coarse grey sandy ware fired red externally. Splashes of green glaze on the outer surface. C40 layer 22 M649.
- 195. Pitcher handle. Grey sandy ware. Speckled green glaze. C35 layer 7 M615.
- 196. Pitcher handle. Grey sandy ware fired light red on the surface. Orange glaze on upper surface. C47 layer 3 M738.

Pottery from layers in the western part of the site dating to between the construction of

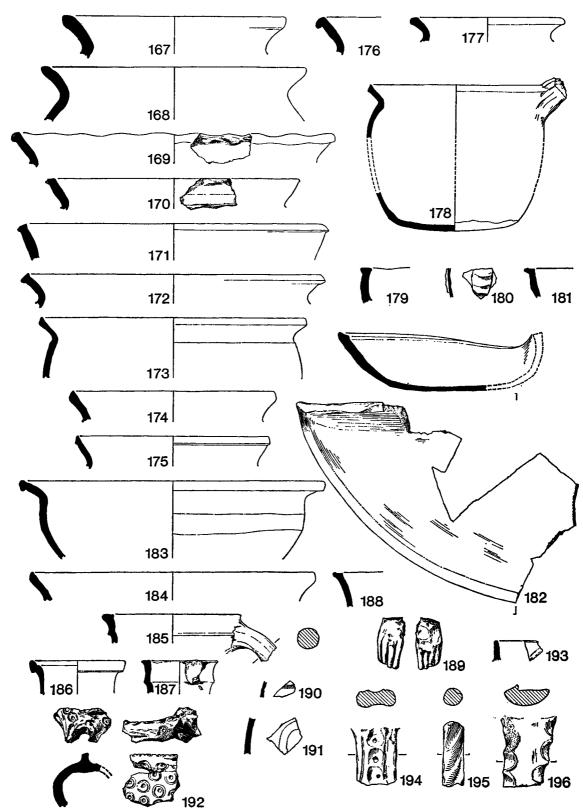


Fig. 72. Medieval pottery: Group L, 167-96 (1)

period 5 (c. 1350) and the construction of period 7 (1396). No. 170 is from an occupation layer within the kitchen; nos. 185, 191 and 196 are from an occupation layer in a hollow beneath the hall. The rest are from various tips and soil accumulations in the courtyard to the north of the hall range.

As might be expected, the collection contains some residual vessels (e.g. nos. 167 and 168), but the cooking pots in general conform to the types already current in the first half of the fourteenth century. Flint-gritting still occurs but flint-free sandy fabrics are now more common. Two sherds, nos. 180 and 186, are from imported Norman vessels which are generally supposed to have reached Britain in the twelfth or thirteenth century. The two small sherds, nos. 190 and 192, both cream wares with dark green glazes, may also be French imports. The only other notable vessels are the aquamanile and the small modelled hand.

Group M. Western Courtyard Area: Post-dating 1396-9 Levels (fig. 73, no. 197)

197. Pitcher. Hard light grey sandy ware. Dark green external glaze. C35 layer 11 M627.

The single sherd of a pitcher is from a builders' spread contemporary with the rebuilding of the hall between 1396 and 1399.

Group N. Western Courtyard Area: Medieval Levels Post-dating 1399 (fig. 73, nos. 198-208)

- 198. Cooking pot. Coarse grey sandy ware with chalk and flint grits. C39 layer 4 M635.
- 199. Cooking pot. Coarse grey sandy ware with flint grits. C39 layer 4 M636.
- 200. Cooking pot. Grey sandy ware with flint grits. Fired red externally. C34 layer 4 M607.
- 201. Cooking pot. Hard grey-brown sandy ware. C43 layer 5 M687.
- 202. Cooking pot. Coarse grey sandy ware with flint grits. C39 layer 4 M634.
- 203. Dish. Grey sandy ware with occasional flint grits. Fired buff externally. Internal pale green-brown glaze. C34 layer 4 M608.
- 204. Pitcher. Hard grey sandy ware. Splashes of mottled green glaze on handle. C35 layer 4 M614.
- 205. Pitcher. Fine grey sandy ware fired light red externally. Splashes of orange-green glaze on handle. C35 layer 3 M613.
- 206. Pitcher. Hard red sandy ware. External dark green glaze. C39 layer 4 M633.
- 207. Pitcher handle. Fine grey sandy ware fired to light grey on the surface. C43 layer 5 M686.
- 208. Curfew. Coarse grey brown sandy ware with flint grits. C34 layer 4 M609.

A miscellaneous group of pottery from the latest medieval levels in the western courtyard area post-dating the building levels of 1396–9. Nos. 198 and 199 are early types presumably residual in this context. The collection is unremarkable and would not be out of place anywhere in the fourteenth century.

Group O. Adjacent to North Range: Fourteenth-century Levels (fig. 73, nos. 209-11)

- 209. Pitcher. Hard red sandy ware with orange-green glaze. C51 layer 19 M835.
- 210. Cooking pot. Hard grey sandy ware fired light brown externally. C51 layer 19 M837.
- 211. Cooking pot. Grey sandy ware with some flint grits. C51 layer 19 M836.

Collection of pottery from an occupation deposit which accumulated during the use of the north range.

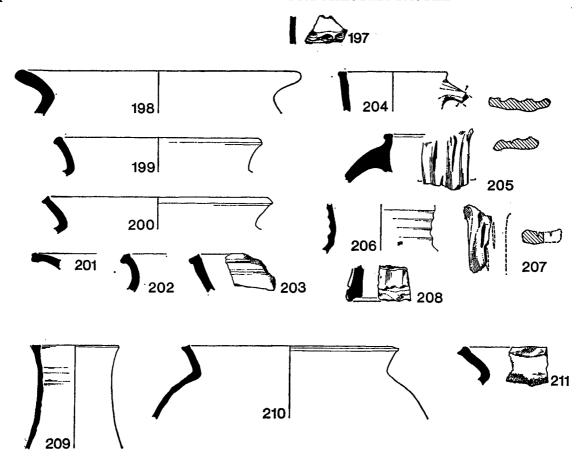


Fig. 73. Medieval pottery: Group M, 197; Group N, 198-208; Group O, 209-11 (1)

Group P. East Range and South-east Range: Sixteenth Century (fig. 74, nos. 212-24)

- Cooking pot? Hard red sandy ware. Thin brown glaze externally and inside over the rim. C49 layer 8 M761.
- Cooking pot. Soft buff ware with copious quartz grits. Northern French or possibly from Surrey. C49 layer 8 M762.
- Cooking pot. Red sandy ware with some reduction on the surface. Traces of internal green glaze. C49 layer 9 M764.
- 215. Jug? Fine red sandy ware. Painted white band in the neck angle. C49 layer 8 M759.
- 216. Cooking pot. Hard grey sandy ware fired reddish on surfaces. Spots of green glaze externally. C45 layer 19 M706.
- 217. Frechen jug. Buff stoneware: speckled brown exterior. C48 layer 15 M747.
- 218. Beaker. Dense buff ware. White glaze inside and out. Deep blue paint. South Netherlands maiolica. C48 layer 15 M746.
- 219. Base of jug. Grey-buff sandy ware. External green glaze. Residual? C46 layer 9 M745.
- 220. Dish. Hard red sandy ware. Orange-brown glaze internally, thick towards the base. C49 layer 8 M760.

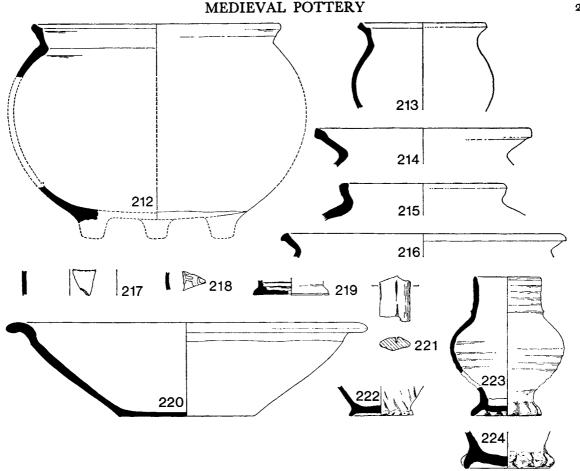


Fig. 74. Medieval pottery: Group P, 212-24 ( $\frac{1}{4}$ )

- 221. Pitcher handle. Hard grey sandy ware fired red externally. Apple-green glaze, splashed-down handle. C45 layer 19 M707.
- 222. Base of jug or pitcher. Hard red sandy ware. Mottled brown glaze outside and in. C45 layer 19 M708.
- 223. Raeren jug. Grey stoneware with thick brown glaze. C49 layer 8 M763.
- 224. Raeren jug. Grey stoneware. External and internal brown glaze. C49 layer 9 M765.

Pottery from sixteenth-century levels in the east and south-east ranges. Nos. 221 and 222 are from a soil accumulation within the east wing; nos. 217–18 are from the filling of the culvert; nos. 214 and 219 from the gravelly soil in the south-east range and nos. 212, 213, 215, 220 and 223 from a layer of occupation soil above it sealed by make-up for the rebuilding by Cornwallis at the beginning of the seventeenth century.

English vessels are represented by nos. 212, 214, 215 and 216 — all cooking vessels in sandy fabrics. No. 215 has a band of white paint externally in the neck angle. The bowl, no. 220, the pitcher handle, no. 221, and the jug base, no. 222, are also English. They are representative of a larger quantity of sherd material totalling 38 sherds of cooking vessels (of which

13 sherds belong to no. 212), 44 sherds of open dishes (20 make up no. 220) and 5 pitcher sherds.

The imported vessels are all illustrated. They include the three stoneware flagons, no. 217, from Frechen, and nos. 223 and 224, from Raeren; the Netherlands maiolica jug, no. 218; and the gritty ware cooking pot possibly from northern France, no. 213. The Frechen jug is best dated to the end of the sixteenth century: the rest of the material is consistent with the date-range 1450–1550.

## VII. BUILDING MATERIALS

### By BARRY CUNLIFFE

SMALL quantities of medieval building material were recovered from the stratified layers. These are described and listed here, together with a note of the types of stone imported to the castle for building work. A number of fragments of medieval mouldings were found in eighteenth- and early nineteenth-century levels, but since they all formed parts of windows or doorways still largely in situ and described in detail above they will not be further considered here.

# ROOF FURNITURE, TILES AND BRICKS

### Ridge Tiles

Ridge tiles in hard red sandy fabric with glaze on the outer surface and with knife-cut crests were comparatively common in the medieval rubbish levels but occurred only in small fragments and seldom in quantity. Examples have been found in the following contexts:

Period 3: early thirteenth-early fourteenth century

East range; in make-up layers adjacent to east range; western courtyard make-up north of the kitchen; in the west range.

Period 4: early fourteenth century

East range; in make-up layers adjacent to east range.

Periods 5-6: c. 1320-90

East range; western courtyard north of the kitchen; privy garden.

Period 7: late fourteenth century

North-west range; western courtyard north of the kitchen.

Post-medieval

Most parts of the castle.

Thus the earliest occurrence at Portchester of knife-cut ridge tiles is in period 3 contexts. Since these tiles could have been brought in towards the end of the period, there is no conclusive proof that they were in use before the beginning of the fourteenth century. In all probability, however, many of the tiles found in rubble layers deposited at different stages throughout the fourteenth century would have come from buildings of significantly earlier date.

### Roof Tiles

Roof tiles are uncommon at Portchester. Only one fragment was found in the entire excavation, in a period 4 level just outside the east range. It was in a hard-fired red sandy fabric but was too fragmentary for its size to be estimated.

Chimneys, Louvers and Finials

All roof furniture from within the castle is illustrated in fig. 75. The dates given here are for the contexts in which the items were found.

- 1. Chimney pot. Coarse grey sandy ware with flint grits. C50 layer 22 M826. Pre-1320.
- 2. Chimney pot. Coarse red-grey sandy ware with flint grits. Glaze spots internally. C50 layer 12 M780. 1320–50.
- 3. Chimney pot. Coarse reddish-grey sandy ware with flint grits. C41 layer 6 M654. Pre-1320.
- 4. Chimney pot. Coarse grey sandy ware with copious flint grits. Fired to red externally. C42 layer 47 M684. Pre-1320.
- 5. Chimney pot. Coarse grey sandy ware with flint grits fired red on the surfaces. C45 layer 57 M743 and 744. 1320-50.
- 6. Chimney pot. Coarse grey sandy ware with copious flint grits. Fired red externally with thick green-brown glaze on the outer (top) surface. C45 layer 17 M704. 1350-1400.
- 7. Finial? Hard grey sandy ware fired red inside. Thick dark green glaze externally. C40 layer 17 M645. Mid-fourteenth century.
- 8. Louver? Hard red sandy ware. External dark green glaze. C40 layer 25 M650. Pre-1320.
- 9. Louver or finial? Grey sandy ware with flint grits. Internal thick green glaze. (It is possible that the sherd belongs to a very coarse dish but an item of roof furniture seems more likely.) C48 layer 37 M753. Pre-1320.
- 10. Louver. Grey sandy ware fired red. Thick green glaze externally. C50 layer 14 M794. 1320-50.

Nos. 1, 2, 5, 6, 9 and 10 came from the east range and associated courtyard layers, nos. 3, 4, 7 and 8 are from the western courtyard area.

The chimney pots found in the outer bailey of Portchester Castle have been discussed in a previous volume (Cunliffe, 1977, 122-4), where it was suggested that they were most likely to have derived from the production centre on Wickham Common or from the Chichester kilns (Barton, 1971). The collection published here, from the inner bailey, conforms to the same general types. Most of them were found in fourteenth-century layers, but they may have been manufactured and brought to the site earlier. The fragments of louvers and finials are too small and undiagnostic to warrant detailed discussion.

### Slates

West country slates were in common use as a roofing material throughout the fourteenth century, but no conclusive evidence of their occurrence in the thirteenth century is recorded at Portchester even though quantities were known to have been imported as early as 1180 on documentary grounds. In the make-up layers of the second half of the fourteenth century (periods 5-6), in the western courtyard, complete slates of the following sizes were recovered:  $12\frac{1}{2}$  by 5; 9 by 5;  $8\frac{1}{2}$  by  $4\frac{3}{4}$ ;  $7\frac{1}{2}$  by  $4\frac{3}{4}$  (inches). (See also Jope and Dunning, 1954.)

### Glazed Tiles

A number of glazed tiles, measuring 5 in. (13 cm.) square by  $1\frac{1}{4}$  in. (3 cm.) thick, were found. Two types can be recognized; one coated on the upper surface with a thick white slip covered with a yellowish-orange glaze; the other surfaced with a dark green glaze. Examples of both types existed which had been cut in halves diagonally before firing.

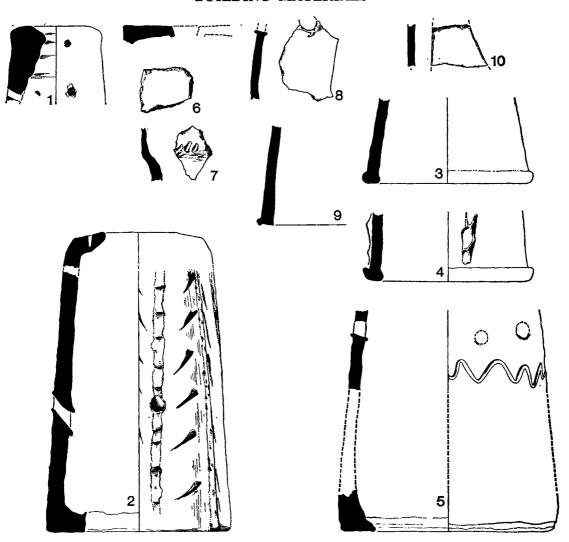


Fig. 75. Roof furniture (1)

The majority of the glazed tiles were found in post-medieval layers, but both green and orange tiles were recorded from period 4 contexts (c. 1320-50) in the east range. More specifically two fragments of the orange glazed tile were found in C48 layer 20, while tiles of both types were incorporated in a nearby hearth (hearth 6) built towards the end of period 4 (p. 64). Thus glazed tiles were in use at Portchester before the middle of the fourteenth century.

### **Bricks**

No bricks have been found in stratified levels, but examples can be seen in situ backing the fireplaces built into the lower floors of the west and north-west ranges of period 7 (i.e. NW4 and W4). The accounts relating to the great building programme of 1396-9 record that 1,000

white tiles were imported from Flanders, via London and Poole, for building fire-backs at Portchester.

### BUILDING STONE

The various types of building stone used in the castle may be briefly listed.

Binstead Limestone (Quarrstone): Isle of Wight

The building work of the twelfth and thirteenth centuries commonly employed finequality Binstead limestone for facings and mouldings. The stone does not appear to have been imported after the construction of the ranges belonging to period 3 but blocks were occasionally reused after that date. The rebuilding of the upper storeys of the east range and south-east range in the late sixteenth century employed quantities of Binstead limestone for facing, but in all probability the blocks were derived from earlier buildings, perhaps the claustral ranges of the priory, which were being pulled down at this time.

Bembridge Limestone: Isle of Wight

Bembridge limestone — a coarse fossiliferous stone — was extensively used throughout the fourteenth century. For the most part it was used, along with flint, in rubblework, but door and window mouldings, assignable to the building programme of 1320-6, were invariably carved from a carefully selected yellowish limestone from the Bembridge beds.

The building records of 1320-6 mention the use of ragstone from the Isle of Wight. The accounts of 1396-9 more specifically list the importation of ragstone from Bembridge.

Bonchurch Free-stone: Isle of Wight

The only specific mention of Bonchurch stone is in the accounts of 1396–9 which note that the free-stone was employed in the vaulting of the basement of the keep. The stone used in this work is a glauconitic sandstone of the upper greensand. It may be that the upper greensand, used extensively for door and window mouldings in the building works of the middle and late fourteenth century, was also derived from Bonchurch.

Beer Stone: Devon

The use of free-stone from Beer for windows, doorways and fire surrounds is noted in the accounts of 1396–9. The stone, a fine-grained glauconitic sandstone from the upper green-sand beds, is similar in appearance to Bonchurch free-stone from the Isle of Wight.

Caen Stone: Normandy

Caen stone from Normandy is noted in the accounts of 1321-6.

Slate: Devon

West country slate, presumably from Devon, has already been noted above (p. 238). The importation of slate is recorded in the accounts of 1321-6.

Flint and Chalk: Local

Flint and chalk of local origin was extensively used in rubblework throughout the medieval period. Large chalk quarries existed on Portsdown, conveniently sited only a mile or so north of the castle. Flints could have been gathered from the fields but the iron-stained nature of many of them suggests that the seashore was the principal source. During the building programme of 1396–9 1,000 cart-loads of flint were brought to the castle from Portsdown and the seashore.

### VIII. SMALL FINDS

### By BARRY CUNLIFFE

### Medieval Coin

Fragmentary silver coin. French, denier tournois. Late twelfth or more probably thirteenth century. (Identified by Dr M. Metcalf of the Ashmolean Museum.) C50 layer 15, small find no. 2890.

## Illustrated Objects (fig. 76)

- 1. Iron knife. C40 layer 13, small find no. 2808. Western courtyard area: construction layer of 1396-9.
- 2. Iron key. Fragment. C45 layer 54, small find no. 2838. East range: pre-1320.
- 3. Copper-alloy strip. C43 layer 20, small find no. 2825. Western courtyard area: late fourteenth-century make-up.
- 4. Copper-alloy fragment. Part of a vessel? C45 layer 19, small find no. 2835. East range: sixteenth-century level.
- Bone handle plate. C44 layer 9, small find no. 2821. South-west range: construction layer of 1396–9.
- 6. Whetstone. C45 layer 39, small find no. 2839. East range: mid fourteenth-century layer.
- 7. Whetstone. C51 layer 23. Outside west end of north range in a late Saxon occupation layer.
- 8. Fragment of quern of Neidermendig lava. C41 layer 6. Beneath kitchen of the main hall in gully of late twelth or early thirteenth century.
- 9. Fragment of Purbeck marble mortar. C43 layer 33. Western courtyard area: construction layer of c. 1320-6.
- 10. Fragment of dark green window glass. Two adjacent sides have been deliberately clipped, the third is broken. The clipped sides show signs of having once been leaded. C51 layer 19.

The only other objects found, but not illustrated here, are miscellaneous trimmings of lead and a number of iron nails.

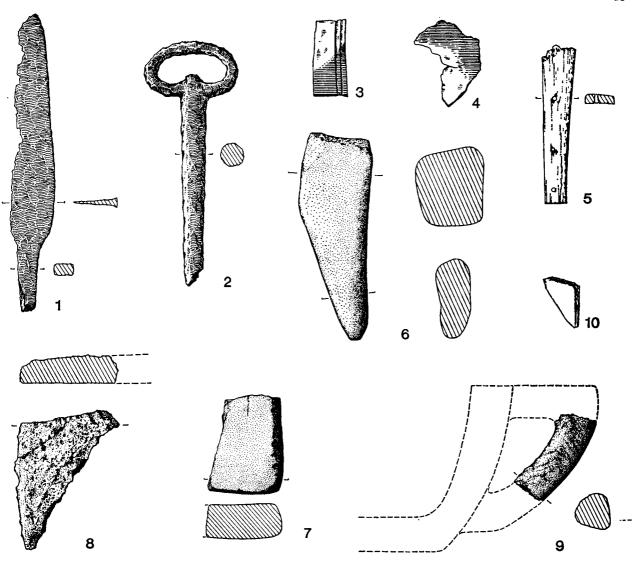


Fig. 76. Small finds  $(\frac{1}{3})$ 

## IX. FAUNAL EVIDENCE

### INTRODUCTION

THE groups of animal bones presented for specialist examination were carefully selected so as to exclude all contexts containing noticeable amounts of residual Roman pottery. We can, therefore, fairly regard the samples studied as an uncontaminated medieval collection. Two types of deposit were discovered: general layers, including rubbish dumped to make up the courtyard and floors, together with a few pits; and in situ occupation deposits on kitchen floors. The former were excavated with trowels and all bones seen were kept; the latter were far more carefully dissected and large samples of each were brought back to the laboratory for fine sieving. Thus we can be sure that from the kitchen deposit samples all small bones were extracted, whereas from the other layers selection was biased to the more readily identifiable fragments.

No attempt was made to sample marine molluscs, but oysters were extremely common, occurring sometimes in thick trampled layers, especially in the south-western part of the courtyard. Mussels, though present, were far less frequent. Whelks occurred sporadically.

### THE LARGE MAMMALS

### By Annie Grant

### Introduction

Just over 8,000 mammal and bird bones and fragments recovered during the excavation of the medieval layers of the inner bailey of Portchester Castle were examined by the writer. Nearly 3,000 fragments could not be positively identified, leaving a total identified sample of 5,300 bones. In addition, a number of fish bones were recovered, which are discussed below (p. 256), whilst bird bones are also reported separately (p. 261).

Professor Cunliffe believes that recovery of bone material from the inner bailey layers was better than that from the other areas of the site, as different techniques of excavation were used. The recovery of much larger numbers of fish bones from this area than from any other area of the site may be an indication of this better recovery. Nonetheless, the possible sources of error and bias that have already been discussed in a previous volume (Grant, 1975) must still be taken into account.

Within the inner bailey area, bones were found in pits and in general occupation layers, including layers that appeared to be composed mainly of kitchen refuse. Bone was not found in great abundance within the inner bailey, and it is only reasonable to assume that the bone refuse of the castle's inhabitants was deposited not only in the inner bailey but also in the pits and gullies of the outer bailey. The analysis of the animal bones found in the medieval layers

of the outer bailey has already been published (Grant, 1977) but in this report comparisons will be made between the two medieval contexts. Three period groupings have been defined for the inner bailey and these are shown with their approximate dates and their contemporary outer bailey phases in table XV.

TABLE XV
Inner and Outer Bailey Phases Used in this Report

Inner bailey	Context	Date	Outer bailey	Context	Date
A B C	Pits + occupation Pits + occupation Pits + occupation	pre-1320 1320–1400 16th century to 17th century	3 4 —	Pits + gullies Gullies	1200-1300 1300-1400

During the excavation of Portchester Castle, particularly large numbers of bones were recovered from the Saxon, and more especially the Roman, layers of the site and consequently a fairly detailed analysis of the bone material from these periods was felt to be appropriate (Grant, 1975 and 1976). Although, in order to ensure a consistency in the bone reports for all periods at Portchester, the same kinds of analysis have been used here as in the earlier reports, the number of bones recovered that were dated to the medieval period is very much smaller than that of the bones of the Saxon and Roman period. Thus, although the methods of analysis used in this report are those used and described in detail in the earlier volumes, it would be unwise to draw any but the most general of conclusions from the results.

The phasing used in the bone reports is summarized in table XV.

## The Species Represented

Bones of a variety of animals were recovered. They were cattle, sheep, pigs, horses, dogs, cats, red deer, fallow deer, roe deer, small mammals (rabbits, hares, etc), birds and fish. The numbers and percentages of bones found for each species are given in table XVI. As in previous volumes, three methods have been used to calculate percentages — 'epiphyses only', 'total fragments' and 'minimum numbers of individuals'. Birds and small mammals have been excluded from the 'epiphyses only' calculations because their small size makes direct comparison with the number of bones of the larger mammals meaningless. Fish bones have been excluded from all percentage calculations for similar reasons. The 'MNI' method has been used only for cattle, sheep and pigs.

The figures are given in their period groupings and, within each group, bones from the kitchen refuse layers are shown separately. In all groups, the sample size is fairly small, and thus the significance of small differences in percentage is low.

Cattle, sheep and pigs seem to have been the species of greatest economic importance. Sheep and cattle bones were found in similar numbers in all three phases. Pig bones were most common in phase B, although the figures may be distorted by the find of the remains of two neo-natal pigs in a single deposit dated to this phase. The survival potential of any

# EXCAVATIONS AT PORTCHESTER CASTLE

## TABLE XVI

Numbers and Percentages of Species Represented

Phase			A	1					В						C	•				
	Kitc refu		Oth laye		Tota	al	Kitc refu		Othe layer		Tota	ıl	Kitch refu.		Oth		Tota	al	Tot	al
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
(a) Epiphy-																				
ses only																				
Cattle	23	33	6о	33	83	33	3	_	96	20	99	21	62	26	27	47	89	30	271	26
Sheep	24	35	62	34	86	34	_		116	25	116	24	73	30	15	26	88	29	290	28
Pig	13	19	54	30	67	27	ı .		152	32	153	32	20	8	7	12	27	9	247	24
Horse		_	2	1	2	ī		_	2		2	<del></del>	l <u> </u>	_	′	_			4	
Dog		_	_	_		_	_		73	15	73	15	75	31			75	25	148	14
Cat	_	_	1	1	r		l		73		2		/3	J-			2	-3 I	5	
Red deer	7	10	2	I	9	4		_	5	1	5	İ	4	2	9	16	13	4	27	3
Roe deer	<u>  _</u> ′	_	_					_	6	1	6	1		_	_	_		_	6	_
Fallow									•	•	•	•							-	
deer	2	3	2	I	4	2	—		19	4	19	4	7	3	_	_	7	2	30	3
Total	69		183	_	252		4	_	47 I		475	_	243	_	58	_	301	_	1436	_
(b) Total																				
fragments																			l	
Gattle			• • •	.0			_		-6-						68	~6			690	
Sheep	53	23	140	18 18	193	19	7	4	269 226	19 16	276	17	153	11		36	221	14	660	17
	45	19	144	18	189	19	4	3	220		230	14	195	14	46	24 6	241	15		12
Pig Horse	32	14	142	10	174	17	3	2		20	284	18	20	2	11	O	37	2	495	12
	-		2		2				5	_	5	_			_	_		_	7	_
Dog	1	_	4	I	5		-	_	174	12	174	11	182	13			182	12	361	9
Cat		_	1		1	_	-	_	I	_	I	_	I	_		_	1	_	3	
Red deer		3	5	I	12	I	—	_	13	I	13	I	5	_	_		5	_	30	1
Roe deer	1-	_			_			_	9	I	9	1	-		1	1	1		10	_
Fallow					•						_		ŀ				•			
deer	4	2	4	1	8	I	I	1	25	2	26	2	9	I	9	5	18	I	52	I
Bird	74	31	311	40	385	38	26	17	377	26	403	25	626	46	13	7	639	41	1427	34
Small	1	_											1							
mammal	19	8	32	4	51	5	115	74	60	4	175	11	175	13	43	23	218	14	444	11
Total	235	_	785	_	1020	_	156	_	1440	_	1596	_	1372	_	191		1563	_	4179	_

animal carcass is far higher if the carcass is buried or disposed of whole, without having been butchered, than if it has been butchered, cooked and eaten, when the individual bones are likely to have been widely distributed. In phase C, there is a significant drop in the proportion of pig bones. The 'minimum numbers of individuals' figures for cattle, sheep and pigs, given in table XVII, are broadly similar to those obtained by the other methods of percentage calculation. The only difference is in the higher percentage of sheep in phase B given by the 'MNI' figures.

In table XVIII, the inner bailey figures for the representation of species in phases A and B are compared with those from the contemporary layers of the outer bailey. It can be seen that, whereas in the inner bailey, cattle and sheep bones were fairly equally represented, in

# FAUNAL EVIDENCE

# TABLE XVII

# Minimum Number of Individuals

	Phase	Phase A		В	•	С	
		No.	%	No.	%	No.	%
Epiphyses onl <b>y</b>	Cattle Sheep Pig	8 <sub>3</sub> 86 6 <sub>7</sub>	35 36 28	99 116 153	27 32 42	89 88 27	44 43 13
	Total	236		368		204	
Minimum number of individuals	Cattle Sheep Pig	6 7 7	30 35 35	5 12 9	19 46 35	5 6 3	36 43 21
	Total	20		26		14	

TABLE XVIII
Species Represented, Inner Bailey and Outer Bailey

Context Phase	Inner l A	-	Outer	bailey 3	Inner l		Outer 4	bailey
	No.	%	No.	%	No.	%	No.	%
(a) Epiphyses only								·
Cattle	83	33	337	54	99	21	53	46
Sheep	86	34	199	21	116	24	26	23
Pig	67	27	100	16	153	32	7	ŏ
Horse	2	1	18	3	2	_	5	4
Dog	_		18	3	73	15	_	
Cat	1	_	_		2	_	1	1
Red deer	9	4	10	2	5	1	2	2
Roe deer	<b>—</b>	_	11	2	6	I	2	2
Fallow deer	4	2	1		19	4	4	3
Total	252	<u>-</u>	624		475		115	
(b) Total fragments								
Cattle	193	19	647	54	276	17	116	45
Sheep	189	19	241	20	230	14	69	27
Pig	174	17	171	14	284	18	35	14
Horse	2	_	24		5		8	3
Dog	5	_	26	2	174	11	l —	_
Cat	1		-	_	1	_	2	I
Red deer	12	I	13	1	13	1	7	3
Roe deer	_	_	13	Ī	9	1	3	I
Fallow deer	8	Í	2		26	2	5	2
Bird	385	38	51	4	403	25	11	4
Small mammal	51	5	14	i	175	11	3	ī
Total	1020		1202		1596		259	

the outer bailey, cattle bones significantly outnumbered sheep bones in both phases 3 and 4. In all phases pig bones were less well represented than either cattle or sheep bones and there is a drop in the percentages of pig bones found over the period of occupation of the outer bailey. This is seen first in phase 4 and continues into phase 6, which falls in date between phases B and C in the inner bailey.

Horse and cat bones were extremely rare in the inner bailey deposits — only three cat bones and seven horse bones were found. Cat bones were also very rare in the outer bailey, but horse bones were slightly more common.

Dogs were better represented in the inner bailey than either cats or horses. In phase B, they formed 15 per cent of the total and in phase C 25 per cent. However, these figures are distorted by the fact that all the dog bones from phase B were found in a single pit and were the remains of only two individuals. The dog bones from phase C were found in the kitchen refuse layers and probably represented only a very small number of individuals. In the outer bailey, dog bones were most frequent in phases 1 and 2, dated 1000–1200. No dog bones at all were found in the layers dated to phases 4 or 6.

Deer bones were found in small numbers in the deposits of all three inner bailey phases. Red deer bones were the best represented in phases A and C, but fallow deer bones were more common in phase B. Similar percentages of deer bones were found in outer bailey deposits.

Bird bones were found in layers of all phases of the inner bailey — in fact they were the most commonly occurring bones. They were most frequent in phases A and C but they were still very common in phase B. The large number of bones found gives a very misleading impression of the importance of birds to the diet of the inhabitants because of the very small size of birds compared with mammals. What is interesting is the number of bird bones found in the inner bailey compared to the number found in the outer bailey, where they are far less common. This may reflect a dietary difference between inner and outer bailey inhabitants, a rubbish-disposal practice or the difference in excavation techniques used in the two areas. Better excavation techniques may also be responsible for the recovery of the comparatively large number of fish bones in the inner bailey (see p. 256). Fish bones were very rarely found in the outer bailey layers of any period.

Small mammal bones were not examined in detail, but the majority were rabbit and/or hare bones. They were particularly plentiful in the latest period of occupation, especially in the deposits that were not specifically designated as kitchen waste.

Comparisons between the representation of species in the kitchen refuse layers and the other deposits of the inner bailey were made particularly difficult by the small size of the kitchen refuse deposits of phases A and B and the non-kitchen deposits of phase C. There appear to be few significant differences, although it may be worthwhile to note that in phase A there was a smaller proportion of pig bones and a higher proportion of deer bones in the kitchen refuse layers. In phase C there were more cattle and red deer bones in the non-kitchen deposits and more bird bones in the kitchen deposits. In phase B, very few large mammal bones were found in the kitchen deposits but there were comparatively large numbers of bird bones.

### The Representation of Bone Elements

Tables XIX-XX give a breakdown and analysis of the individual bone elements recovered

for cattle, sheep and pigs. Percentages have been calculated as percentages of the best-represented skeletal element using the methods described in previous volumes (Grant, op. cit.). Since we are dealing only with small numbers of bones, a very detailed analysis would not be worthwhile. However, there are a few points of interest to be noted. The cattle bone analysis is shown in table XIX. Most skeletal elements are represented in each phase, but horn-core fragments were found only in phase B deposits and here only in very small numbers. Skull and upper jaw fragments were similarly poorly represented, especially in phases A and C. Mandibles, with teeth in situ, were only found in phase B deposits, although a very small

TABLE XIX

Analysis of Bones Represented — Cattle and Sheep

			Ca	ittle					Si	геер		
		A	7: ***	В		С		A		В		C
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Horn core	_		3	33	_	_	_	_	4	17	4	33
Skull	1		21	-	8	_	4	_	3	—	8	
Maxilla	_		2	22	_		<b> </b> -		1	4	_	
Mandible		_	5	56	_		1	8	2	9	5	42
Scapula D	2	18	5	56	3	33	4	31	9	39	4	33
Humerus P	1	9	I	11	3	33	4	31	4	17	ī	8
Humerus D	4	36	5	56	ī	11	13	100	23	100	6	50
Radius P	5	45	8	89	2	22	7	54	14	61	12	100
Radius D	2	18	3	33	4	44	7	54	5	22	3	25
Ulna P	2	18	7	78	4	44	4	31	š	35	5	42
Metacarpal P	2	18	6	67	6	67		_	3	13	ī	8
Metacarpal D	1 1	9	2	22	3	33	2	15	_			_
ist phalanx	10	27	8	22	5	22	1	8	I	4	3	8
and phalanx	6	18	5	22	11	33		_	_			_
3rd phalanx	7	18	5	22	3	11		_	_	_	1	8
Pelvis	3	27	8	89	4	44	9	69	6	26	9	75
Femur P	š	55	2	22	4	44	3	23	6	26	3	25
Femur D	5	45			7	78	1	-3 8	7	30	5	-3 42
Tibia P	3	<del>2</del> 7	4	44	4	44	1	8	2	9	4	33
Tibia D	3	-, 27	9	100	ī	11	7	54	14	61	10	83
Calcaneum	111	100	6	67	8	89	9	69	5	22	6	50
Astragalus	7	64	_		9	100	4	31	I	4	4	33
Metatarsal P	'i	9	8	89	I	11	1 -	<u> </u>	3	13	3	33 8
Metatarsal D	1	9	3	33	5	56		_	3	13	3 2	17
Atlas	1 _		3 4	33 89		22	4	62	3 2	17	5	83
Axis	4	73	<del>4</del>				2	31			3 4	6 <sub>7</sub>
Cervical vert.	1	/3 —	I		I		1	<u>J.</u>	-		8	
Thoracic vert.	6		7		7		15		5 6		11	
Lumbar vert.	3	_	3		7	_	15		10	_	7	_
Sacrum	3		<u> </u>	_	2		''		10	_	1	_
Caudal vert.	;		_	_	2 I	_	1 1	_	I		2	_
Vertebra frags.	1	_	_	_	_	_	1 1			_	2	
Teeth	1				3		1 -		12			_
10011	15	_	27	-	17	_	4	_	12		22	_

P=proximal; D=distal.

number of mandible fragments were found dated to phases A and C. Although, in phase B, horn, skull and mandible fragments are better represented than in either of the other phases, they are still very poorly represented in comparison with other periods of the site's occupation.

Metapodials are better represented than skull fragments, but if their high survival potential is taken into consideration (see Grant, 1975, 384), they are less well represented than would have been expected, if equal numbers of all skeletal elements were originally present in the deposits of the inner bailey.

The outer bailey figures for phases 3 and 4 (Grant, 1977, 218) show a similar, but slightly less pronounced scarcity of cranial material, but mandibles were well represented in phase 3. Metapodials are better represented in the outer bailey than in the inner deposits.

Comparisons between the kitchen refuse layers and the other layers of the inner bailey were very difficult because of the small and disparate sizes of the samples from the two types of deposit in each period. In phase A, in the kitchen deposits, no cattle cranial material was found at all, but the bones of the extremities were represented. In phase B, cattle bones were very scarce in the kitchen deposits but there was no cranial material represented. In phase C, the majority of the cattle bones were found in kitchen deposits and some cranial material and bone from the extremities were found. However, there was no cranial material and very little bone from the extremities in the other deposits of this period.

The analysis of the sheep-bone element representation is seen in table XIX. Again, very little bone from the head was found, and mandibles were particularly scarce when compared with the frequency of their occurrence at all other periods of the site's history, including the inner bailey deposits. The bones of the extremities were also poorly represented and this is mirrored to some extent in the outer bailey deposits of phases 3 and 4 (Grant, 1977, 219). The best-represented bone element in phases A and B was the distal humerus. This bone has a high survival potential, but it is also an important meat-bearing bone.

The analysis of the pig-bone element representation is given in table XX. Cranial material is far better represented for pig than for either cattle or sheep, and metapodials were similarly better represented. Significant differences between three phases of occupation were not apparent. The representation of pig-bone elements in the outer bailey showed a very similar pattern, although metapodials were more common in the outer bailey deposits.

Table XXI gives the number of rib and skull fragments of all species, together with the number of other identified bone fragments for each of the three phases. It is clear that in each phase the percentage of rib-bone fragments found in the kitchen-waste deposits is significantly lower than that of the rib fragments of the other deposits. The table also emphasizes the small number of skull fragments found in the inner bailey deposits. In the Roman and Saxon layers (Grant, 1975 and 1976), 7 per cent of the identified bones recovered were skull fragments. In the medieval outer bailey 4 per cent were skull fragments (Grant, 1977), but in the inner bailey only 2 per cent were skull fragments.

Evidence of the gnawing of bones by dogs was noted on many of the bones. The bones of cattle, sheep and pigs had been gnawed, as had a single horse bone. The major limb bones were most commonly gnawed, especially the distal humeri of sheep and pigs, the radii and tibiae of sheep, the ulnae and tibiae of pigs and the calcanea of cattle. The extremities of some bones may have been completely destroyed by gnawing and this would have had a distorting effect on the representation of skeletal elements.

TABLE XX

Analysis of Bones Represented — Pig

Period		A		В	(	C
	No.	%	No.	%	No.	%
Skull	17	_	39		3	*
Maxilla	12	92	7	41	1	
Mandible	13	100	17	100	4	
Scapula D	1	8	7	41	2	
Humerus P	2	15	6	35	I	
Humerus D	1	8	13	76	_	
Radius P	2	15	12	71	2	
Radius D	2	15	4	24	I	
Ulna P	7	54	12	71	1	
Metacarpal P	8	62	16	94	5	
Metacarpal D	6	46	15	88	3	
ıst phalanx	4	.8	5	12	ī	
and phalanx	2	8	I	6	-	
3rd phalanx	<b> </b>		2	6		
Pelvis	1	8	9	53	I	
Femur P	1	8	4	24	1	
Femur D	_	_	8	47	3	
Tibia P	2	15	10	59	ī	
Tibia D	3	23	12	71	1	
Calcaneum	4	31	6	35	_	
Astragalus	4	31	2	12	ī	
Metatarsal P	5	38	7	41		
Metatarsal D	5	38	6	35	_	
Atlas	I	15	1	12	1	
Axis	_		_	_	-	
Cervical vert.	l		2		1	
Thoracic vert.	6		3 8 6		_	
Lumbar vert.	4		6		I	
Sacrum			_		_	
Caudal vert.	l		l —	_		
Teeth	28		43		2	

<sup>\*</sup> Sample too small for percentages to be meaningful.

TABLE XXI
Ribs and Skull Fragments: All Periods

Phase	A				В			C						
Context	Kita	hen	Oth	er	Kita	hen	Oth	er	Kitch	hen	Oti	her	Tot	al
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Identified frags. Skull frags. Rib frags.	235 5 19	91 2 7	785 17 244	75 2 23	156 — 17	90	1440 80 505	71 4 25	1372 19 145	9 1 9	191 — 73	72 — 28	4179 118 1003	79 2 19
Total	259	_	1046	_	173	_	2025	_	1536		264	_	5300	_

### Butchery

Evidence of butchery was seen on the bones in the form of cut-marks. The cut-marks seen suggested that sharp knives and heavy chopping-tools were used. Evidence for the use of a saw was seen only on one bone.

The medieval butchery practice seemed to differ from that of the Roman and Saxon periods at Portchester in the more frequent use of heavy chopping-tools compared to knives. The bones seem to have been cut into much smaller pieces than in the earlier periods — this is reflected in the higher percentage of unidentified fragments in the medieval period. Identification of bone fragments was sometimes made difficult or impossible by the way in which they had been cut.

The general pattern of butchery was very similar to that already described for the outer bailey. Almost all cuts seem to have been made with a heavy chopping-tool, with knife-marks only very occasionally seen. Evidence of butchery on the cattle bones was seen most frequently on the humerus, pelvis and femur, but also on other bones such as the calcaneum, astragalus, radius and ulna. Several limb bones had been split longitudinally and so had some vertebrae. Many sheep vertebrae had been split longitudinally — this seems to have been fairly common practice. The majority of butchery marks were seen on femora, humeri and radii. The majority of butchery marks on pig bones were seen on the humeri and pelves. Cut-marks were also found on the bones of deer and on some dog bones.

There was no evidence that bone-tool manufacture had taken place in the inner bailey. No sign of bone-tool waste was found and there was certainly no evidence for a horn industry.

## The Age Structure of the Animals

This analysis was made particularly difficult by the small number of bones recovered and especially by the scarcity of mandibles already noted. Only a very general analysis was thus possible. Tables XXII–XXIV give the fusion and tooth-wear evidence.

There is evidence from the state of fusion of the long bones that cattle may have been killed mainly from about  $2\frac{1}{2}$  to  $3\frac{1}{2}$  years, the majority probably having been killed by the time they were about 4 years old. Some older animals were represented, and there is evidence for animals under one year of age in phases B and C.

Tooth-wear analysis was only possible for phase B — one very young mandible was found, three from mature animals and one from an animal of perhaps 3-4 years.

Comparisons between the three phases of occupation were very difficult to make, but it is possible that in the last phase there were rather more animals that were fully mature than in the two earlier phases.

The state of fusion of the sheep bones shows that in all periods there were animals of under one year of age. In phase B, there was evidence of more young animals than in either of phases A or C. Animals seem to have been killed in all age groups, in all periods, with fully mature animals also represented. In phase C, more bones seem to come from older animals than in the other two phases. Tooth-wear evidence was only available for phase C. Three mandibles were from animals probably over 4 years in age, of which two were probably from fairly elderly animals, and two mandibles were from animals of approximately 2–3 years of age.

The evidence for an increase in the number of more mature animals in phase C of the inner

### FAUNAL EVIDENCE

# TABLE XXII

# The Age of the Animals: Cattle

		Period A		В		С	!
	Approx. age at fusion	UF	F	UF	F	UF	F
Pelvis Scapula D	10 months	<del>-</del>	4 2		7 4	<u> </u>	3
Humerus D Radius P	18 months	I I	3 4	=	5 8	=	I 2
Metacarpal D Tibia D Metatarsal D	2-2½ years		1 3 1	3 -	2 6 2	2 2	1 1
Calcaneum Femur P	3½ years	6	1 5	I I	I I	6 2	2 2
Humerus P Radius D Ulna P Femur D Tibia P	3½-4 years	3 1 - 1 3	- 1 - 4 -	 I I  4	1 2 —	1 3 2 3 1	2 1 - 4 3

Tooth-wear stages represented (see Grant 1975, app. B): phase B — 3, 35, 43, 44, 46. UF — unfused; F — fused.

TABLE XXIII
The Age of the Animals: Sheep

		Period A		В	}	(	7
	Арртох. age at fusion	UF	F	UF	F	UF	F
Scapula D Humerus D Radius P Pelvis	10 months		4 12 5 6	3 3 3 1	4 20 11 5		2 6 11 8
Metacarpal D Tibia D Metacarpal D	1½−2 years	1 2	5	- 6 1		_	10
Ulna P Femur P Calcaneum Radius D	2½-3 years	 2 6 5	1 2 4 2		2 4 1 2	- I - 2	2 2 5 1
Humerus P Femur D Tibia P	3-3½ years	3	2 - 1	4 3 1	 4 1	- 1 -	1 4 4

Mandible-wear stages represented: phase C - 31, 34, 41, 49, 49.

### **EXCAVATIONS AT PORTCHESTER CASTLE**

## TABLE XXIV

## The Age of the Animals: Pig

		Period A		В	*	(	7
	Approx. age at fusion	UF	F	UF	F	UF	F
Humerus D Radius P Pelvis	I year	I		4 1	6 8 5	2 _	
Metapodial D Tibia D Calcaneum	2-2½ years	8 1 4	2 2 —	13 9 3	2 	3	
Humerus P Radius D Ulna P Femur P Femur D Tibia P	3½ years	2 2 5 1	= = = = = = = = = = = = = = = = = = = =	3 1 4 - 3 6	   1	I 2 2 I	- 1 1

Mandible-wear stages represented: phase A — 1, 8, 30, 36, 36; phase B — 1, 1, 1, 17, 18, 19, 21, 21; phase C — 1, 1, 18, 24.

bailey is paralleled by the evidence for a similar change in the age structure of the outer bailey sheep in phase 6.

The long-bone fusion evidence for pigs shows that animals of under one year of age were present in all phases of occupation. The vast majority of the pigs seem to have been killed between about 1 and 3-4 years of age, and there is very little evidence for mature animals.

Tooth-wear evidence was available for all phases. In phase A, young and juvenile animals were represented but also more mature animals, although there was no evidence in the long-bone material for animals over approximately 2 years of age. In phase B, the mandibles were from juvenile animals and from the two neo-natal pigs found in pit 243. In phase C, one young animal and two juvenile animals were represented.

### Metrical Analysis

Very few bones were complete enough for their dimensions to be measured. Full details of the metrical analysis of the bones from all periods at Portchester will be published in the final volume. The few measurements of cattle tibiae and metapodials that were taken were well within the range of measurements given for the outer bailey bones (see Grant, 1977, 229).

## Discussion and Conclusions

Many of the points made in the discussion and conclusions of the report on the outer bailey bones are relevant to the analysis of the inner bailey bones and will not be repeated here. This

<sup>\*</sup> Phase B includes the remains of two neo-natal individuals.

discussion is confined to the points that alter or add to the conclusions already drawn from the outer bailey bone analysis.

In this discussion it must be remembered that where the outer and inner baileys are compared there are several factors that may have a bearing on any differences detected. Firstly, recovery is thought to have been better in the inner bailey excavation, and this will tend to increase the proportion of smaller animals relative to larger animals. Secondly, there may be differences in rubbish-disposal practices. It may well be that the vast majority of the rubbish generated by the inner bailey inhabitants was thrown into the outer bailey, and only particular sorts of rubbish deposited in the inner bailey. Thirdly, there are likely to have been social differences between the occupants of inner and outer bailey which may be reflected in the bone refuse of the two contexts.

One of the real differences between the inner and outer bailey lies in the presumption that no animals, with the possible exception of dogs, cats and birds, actually lived in the inner bailey. The outer bailey may well have been used for stabling or grazing at certain times. Thus most of the bone found in the inner bailey is likely to be simply food refuse, that is the remains of meals. This view is given weight by two facts deduced from the bone analysis.

Firstly, cranial material, especially of cattle and sheep, is extremely rare and the bones of the extremities are also poorly represented. This implies that preliminary butchery of the carcasses was not carried out in the inner bailey, and that only the major meat-bearing bones were brought into the inner bailey for cooking. The fact that rather more cranial material was found for pigs may relate to a different cooking technique for these animals. The heads of pigs can be cooked whole as 'boar's heads', which are known to have been a medieval delicacy (Hartley, 1973), and cheek-meat can be made into Bath chaps. Many of the pig bones were from young animals and young pigs could have been roasted whole on spits in front of the kitchen fire.

Secondly, there were very few horse bones found in the inner bailey. No horse bones found anywhere in Portchester Castle in the medieval period showed any evidence of having been butchered, and those of the outer bailey seem to have been found in a few pits and were not evenly scattered with the rest of the bone material. The assumption is thus made that horses were not considered as food animals and they were perhaps kept in the outer bailey for use as riding animals or for traction.

In contrast to the small number of horse bones, significant numbers of dog bones were found in the inner bailey in phases B and C. The majority of the bones were from a small number of individuals whose remains were buried together, and we may assume that they represented hunting dogs, pets or guard dogs kept in the castle. However, a few bones had cut-marks on them and it would seem that dogs were occasionally eaten.

Although we must assume that the large number of fish and bird bones found reflects, at least in part, the improved recovery techniques of the inner bailey, these bones may also reflect eating habits and a life-style that differed from that of the outer bailey inhabitants or that of the earlier inhabitants of Portchester. Falconry was increasingly popular in England after the Conquest (Wilson, 1973), especially among the noblemen. Hawks and falcons could be flown at a variety of birds which might end up in the castle kitchens. Birds could also be trapped or bought from professional bird-catchers, of course. Fish were particularly important in the medieval period since the Church designated many days when meat could not be

eaten. Since days of abstinence were many, fish must have been of great importance to the diet.

The deer bones, in theory, should represent the results of the sport of the nobles. Hunting for rabbits and hares was, however, considered poor man's game (Wilson, op. cit.). Fairly high percentages of small mammal bones (mainly rabbit and hare bones) were found, especially in phases B and C. There was a warren at Portchester, see below, p. 289.

The age structure of the animal bones suggests that those animals eaten in the inner bailey were generally those kept mainly as store animals. In phases A and B particularly, only a small percentage of mature animals were found. Cattle used for traction and sheep needed for wool-production are generally kept to a much older age than those wanted only for food. It would appear that these animals were not generally being eaten within the castle. In fact, the percentages of mature cattle and sheep in the earlier phases of the outer bailey were lower than they had been in the Roman and Saxon period, although in the latest phases in the outer bailey, as in the inner bailey, more mature sheep were found.

It seems unlikely that the bone from either the inner or the outer bailey can be thought to give an accurate picture of the animal husbandry practices of the Portchester area. Although there are differences between the bone assemblages of the two areas of Portchester, there are also many similarities. These are seen especially in the small numbers of mature animals, the relatively small amounts of skull and other 'waste' bones, when compared to the other periods of occupation at the site, and in the similarity of the butchery techniques. The bone assemblages of the medieval period do not seem to be complete enough in the range of skeletal elements and age groups represented to provide a full picture of animal husbandry practice.

Changes occurring between the three phases A, B and C were difficult to isolate clearly. The impression is that periods A and B were on the whole fairly similar, but that there were differences between these first two phases and phase C. These differences were seen particularly in the decline of the importance of pig and in the increase in the percentages of mature animals, especially cattle and sheep, in the later phases. These changes were paralleled in the outer bailey and may reflect changing agricultural practices of the surrounding areas, but they may also reflect changes in the nature of the occupation of the site in the latest phases.

### FISH BONES

## By Jennie Coy

Numerous factors affect both the deposition and retrieval of fish remains. At Portchester, fish bones from the medieval layers may be from fish used as food; from those discarded uneaten, through small size or decay; from fish used for bait; or from any fish fresh in the guts of larger ones. Unusual or attractive fish could always have been brought back out of interest.

The species and sizes available locally would vary according to season. Fish migrations are complex and are linked both with age and time of year.

There may have been a number of people involved in fishing at Portchester itself (see below, p. 290) and fishing could have taken place off the shore here, on sand or mud-flats exposed at low tide, from boats within Portsmouth Harbour, or from boats further afield. By

the medieval period there was likely to have been short- and long-distance importation, especially of salt fish. By the year 1300 Southampton at least was trading with Lowestoft (Studer, 1910, 5). By the early fifteenth century the port books suggest that trade included, for example, congers from the Channel Isles, salmon from Suffolk, herrings from Suffolk, Dieppe and Étaples, stockfish (probably split cod) from Norfolk, pollack from Cornwall, Devon and Brittany, and ling and cod from the Netherlands (Studer, 1913). Portsmouth cargo boats were often in Southampton according to port books and overland export of fish may also have occurred from Southampton, as it did to Winchester. Bearing all this in mind, ecological interpretations based on the Portchester medieval fish bones are probably irrelevant.

Added to these depositional factors is the difficulty that the deposits studied are not necessarily comparable, although a number of them are from apparent kitchen refuse. Retrieval must also play a controlling role in any fish sample produced for archaeozoological study. The need to water-sieve with a carefully controlled experimental design is only just now being realized in British archaeology. Only the fine sieves in this process can check the relative 'drop-off' that occurs in small fish (Clason and Prummel, 1977, 174). Fish-bone retrieval at Yarmouth (Wheeler and Jones, 1976) and work by Southampton Archaeological Research Committee have shown that the picture of fish-exploitation for a settlement may need complete revision after sieving has revealed quantities of small fish like herring and eel. These species have only been shown in two layers in the Portchester sample and it is likely that their actual importance was much greater.

In spite of these limitations the sample is useful as supplementary information on diet, and some trends are visible even with such a small and limited sample.

## The Fish Represented

Table XXV shows the overall results for the three chronological groups A, B and C and totals. Bones from known kitchen refuse are included in all totals and given also in parentheses. Kitchen refuse layers involved are as follows:

Phase A — pre 1320. C41 layer 6 and C42 layers 43, 45, 46 and 47

Phase B — 1320-1400. C49 layer 11

Phase C — late sixteenth and early seventeenth century. C49 layers 8 and 9

Most of the 1,200 or so fish fragments examined could not be taken to species and attention was concentrated on the well-preserved head-bones and vertebrae. Bones were assessed for fish size by comparing cod premaxillary and dentary measurements with the graph produced by Wheeler and Jones (1976, 215) or, for other bones and species, by comparing measurements taken according to Morales and Rosenlund (1979) and the general overall size of the fragments with modern skeletons of weighed and measured fish in the collections of the Faunal Remains Project, Southampton University (p. 261). This is not so reliable, since the true relationship between bone size and body weight has not been worked out, as it has for cod jaws, and the weights given must be regarded purely as a rough guide to size-class.

I am grateful to Mr Alwynne Wheeler not only for all the information provided in his books (e.g. Wheeler, 1969 and 1978), but for his kindness in allowing me access to the collections at the British Museum (Natural History) for some problem bones. Neither of these

## EXCAVATIONS AT PORTCHESTER CASTLE

### TABLE XXV

## The Overall Distribution of Fish Fragments

Species	Phase A	Phase B	Phase C	Total
Anguilla anguilla, common eel	<del>-</del>	4		4
Conger conger, conger eel	26 (17)*	27	13 (12)	66
Clupea harengus, herring		11	<del>-</del>	11
Salmo salar, salmon	_	3	2	5
Salmo sp., salmon or trout	1 (1)		_	ī
Gadus morhua, cod	14 (10)	9 (2)	20 (19)	43
Melanogrammus aeglefinus, haddock	<del>``</del>	ī		13
Merlangius merlangus, whiting	I	1 (1)	6 (6)	8
Trisopterus minutus, poor cod	4 (4)		<u>`</u>	4
Pollachius pollachius, pollack	2 (2)	_	2 (2)	4
Molva molva, ling	10	I	40	51
Merluccius merluccius, hake	I	_	13	14
Gadoids (see bracket above) not			•	•
identifiable to species	I	11 (1)	3 (3)	15
Belone belone, garfish	I	3 `	<del>-</del>	4
Eutriglia gurnardus, grey gurnard	_	_	ı (ı)	Ī
Dicentrarchus labrax, bass	9 (6)	5	4 (4)	18
Trachurus trachurus, horse mackerel	1 (1)	<u> </u>	<del></del>	I
Mugilidae, mullet†	5 `	_	8 (8)	13
Crenilabrus melops, corkwing wrasse	_	I	ī	2
Sparidae, sea bream	2	2		4
Scophthalmus maximus, turbot		I		ī
Scopthalmus sp., turbot or brill	_	I	1 (1)	2
Pleuronectes platessa, plaice	5	I	<u> </u>	6
Platichthys flesus, flounder	1 (1)			I
Plaice or flounder	55 (31)	25		8o
Solea solea, sole	2 (2)		-	2
Unidentified fragments	335 (251)	320 (4)	190 (182)	845
Totals	476	427	304	1207

<sup>\*</sup> Figures in brackets show the number in kitchen deposits.

collections had large enough specimens to match some of the Portchester remains and some fragments can therefore only be referred to as 'larger than...' a particular fish in the collections.

### Phase A. Pre-1320

Conger eel was well represented. The kitchen refuse contained remains of four individuals roughly similar in size to a 3.5 kg. conger (2), a 16 kg. specimen, and (a single vertebra, in C42 layer 43) an even larger conger. Elsewhere at least six more congers were represented, one around 16 kg., two slightly less than that, and three smaller ones probably between 2 and 4 kg.

The kitchen refuse sample contained the remains of at least six cod of c. 0.5, 1-1.5, 3-6 (2),

<sup>†</sup> Mullet bones were comparable with those of thick-lipped grey mullet Crenimugil labrosus, but lack of comparative material of the other species makes specific distinction unwise.

c. 10, and c. 14.5 kg. respectively. Elsewhere layers gave evidence of at least five more cod, four of which could be roughly sized at c. 1.5, 3-6, c. 10, and c. 14.5 kg.

Ling occurred only in C50 layer 15, with some very large butchered fragments representing at least two fish much larger than a modern 6.4 kg. specimen and one smaller than 5.5 kg. Of the other cod-like fishes, the pollack represented in C41 layer 6 was a very small fish, but the hake in C48 layer 40 was comparable with a modern fish of 2.5 kg. Throughout this account the term 'gadoid' is used to cover all species of the cod and hake families.

Kitchen refuse contained the remains of three large specimens of bass, two greater than a 5.5 kg. specimen, one roughly comparable with it, and a small bass of less than 0.25 kg. in weight. A bone from a large bass (c. 5.5 kg.) was also in C48 layer 39.

Flatfish represented in the kitchen refuse comprised a Dover sole (from a well-preserved neurocranium) of 0·3-0·5 kg. and nine plaice or flounder. One plaice neurocranial fragment was well enough preserved to be specifically identified. Bones of four compared with modern specimens of 0·2-0·3 kg., two with those of 0·4 kg. (all normal fish-shop size by modern standards), whereas three individuals were larger than a modern 2·5 kg. plaice described by the collector as 'the size of a dustbin lid'. Plaice or flounders of this size or larger were retrieved from four other layers in phase A in addition to remains of six individuals of the smaller size groups and one intermediate one. In C50 layer 15 there was a second positive identification of plaice from a jaw-bone and in C48 layer 38 one of flounder.

Other species found were of less significance in terms of food than those above, and the distribution of identifications within the deposits of this period may be linked as much with preservation and retrieval methods as with distribution. The kitchen refuse, being more carefully sampled, produced remains of a very small species — the poor cod, *Trisopterus minutus*, as well as the pollack and a dermal scute of horse mackerel. There were also traces of mussel shell, *Mytilus edulis*, and many unidentifiable fish spines and rays. Bones in C48 layer 40 were also well preserved, providing the only evidence of garfish for the period, and some possible sea bream vertebrae.

### Phase B. 1320-1400

The four groups mentioned in detail for phase A—conger, gadoids, bass and flatfish—were again in evidence. The individual congers represented ranged over the same categories as those in phase A. Individual cod represented were less than 0.5, c. 0.5 (2), 2-3, 3, 8 and greater than 15 kg. respectively. The small cod here and some other small gadoid remains may result from better retrieval. There were at least three big bass represented, comparable with those in phase A, and one a little larger than a modern 0.3 kg. example. Flatfish included a turbot (probably slightly less than 3.5 kg.) and a larger turbot or brill in C50 layer 12. Most of the plaice or flounder came from fish around 0.3-0.5 kg. except for two specimens bigger than the 2.5 kg. modern one mentioned above. These were from C47 layer 12 and C50 layer 12.

The single bone of ling from this period (in C50 layer 12) was from a very large specimen. Salmon, from C42 layer 24 and C47 layer 7, was roughly comparable with a 2 kg. specimen.

The deposits of kitchen refuse of 1320-50 date contained the remains of a 5-10 kg. cod which had possibly been split longitudinally, and a small whiting (less than 0.5 kg.). Bone from C42 layer 24 and layer 27 was also well preserved, so well that it may be more repre-

sentative than all other samples from the site. Salmon, garfish, and possible sea bream came from here as well as traces from two good-sized herrings and a tiny bone from a corkwing wrasse.

Pit 265 contained a number of bones from a big conger (larger than a 16 kg. specimen). Many of the bones had been chopped right through as if the fish had been split roughly longitudinally. It also contained bones of bass, cod and flatfish.

## Phase C. Late Sixteenth-Early Seventeenth Century

There are more differences here. Kitchen refuse in C49 layer 8 and layer 9 forms most of the collection and shows a higher concentration of gadoid bones — representing four butchered ling all around 5-6 kg. size; six cod (less than 1, c. 0.7, c. 3, c. 6 and c. 9.7 (2) kg.) — one with butchery; three whiting (less than 1 kg.); a pollack a bit less than 3 kg.; and four hake (c. 0.5, 0.5-2.5 and c. 2.5 (2) kg.).

These same deposits also contained the mullet, grey gurnard, salmon, and the only flatfish bone from the period — a vertebra of a large turbot or brill (in excess of 3.5 kg.). Three bass were represented, two around 5-6 kg. size and the other a very small one not much over 0.25 kg.

Bone from C48 layer 15 produced cod and a small corkwing wrasse, and that from C50 layer 6 conger eel. The presence of many delicate rays and cranial fragments in the kitchen layers suggests that sampling and preservation was as good as in the kitchen layers in other periods, so that alteration in emphasis from flatfish to gadoids may represent an actual trend.

#### Conclusions

Apart from the euryhaline fishes, salmon and eel, and the flounder, which may travel up rivers, the remains are all from marine fishes. Table XXVI compares the representation of conger, gadoids, and flatfish for the three periods using the numbers of fragments as a percentage of the total identified fragments from that period. This compares well with the corresponding 'minimum numbers of individuals' given in table XXVII. Unlike table XXVI these are actual figures and are not corrected for sample size.

While accepting the problems of sampling stressed throughout this report, especially the difficulty of comparing different types of samples, there does at least seem to be a rise in the importance of deeper-water species, especially ling and hake, in phase C and a complete

TABLE XXVI

Percentage Representation of certain Groups, by Fragment
Count, Compared with the Total Identified Fragment
Count for the Period

	Phase A	Phase B	Phase C
Conger eel	21	25	11
Gadoid	23	21	74
Flatfish	23 48	26	I
Others	8	28*	14

<sup>\*</sup> This high figure may be partly a result of better preservation and/or retrieval from one or two layers.

#### FAUNAL EVIDENCE

# TABLE XXVII

Minimum Numbers of Individuals Recognized in Each Period

	Phase A	Phase B	Phase C
Conger eel	10	12	4
Gadoid	15	13	19
Flatfish	22	11	1
Others	6	12	5

absence of plaice and flounder. Perhaps easier supply of large salted fish made local collection of fish less important. Some of the butchery observed may have taken place before salting.

It is probably not coincidental that amongst the commonest fish imports recorded by Robert Florys in the early fifteenth century were ling and hake (Studer, 1913). There is a slight decline in the significance of flatfish observable by comparing results from phase B with those from A, but it is not until the post-medieval period that this becomes marked. Herrings may have become important in phase B, but the remains of these are difficult to assess without fine water-sieving. Imports, if they existed, are obviously mixed with local catches here, but samples of the other species are too small to discuss in detail.

The waters around Portchester are, and probably were then, relatively shallow. Today Portsmouth Harbour yields bass, pollack, mullet, flounders, silver eels, and plaice; with small cod (codling) in late autumn; congers around wrecks; red bream, grey gurnard, and sharks in summer; and whiting in cold frosty weather (Stoker, 1963). Unless building and repair work around the castle created pseudo-rocky conditions it is difficult to see this as a good place for conger, but with the exception of these, and very large cod, and ling, and the herring and hake, all the fish could have been caught locally from the shore or from boat-based fishing near it. Comparable fish have been donated to the Faunal Remains Project over the last three years by Southampton anglers or Fawley Power Station. It is likely therefore that throughout the time-span covered by these deposits the small flatfish, all bass, mullet, salmon, garfish, and gurnard were locally caught. Flatfish were transported around Britain in the medieval period, and although the large flatfish might have been locally line-caught import is again a possibility.

The splitting of large fish, possibly as an aid to preservation (Cutting, 1955), occurred in periods B and C.

Finally it should be stressed that, in spite of the absence of their remains, it is likely that cartilaginous fishes — skates, rays, dogfish and sharks — and very small fishes like sprats may also have played a part in the diet.

#### BIRD BONES

## By Anne Eastham

The medieval and later excavations at Portchester Castle yielded nearly 1,300 bird bones, and the variety and range of species raise some interesting implications about the sporting

and eating habits of the occupants over a long period of time. Each phase produced its own deposits of kitchen refuse, and careful recovery of these has provided useful comparisons.

# Phase A. Pre-1320 (table XXVIII)

The levels dated to the pre-1320 period contained some very interesting species. The check-list includes:

Anser anser (goose)
Anas platyrrhyncos (mallard)
Anas penelope (wigeon)
Anas crecca (teal)
Gallus gallus (domestic fowl)
Perdix perdix (common partridge)
Vanellus vanellus (lapwing, green plover)
Numenius arquata (curlew)
Numenius phaeopus (whimbrel)
Uria aalge (guillemot)
Columba palumbus (wood pigeon)
Columba livia (rock dove)
Lullula arborea (wood lark)
Turdus philomelos (song thrush)
Corvus monedula (jackdaw)

Of 387 bones recovered from this period, the domesticated species are, as might be anticipated, the most common. Geese, duck and domestic fowl were regularly reared and eaten in considerable numbers. Teal and wigeon would have been resident locally in the wild but could also be induced to join the domestic flock for regular feeding, or could have been decoyed very easily.

Waders and game birds also feature in the diet. Partridge would have been easy to drive and net on local agricultural land. But the inhabitants also caught curlew, whimbrel and plover. A guillemot might have been considered less attractive fare, since its flavour when cooked is noticeably oily and fishy. But the guillemot's larger cousin, the great auk, was considered a delicacy among seafarers and finally became extinct in 1844.

The pigeons, both wood pigeon and rock dove, would have been trapped in the environs of the castle. Indeed, it is more than probable that the doves were domestically bred as a winter stand-by, since this was the regular practice of most large establishments.

The passerines in these levels are few: a thrush, which could have died accidentally, though they are regarded as quite good eating, a jackdaw, which is not, and, more doubtfully, a wood lark. Microscopic comparison of the wood lark bones suggested that the determination was probably accurate on osteological grounds, but they are not a common species at the present day even though they are found throughout southern Britain, and it is recorded that occasionally in winter small flocks gather on coasts and coastal shrubland.

From these levels one batch of bones was too eroded for identification, although their general size suggested that they had belonged to a variety of small chicken, partridge, fowl or

#### FAUNAL EVIDENCE

## TABLE XXVIII

# Bird Bones from Phase A (Pre-1320)

	Anser anser	Anas platyrrhyncos	Anas penelope	Anas crecca	Gallus gallus	Perdix perdix	Vanellus vanellus	Numenius arquata	Numenius phaeopus	Uria aalge	Columba palumbus	Columba livia	Lullula arborea?	Turdus philomelos	Corvus monedula	Unidentified
Skull		2														
Mandible (upper)	1				1							1				
(lower)					2							l	l		ŀ	
Coracoid	2	1			8							3				
Sternum	3				3	1									I	
Furcula	2	1				1										
Scapula					6	I						1				
Vertebrae	12				3									l		
Ribs												ļ				
Pelvis	2				5 8	I				I					i	
Humerus	2	3	2		8		I	1	2		Ī	I	1		6	
Radius	4	3	I									2	l		1	l
Ulna	5	2		2	10	4			1		1	1	2		6	
Carpometacarpus	8	2			6							2			I	ĺ
Digits	4															Ì
Femur				I	6	3				1				1	4	
Tibiotarsus	2		I		10	3						1		I	I	ł
Fibula				1									•			ļ
Tarsometatarsus		I		1	149							3	ŀ		3	
Phalanges	1															
Total (387)	48	14	4	3	91	14	I	r	3	ī	2	13	3	ı	23	165

pigeon, which had been boiled for a long while for soup or some similar pot au feu. The state of disintegration of the remains would support such a notion.

One particular refuse pit (pit 243) of this date deserves mention. The species found in it were very similar to other deposits of the period, but curlew and whimbrel occur, and it was into this pit that the guillemot was thrown.

# Phase B. 1320-1400 (table XXIX)

Very few bones were recovered from deposits of the 1320s, only 26 in total. There are a few geese, duck and domestic fowl, and the species include:

Anser anser (goose)

Anas platyrrhyncos (mallard)

Gallus gallus (domestic fowl)

Perdix perdix (common partridge)

Coturnix coturnix (quail)

Numenius arquata (curlew)

Columba livia (rock dove)
Corvus monedula (jackdaw)

#### **EXCAVATIONS AT PORTCHESTER CASTLE**

## TABLE XXIX

Bird Bones from Phase B (1320-1400)

	Gavia immer	Anser anser	Anas platyrrhyncos	Anas penelope	Anas crecca	Cygnus olor	Gallus gallus	Perdix perdix	Coturnix coturnix	Numenius arquata	Scolopax rusticola	Tringa totanus	Calidris alpina	Philomachus pugnax	Larus argentatus	Larus canis	Columba livia	Corvus corone	Corvus monedula	?Galerida cristata	Turdus philomelos	Turdus merula	Anthus spinoletta	Emberiza sp.	Garrulus glandarius	Sturnus vulgaris	Passer domesticus	Unidentified
Skull							1												1	Γ								
Mandible (upper)	1		İ		1																							]
(lower) Coracoid	1		ĺ				1			i							_		1			1					l	1
Sternum		1					6				1						6		1						ļ			
Furcula		3	1			1	5 1	1		1							2		•	l	İ		ļ		1			
Scapula			1				2	•									5				ĺ	ļ						
Vertebrae	1			'			•									i i	J			1					1			
Ribs	l						2													1					1			
Pelvis	1	1					I	1									4											
Humerus		1		1	1		10	2									4 8		2		İ		l	1	ļ		1	
Radius	1		3		3		13	1			1			1	1		5	1			1		1	1	1			
Ulna	1	2	I	I	2		15			1					I		4	1			-	[		1	1			
Carpometacarpus	I	I	İ		t		5			I							7	2	1	I		ĺ	ĺ	1			I	
Digits		3	l		1				] .															1			l	İ
Femur Tibiotarsus	1	1	I		2		9	I								I	8		_		1							
Fibula	1	1					15										2		2	ł		l	ļ	ļ	1	1		ļ
Tarsometatarsus	ŀ		١.	1			3	_	ı			1	,				7		3		,		ı	ı				
Phalanges			I				40	5	1			•	•	3			,		3		•	•	1	•				
Total (368)	3	14	7	2	10	ı	129	11	I	2	1	I	1	4	2	I	58	4	12	1	ī	1	1	2	1	1	2	94

The domestic fowl, though few in number, are variable in size. Some are quite large, while others are quite small and more like bantams. The quail could have been netted in the fields, though they were often hatched under broody hens and reared as tame birds for the table.

The same general pattern is found in the bird material recovered from pits and deposits dated to between 1320 and 1350. Species found in the general refuse of this period included:

Anser anser (goose)

Anas platyrrhyncos (mallard)

Anas penelope (wigeon)

Anas crecca (teal)

Gallus gallus (domestic fowl)

Perdix perdix (common partridge)

Scolopax rusticola (woodcock)

Numenius arquata (curlew)

Calidris alpina (dunlin)

Larus canis (common gull)

Columba livia (rock dove)

Corvus corone (crow)

Corvus monedula (jackdaw)

The domestic species at this time are mainly geese and chickens, of which there are again both a large and a small breed. One goose tibiotarsus was heavily gnawed by a rat. The teeth-marks are very clear indeed and the animal was evidently foraging through the rubbish. Only one bone each of mallard, wigeon and teal were recovered. Other game was still popular, with partridge and a variety of waders, curlew, dunlin and woodcock.

Gulls are the most common species in the area today and common gulls are to be expected in this context. The only surprise is that they are so rare. There is one herring gull and a tern in Saxon levels (Eastham, 1976) but until the sixteenth and seventeenth century there are very few gull remains indeed. The passerines include (possibly resident) rock doves, a crow and a jackdaw.

A number of pits belong to this period and, in so far as the avian material recovered helps to fill out the picture of bird life presented by the other finds, they are quite interesting.

Pit 243 contained:

Anser anser (goose)
Gallus gallus (domestic fowl)
Columba livia (rock dove)
Corvus monedula (jackdaw)
Garrulus glandarius (jay)
Sturnus vulgaris (starling)
Emberiza sp. (finch sp.)
Passer domesticus (house sparrow)

There are more rock doves in this pit than in other deposits of the period, with fewer chicken and geese. The jays were probably killed for egg-stealing or attacking young chicks or game, which the castle occupants were rearing or preserving for their own purposes. Jays are never popular with keepers for the damage they do to young birds.

The finch, or bunting, humerus is fairly large, approximating very closely to the yellow hammer, *Emberiza citrinella*, but with only one of them for comparison it is not possible to make a precise identification.

Pit 265 contained:

Gavia immer (great northern diver)
Anas penelope (wigeon)
Anas crecca (teal)
Gallus gallus (domestic fowl)
Columba livia (rock dove)
Corvus corone (crow)
Turdus merula (blackbird)

The only notable find from this pit is the three bones of the great northern diver. An almost complete skeleton of this diver was found in the Roman levels (Eastham, 1975) and two tarsometatarsi in the late Saxon levels (Eastham, 1976). It seems that despite its shyness this species was continuing to winter in the Solent during the fourteenth century.

Pit 266 contained very little avian material (only three chicken bones), so that no particular comment is required.

```
Pit 276 contained:

Anser anser (goose)

Anas platyrrhyncos (mallard)

Anas crecca (teal)

Gallus gallus (domestic fowl)

Perdix perdix (common partridge)

Columba livia (rock dove)
```

This pit contained only 43 bird bones, of which 18 were so badly damaged and eroded that no identification was possible. The relative numbers and range of species again conform with other finds of this date.

Only 15 bird bones were recovered from contexts dated to c. 1350 and the check-list shows that four of them must have been kitchen refuse.

```
Anser anser (goose)
Anas platyrrhyncos (mallard)
Anas crecca (teal)
Gallus gallus (domestic fowl)
```

The second half of the fourteenth century reveals again the interest the residents of the castle had in wild-fowling and in complementing their diet with a variety of game. Species recovered were:

```
Anser anser (goose)
Anas platyrrhyncos (mallard)
Anas crecca (teal)
Cygnus olor (mute swan)
Gallus gallus (domestic fowl)
Perdix perdix (common partridge)
Scolopax rusticola (woodcock)
Numenius arquata (curlew)
Tringa totanus (redshank)
Calidris alpina (dunlin)
?Philomachus pugnax (ruff?)
Larus argentatus (herring gull)
Larus canis (common gull)
Columba livia (rock dove)
?Galerida cristata (crested lark?)
Turdus philomelos (song thrush)
Anthus spinoletta (rock or water pipit)
Emberiza sp. (finch sp.)
```

The remains appear as almost a feast of game. Certainly swans were much relished and were usually eaten in rather high society. A number of swan bones occurred in levels of a similar date at Winchester Castle. The other five wader species, woodcock, curlew, redshank, dunlin and ruff, show eclectic tastes in food birds. The ruff is interesting, but with only four

bones for comparison its determination is tentative. The tarsometatarsi gave the best basis for identification, which appeared to be correct. The bones are much smaller than those of green plover, shorter and thicker than those of redshank and too large for any but the most southern specimens of golden plover available, even allowing for sex difference in *Charadrius apricarius*.

The ruff is now a palaearctic species which is only a passage migrant to the British Isles, and so is rarely seen. It used to breed regularly in Norfolk until 1871 and sporadically in single pairs until 1922. It still breeds in western France. It may have been more common formerly, either on passage or even breeding on the marshlands of the south coast.

It is interesting that the most common bone found of these game birds is the tarsometatarsus. It is almost as though the lower legs were trimmed off when the birds were dressed for cooking, even though at the present day it is regarded as better to leave the legs and feet attached until after the bird is cooked. If, then, the tarsometatarsus is pulled before serving, it is possible to withdraw with it the very tough tendons which pass down the leg from the distal end of the femur to control the feet.

Another species which is of uncertain determination is the crested lark. It is really a species of south-central Europe and dryish open spaces, and only rarely appears in southern England. The carpometacarpus, however, is much larger than that of a skylark, which is our largest lark. The rock or water pipit is much more acceptable to record. In any event these two species and the small finch bone illustrate how much more information is furnished when the recovery of finds is careful and complete enough to yield information about the smaller passerines as well as the large species of food birds.

# Phase C. Sixteenth and Seventeenth Centuries (table XXX)

The final phases of the Portchester Castle excavations belong to the sixteenth and seventeenth centuries. There were 334 bird bones and the list is again an extensive one.

Anser anser (goose) Anas platyrrhyncos (mallard) Anas penelope (wigeon) Anas crecca (teal) Cygnus olor (mute swan) Circus aeruginosus (marsh harrier) Gallus gallus (domestic fowl) Perdix perdix (common partridge) Gallinago gallinago (snipe) Numenius phaeopus (whimbrel) Tringa totanus (redshank) Calidris alpina (dunlin) Larus argentatus (herring gull) Larus canis (common gull) Columba palumbus (wood pigeon) Columba livia (rock dove) Corvus corone (crow) Corvus monedula (jackdaw) Sturnus vulgaris (starling)

## **EXCAVATIONS AT PORTCHESTER CASTLE**

#### TABLE XXX

Bird Bones from Phase C (sixteenth-seventeenth century)

	Anser anser	Anas platyrrhyncos	Anas penelope	Anas crecca	Cygnus olor	Circus aeruginosus	Gallus gallus	Perdix perdix	Gallinago gallinago	Numenius phaeopus	Tringa totanus	Calidris alpina	Larus argentatus	Larus canis	Columba palumbus	Columba livia	Corvus corone	Corvus monedula	Sturnus vulgaris	Unidentified
Skull Mandible (upper) (lower) Coracoid Sternum Furcula Scapula Vertebrae Ribs Pelvis	3	1	I	3 1			4 7 2 5 3 1	1						1 10 1 2		2 I I		1		
Humerus Radius Ulna Carpometacarpus Digits Femur Tibiotarsus Fibula Tarsometatarsus Phalanges	3 4	1 3 8 11 2 1	2 2 2	2	I	1	8 5 9 3 1 12 18 1 15 11¢	1 3 1 3	I	I	1	1	1 6 2	9 2 11 4	2	7 5 12 1 1 3	2 I	1 2 2	2 1 7	
Total (334)	21	28	7	6	ı	3	95	10	1	I	1	1	10	42	3	36	3	9	10	46

Most numerous once more are the domestic geese, duck and domestic fowl. As before there are two sizes of fowl, with some bantams in addition to the chickens.

As in the other levels, the hunted species are of wild fowl, wigeon, teal and swan; and the same pattern of other game is repeated: partridge, snipe, whimbrel, redshank and dunlin. In levels of this period was found the only predator, a marsh harrier. One was also found in the early medieval levels and it is interesting that they were resident in southern Britain at this date. They are described as a species in the first printed bird book, William Turner's Avium Praecipuarium, published in Cologne in 1544. They are recorded as having bred in Norfolk until 1936–7 but now are only rare vagrants to the British Isles. Where they do flourish, however, they are voracious predators and will take even large snakes, flying off with the reptiles writhing from their beaks. Other food would include young rabbits, hares, and both eggs and young of almost all wild fowl, crakes, rails, pheasant, partridge, snipe and so on. On the whole it is not astonishing that this one was destroyed by the sportsmen of Portchester Castle.

The other notable change in this period is the increase in the gull population. Up until this time gull bones could be numbered in ones and twos. Now, however, a sizeable population

seems to be emerging. It gives rise to some speculation as to whether, in view of their present-day behavioural patterns, this is the beginning of the increase which led to the enormous modern gull population and whether at this time they were exploiting the sewage and rubbish of the castle. Gulls have become a much more inland and less coastal species during the period over which local authorities have developed systems for the disposal of sewage and garbage. Observations of their daily pattern have put gulls somewhat under suspicion as carriers of disease, both human and animal. Besides the fact that the gulls were probably foraging on the rubbish heaps of the castle, it is also possible that they may have been killed for food by anyone who did not feel too fastidious about their habits or the flavour of their flesh.

The record of bird bones at Portchester Castle from the beginning of the fourteenth century shows that its occupants had a great enthusiasm for all kinds of wild-fowling and took a gourmandizing interest in the exploitation of all the reserves of wild-life in the area. This raises the question of hunting techniques. During the early and developed medieval history of the castle it seems likely that falconry was part of their sport (Eastham, 1977, 234). In deposits of that time were found bones of goshawks and sparrowhawks. However, from 1300 onwards there was not a single bone of any kind of predator until the harrier in the sixteenth- and seventeenth-century deposits. Obviously other means of catching the numerous wild fowl were used. Documentary sources, like the Boke of St. Albans, printed in 1486, all show that wild fowl of every kind were driven or decoyed into nets. This method was still in use quite recently in the fenland of East Anglia. John Humphreys (1977, 1981) describes, with illustrations, the way in which plovers were netted and sent to Leadenhall Market in order to supplement the meagre income of the fenmen. Dogs were used to point the birds and this is why breeds like the setter, pointer and cocker spaniels were favoured for sport. Even snipe and woodcock, which rise very high very rapidly when alarmed, may be netted provided they are driven very close to the nets before the dogs put them up (see below, p. 289, for fowling at Portchester).

Whether nets and decoys were the only means or not is difficult to establish. At Portchester Castle the Saxons seem to have been just as successful at the chase as people in the fourteenth and seventeenth centuries and it is not possible to discern from the osteological remains whether firearms were used or not. In Britain firearms were not used for sport until the latter half of the seventeenth century, although they date from the fifteenth century on the Continent. The muzzle-loading gun was too slow in loading to be useful except in the manner of a punt-gun, and modern breech-loading shotguns, though dating back to 1537, were not to be really efficient as sporting guns until all escape of gas at the breech was prevented when the gun was fired by using an expansive cartridge containing its own means of ignition. Until this could be achieved breech-loaders had neither range nor accuracy. The gradual improvements which brought this about took place in the nineteenth century. In 1847 Houiller of Paris patented a weak-walled shell which effectively blocked all gas escape and this invention revolutionized gun-making and gave rise to the modern sporting-gun.

Such weapons, however, are not essential to success with wild-fowling and neither Chantrey, who took a brace of woodcock with one shot at Holkham in 1834, nor the fourteenth-century or seventeenth-century gentlemen at Portchester taking woodcock and snipe, had the benefit of efficient firearms. Nevertheless, the avian record shows that they were extremely successful at exploiting the area in which they lived both for sport and for the pot.

# X. PORTCHESTER AND ITS REGION

By Julian Munby

## INTRODUCTION

A LTHOUGH Portchester Castle was an exotic feature in the landscape, playing a role in national history and the defence of the realm, it was also, at a more mundane level, a fortified manor house at the centre of an estate, adjacent to the village and its fields. As such, it had a role in the economic life of a rural hinterland, the more so as Portchester was a small market town with pretensions to burghal status that might have been realized had circumstances been different.

It is not intended to give here a complete history of the manor of Portchester, but it is possible to give quite a full picture of the topography of the village at a date near to the major series of building works on the castle described elsewhere in this volume, and to place the village in a rural setting. In addition some suggestions are made on the landscape history of the environs that may point towards themes which could be examined in future fieldwork and documentary study.

# Materials for Study

Written records concerning Portchester and its area survive in great quantity. For the periods when Portchester was a royal stronghold there are financial records of expenditure on the buildings, together with descriptions and accounts relating to the administration of the castle estate. From its foundation inside the castle and after its transfer to Southwick, the Augustinian Priory maintained a major economic interest in lands adjacent to Portchester, as its cartularies record. The Premonstratensian Abbey of Titchfield acquired a major portion of Portchester in 1231, and compiled a splendid series of registers concerning their estates, including a volume of outstanding importance which preserves a minutely detailed perambulation of Portchester in 1405.2 After the dissolution both monastic properties were amalgamated into the estates of Southwick Park.<sup>3</sup> Preservation of the medieval records is in part due to the new owner of Southwick, John White, who seems to have based his estate management on extensive historical research (and whose monument in Southwick Church reflects his interests as an antiquary).4 His and later records of the Southwick estates survive in enormous quantity, now mostly in the Hampshire Record Office.<sup>5</sup> The conservative maintenance of the Southwick estates, consolidated and expanded where necessary, over the next few hundred years has had an effect more tangible than the mere preservation of

Pevsner and Lloyd, 1967, 604-5. See also Byrne, 1981, III, 329.

<sup>&</sup>lt;sup>1</sup> H.R.O. 1M54/1-3.

<sup>&</sup>lt;sup>2</sup> H.R.O. 1M54/4 (survey); B.L., MS. Loans 29/55-59 (Portland MSS. from Welbeck Abbey).

<sup>3</sup> V.C.H., Hants, III, 159 and 162.

<sup>&</sup>lt;sup>4</sup> See, for example, his annotated copy of the 1405 survey, H.R.O. 5M50/1328; for White and Southwick Church see

<sup>&</sup>lt;sup>6</sup> H.R.O. 5M50 (Daly Collection), 4M53 (Southwick Park), 5M53 (Welbeck Abbey), 1M54 (Southwick Cartularies) and 5M54 (Thistlethwaite).

records. An estate whose manorial court records continue until 1939 has naturally been a major factor in the maintenance of so unspoiled a landscape within such close proximity to a large and expanding urban zone. Given the amount and quality of record evidence, this is an area whose ecological history and archaeology would repay close examination.

## THE REGIONAL SETTING

(figs. 77–8)

Portchester lay just off the main coast-road approximately midway between Chichester and Southampton, and on a promontory at the head of Portsmouth Harbour. Portsmouth itself was an urban latecomer of the twelfth century, probably supplanting Portchester as a central place and focus of maritime activity. Portchester was a market centre to a small rural hinterland, as nearby Havant, Wickham, Titchfield and Fareham were to their own (doubtless overlapping) hinterlands. Whilst it can be seen (fig. 77) as one of a group of small towns in the larger regions of the truly urban centres of Southampton, Winchester, Portsmouth and Chichester, it will be shown that Portchester itself never had more than pretensions to burghal status.

In geographical terms Portchester lies at the western end of the Sussex coastal plain and fronts on to a wealden landscape in miniature, formed by the prominent chalk outcrop of Portsdown and the tertiary deposits of the Forest of Bere syncline behind. This immediate hinterland will be further described below, but it must also be considered in the broader regional context. The central feature of this region was the Forest of Bere (O.E. bāēr, 'swine-pasture') which lay on the tertiary clays and sands at the eastern end of the Hampshire basin. The medieval Royal Forest extended from the west side of Havant to the River Meon, though beyond the legal boundaries a similar land-use prevailed in Havant Thicket and Emsworth Common on the east, and Waltham Chase on the west.¹ The designation of 'forest' did not imply anything more than an area set aside as a royal preserve and subject to special laws;² whilst parts of Bere were royal demesne and could be used for the growth of timber, and there were privately owned enclosures containing timber stands, much of the forest was open wood pasture, and in part probably only sandy heath.

Jolliffe has equated the forest with the *Meonwara snade*, occurring in the bounds of a tenth-century charter for Droxford, and sees it as 'the *communis silva* of a folk of the Meonwara', repeating the arrangement of the Kentish Wealds.<sup>3</sup> Manors from all round the forest had woods or grazing rights within it in the Middle Ages, and in the 1381 extent of Portchester the Abbot of Titchfield is said to have common pasture for all his beasts in the forest.<sup>4</sup> When the Commissioners for the Woods, Forests and Land Revenues of the Crown reported on the Forest of Bere in 1792 (recommending the disafforestation and enclosure that eventually took place in 1814) they heard evidence from the under-keepers on the extent of grazing in the forest. Whilst unable to give information on the respective rights of common, the keepers

<sup>&</sup>lt;sup>1</sup> See first Ordnance map of 1810 (surveyed 1797 and 1808), reproduced in Margary, 1981; medieval perambulations in Titchfield Register (B.L., MS. Loans, 29/55, f.12–13) and *Report*, 1792, apps. i and ii.

<sup>&</sup>lt;sup>2</sup> Young, 1979 and Rackham, 1980, 175-88.

<sup>&</sup>lt;sup>3</sup> Jollieff, 1933, 89; Sawyer, 1968, no. 446 (copied by no. 276).

<sup>4</sup> Jolliffe, 1933, 90 n.2; Titch. Reg., ff.14 and 186v.

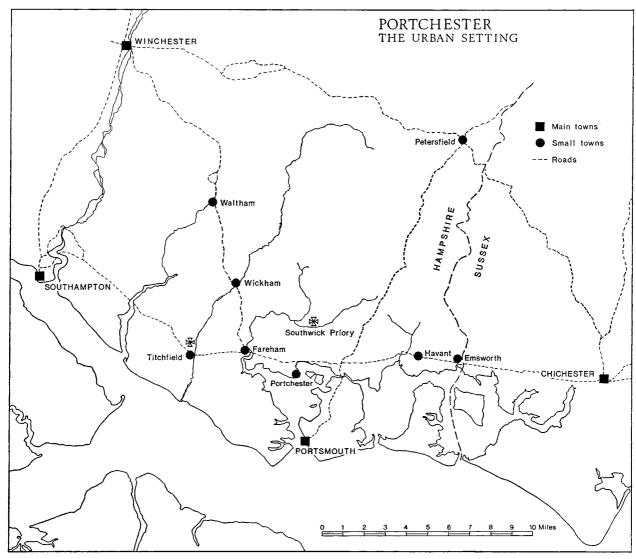


Fig. 77

stated that cattle were put into the forest from Soberton, part of East Meon, Hambledon, Catherington, 'Clanville', Farlington, Portsea Island, Wymering, Widley, Portchester, Southwick, Boarhunt, Wickham, Titchfield and Fareham (fig. 78). In addition cattle from Blendworth entered the forest from Blendworth Common and cattle from Havant, Idsworth ('Edsworth') and Bedhampton entered the forest from Havant Thicket. Cattle and ringed swine were allowed into the forest, and though control of stinting was hopelessly inadequate at least sheep were excluded.¹ At the enclosure award in 1814, compensatory allotments were made to those tenants and manors then specified to be enjoying pasture rights.²

<sup>1</sup> Report, 1792, 5 and apps. iv and v.

<sup>&</sup>lt;sup>2</sup> Ex. inf. R. Davey (award in H.R.O., cf. Tate, 1978, 127).

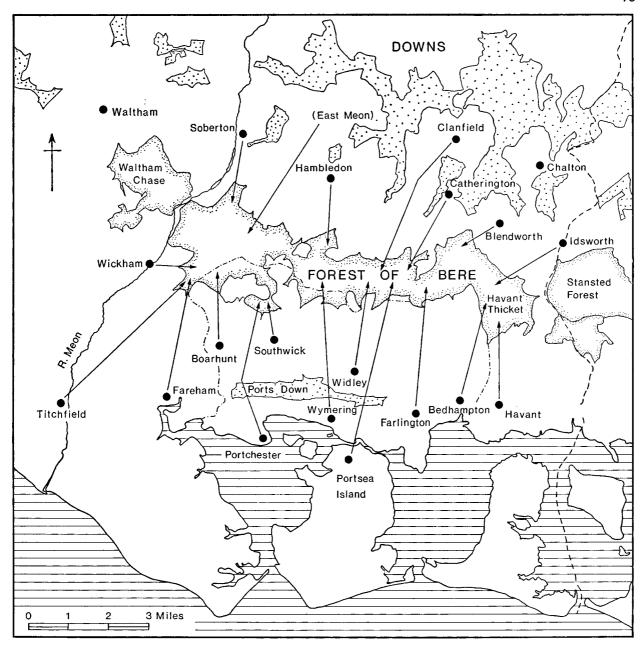


Fig. 78. Rights of common in the Forest of Bere

One can only speculate as to the true antiquity of these grazing arrangements, yet whilst it is true that grazing may have increased in the later years of the forest's history, when regulation was very lax, it is highly probable that these communities had rights which predated the establishment of the Royal Forest after the Norman Conquest. The extent of forest grazing can be used to describe the extent of this region. Bounded on the west by the river

Meon and on the east by the county boundary, the northern edge consisted of the parishes which extended from the clay forest edge up the chalk to the commons at their northern extremities on the western continuation of the South Downs: Soberton, Hambledon, Catherington, Clanfield and Chalton. The scarp slope of the Downs provided a natural limit that was followed by the parish boundaries. On the south were two categories of settlement, those north of Portsdown and on the edge of the forest (Widley, Southwick and Boarhunt), and those south of Portsdown along the coast, from Emsworth to Fareham, including the Island of Portsea; most of these would have had to cross Portsdown to reach the forest. Titchfield was something of an outlier in this distribution, and was a parish with its own large common, but presumably had good reason to use the grazing in the forest; in this case it may have been a post-medieval development.

Perhaps the whole of the region had used the forest for swine pasture from the earliest days of Saxon settlement, along the lines of the wealden swine-pastures in Kent, Sussex and Surrey; it is unnecessary to connect this with the supposed Jutish settlement by the *Meonwara* in Hampshire and see the arrangement as originating with one people, for it rather represents a typical allocation of a marginal resource amongst adjacent communities.¹ There should be further evidence, in other manorial customs in this area, if there had been a single folk settlement, and this has not yet been forthcoming. Uniting as it did this part of Hampshire into a coherent region, the Forest of Bere was in another sense a boundary between the communities to its north and south, as reflected in the Hundred boundaries that followed the parish boundaries along its centre. To the south of the forest lay the Hundred of Portsdown, running from Portchester and Boarhunt on the west to Bedhampton on the east, encompassing the more immediate environs of Portchester.

# THE LOCAL SETTING

(figs. 79–80)

Unlike other parishes in the Hundred of Portsdown, the boundaries of Portchester did not extend beyond the crest of the Down itself. Its arable was confined to the brickearths and coombe deposits of the coastal plain, while the chalk of the Down was common pasture. The chalk outcrop of Portsdown is a prominent local feature, extending for about 10 miles between Bedhampton and Fareham, and at its broadest and highest just north of Portchester. With a fairly steep scarp to the south and a gentle dip-slope on the north, most of the length of its summit was taken up with common pasture accessible to the communities on both sides of the Down. Between Portchester and the Forest of Bere lay the parishes of Boarhunt and Southwick, each of them large in area and comprising several different units which, although represented in the modern period by farms, were probably at one time more populous hamlets.

They occur in three groups, arranged roughly in linear form (fig. 79). The first line of settlements on the northern slopes of Portsdown comprises those on the edge of the chalk where it is covered by the lowest of the tertiary deposits, the Reading Beds (of clay and sand). Here

<sup>&</sup>lt;sup>1</sup> Jolliffe, 1933, 86-90, and Witney, 1976; for the Meonwara see Hinton, 1981, 61.

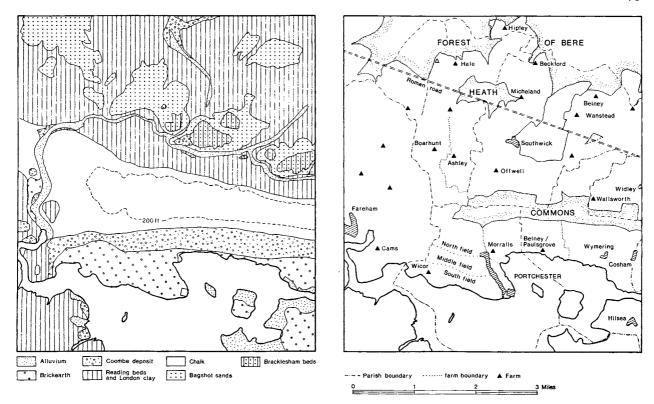


Fig. 79. Geology and settlement in the environs of Portchester

are Boarhunt Manor and Church, the farms of Ashley and Offwell, and further to the east in Widley parish the hamlets of Wallsworth (now Pigeonhouse Farm) and Widley (now Mill Farm). These settlements were all able to exploit the chalk soils of Portsdown (doubtless for arable) and the lower slopes of Reading Beds and London Clay (woodland and pasture) as far as the narrow alluvial strip of the river to the north. The London Clay extends from the lower slope of Portsdown right through the Forest of Bere to where the underlying Reading Beds make their appearance again. Although most of the central forest area lay on clay, there are sizeable deposits of Bagshot Sands and Bracklesham Beds above the clay, on which occurred a linear succession of heaths and parkland: Wickham Common, Walton Heath, Southwick Park, Hookheath and Purbrook Heath. It was this line that the Roman road followed from Bedhampton to Wickham, as the most easily penetrated route across the clayland. The road was also the approximate southern line of the Forest of Bere perambulation followed in 1688, even though then, as later, it was somewhat to the south of the edge of the forest proper.<sup>1</sup>

The second line of settlements comprised those near to the streams to the south of the Roman road and forest. The largest was Southwick, on a gravel promontory at the confluence of two streams, a village that grew at the priory gates and was centrally placed to exploit both

<sup>&</sup>lt;sup>1</sup> Report, 1792, app. ii.

its adjacent sands and clays and also the chalk soil of Portsdown. Other settlements lay near to the streams in Boarhunt (and in the detached part of Southwick there), in the part of Wymering that crossed over Portsdown, and in Widley.

The third group of settlements was more irregularly spaced and lay inside the jurisdiction of the forest. It is not clear without further research to what extent these were ancient clearings of the clayland that fell within the imposed forest boundary, or whether they represent subsequent assarts into the forest. Most were in existence by the thirteenth century. The farm of Hale in North Boarhunt may have been in existence at the time of Domesday. Micheland, Beckford and Hipley are all along the line of the stream descending from Hambledon; the widening area of alluvium and the occurrence of gravel between Hipley and Beckford are likely to have encouraged primary clearance. Another grouping to the east of Southwick became a separate parish for a time, that of Wanstead.

The actual edge of the forest as depicted on the First Edition Ordnance map of 1810, shortly before disafforestation and enclosure, had a typical forest outline, with irregular concavities formed by assarts and funnel-shaped exits to the approach roads. The plant cover seems to have varied from stands of oaks in enclosures to open heath; it is possible that exploitation increased towards the end of the life of the forest as the 1792 report gives a picture of widespread and uninhibited removal of underwood by commoners.

How did Portchester relate to this whole area? It has been shown that Portchester was just one of many places around the forest that made use of the pasture there, but from the administrative point of view there was a closer connection. In medieval times the Forest of Bere was often known as the Forest of Portchester, and the Constable of the castle was regularly the Keeper of the Forest, as he was when the castle and manor were purchased in 1632 (the owners of Southwick later acquired the hereditary keepership, which was still theirs in 1792). However, there is no reason for supposing that this was of any greater age than the taking of the forest under royal control at some time after the Conquest. Indeed it is difficult to demonstrate which features in the landscape do survive from then or before the Conquest. The early estates here are not easy to reconstruct, as the redistribution of lands attached to the castle and the growth of the Southwick Priory estate have obscured the earlier pattern. A few features are at least suggestive of what this may have been.

Firstly it may be supposed that, when the priory was founded at Portchester by William of Pont de l'Arche in c. 1128, it was endowed with lands that were part of the castle estate, so that the manor of Southwick had probably belonged to the castle. Secondly, although the castle estate was further altered by the creation of manors held by service of castle-guard, it is of course described in Domesday Book as it was in 1086, before any of these changes. The most striking feature of the Domesday entries for Portsdown Hundred is that Boarhunt and the lost Aplestede are the only named places on the north side of Portsdown. In the case of Portchester and Cosham each have several smaller holdings that are likely to have been beyond Portsdown. On the other hand, the information that is given on landholders in the

<sup>&</sup>lt;sup>1</sup> See above, p. 271 n. 1; the plans made for the 1792 *Report* (at P.R.O. Kew, F.17/359) only show Crown demesne lands in east and west walks.

<sup>&</sup>lt;sup>2</sup> H.R.O. 4M53/1.15; V.C.H., Hants, III, 159; Report, 1702. 6.

<sup>3</sup> Mason, 1980a, 2.

<sup>&</sup>lt;sup>4</sup> See Hoad, 1981, 2-6 for a tabulation of these; for D.B. text see V.C.H., *Hants*, 1, and Morris, 1982.

time of King Edward is not such as to suggest that any of the smaller holdings had been held in one big estate before the Conquest. Indeed, the large manor of Portchester held in 1086 by William Mauduit had been held as three manors before 1066, implying some consolidation in order to make a suitably sized estate for the castle. The only hint of a large pre-Conquest estate is the royal manor of Wymering, Cosham and Portchester, for which no hidage or value is given, though its comparative size may be estimated from the number of people mentioned.

The third feature that can be examined is the shape of the parish boundaries in Portsdown Hundred. The map (fig. 80) shows that although Bedhampton and Farlington extended for the full length of the Hundred, from the forest to the sea, the parishes to the west were interlocked in an intricate pattern. Whilst to some extent this must reflect the greater breadth of Portsdown towards the west, it also has the look of a secondary division of one or more large primary units. Evidence for the early history of the churches is lacking, though none is mentioned before the twelfth century except Boarhunt, and that is the only one with pre-Conquest remains. One possible explanation (and it is not the only one) is that there was one large parish, whose mother-church could have been at Portchester. The royal manor of Domesday Book may have been the last remnant of the large royal estate of Portchester acquired from the Bishop of Winchester by King Edward in 904 in exchange for (Bishops) Waltham, and on which he established the burh.2 Portchester's 40 hides were exchanged for 38 in Waltham, compared with only 5 hides as the pre-Conquest total given for Portchester itself in Domesday. Although precise boundaries cannot be suggested, it does seem likely on the evidence considered above that the first territory of the burh extended from the coastal plain up to the forest on the further side of Portsdown.

#### THE MANORS

From the wider rural setting of Portchester we turn to the parish itself, and the manor that was virtually coterminous with it. It has been suggested above that a large Saxon estate was taken over for the foundation of the burh at Portchester, and that this had been partly broken up by the time of the Conquest. The land held by William Mauduit in 1086 was apparently an amalgamation of separate pre-Conquest estates. Mauduit's descendants held the manor as part of the hereditary serjeanty of Chamberlain Treasurer to the King.<sup>3</sup> In the century following Domesday Book the castle estate was reorganized to provide small manors to be held by service of providing castle-guard. They were in Boarhunt, Southwick, Wanstead, Wymering and Cosham (and may indeed have been formed partly from the royal lands mentioned in Domesday, and not entirely from land belonging to the castle).<sup>4</sup> With the foundation of the Priory of Portchester in c. 1128 (afterwards removed to Southwick) there were further diminutions of the castle estate to provide endowment for the church, mainly

<sup>&</sup>lt;sup>1</sup> Hase, 1975, 114 f.; Taylor, 1965, 1, 76-8.

<sup>&</sup>lt;sup>2</sup> Sawyer, 1968, no. 372; Cunliffe, 1976, 2-3; see Hinton, 1981, 61-2 on the suggestion that Portchester may have been given to Bishop Wilfred in the seventh century.

<sup>&</sup>lt;sup>3</sup> Mason, 1976.

<sup>&</sup>lt;sup>4</sup> Rigold, 1965, 5, suggests a date before 1130 and has further observed (pers. comm.) the distinction between the arrangement at Portchester and the great feudal *castellaria*, for which see Stenton, 1932, cap. vi. For lists of the manors see *Book of Fees*, 1, 74, 258, 340; II, 699, 1169 and 1364.

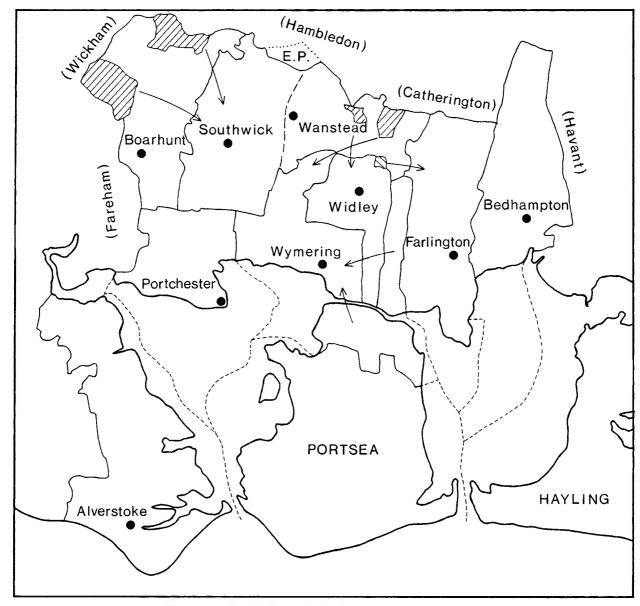


Fig. 80. Parish boundaries in Portsdown Hundred

from land in Southwick (and the lost Aplestede). 1 By the time the castle and manor returned to the King's hands in Henry II's reign the land area of the manor was probably the same as it was to remain for centuries: all located on and to the south of Portsdown. 2 It was, however, subject to a major upheaval in 1231 when it was divided. Peter des Roches, Bishop

<sup>&</sup>lt;sup>1</sup> Mason, 1980a (where *Aplestede* is wrongly located: see Hoad, 1981, 8–12, who proves that it was in the village of Southwick).

<sup>&</sup>lt;sup>2</sup> For the chronology of this, see p. 73 above.

of Winchester, seeking to promote the foundation of a house of Premonstratensian Canons at Titchfield, acquired from King Henry III two-thirds of the manor, leaving one-third in the King's hands. This division of both demesne and villagers' lands, although seemingly impractical, was perhaps not too inconvenient. It was primarily a division of the rental rather than a physical allotment of land, and left the castle a certain endowment of manorial attributes whilst relieving it of some of the burdens of managing an agricultural appendage. Two demesne farms did not operate for long (if at all) after the division, and only the Abbot of Titchfield kept one going. The main effect of the division was a complication of the tenurial arrangements, as there were two sets of manorial courts and two rent collectors, though no piece of land was held from both manors.

Thus there were from 1231 two manors in Portchester: the King's manor, which was always held with the castle and the Forest of Bere, and the Abbot's manor, which was held by Titchfield until the dissolution, and was known as Wicor. Long after the reamalgamation of these two parts in the eighteenth century they were still separately named and administered. Despite the impression given by the arrangement of material in the Victoria County History, there was no 'borough' of Portchester distinct from these two manors.<sup>2</sup> Grants of the castle naturally included the villa (meaning either 'village' or 'town'), but this simply referred to the manorial part of the holding, and the 'vill' had no separate existence as such. Its supposed urban status will be discussed further below.

One part of the parish of Portchester was separate from the principal manor and presents a puzzle. The north-east corner of the parish, the farm of Morralls, appears as such for the first time at the dissolution, amongst the properties of Southwick Priory, as the manor of Morralls, held with the rectory of Portchester.<sup>3</sup> It is not possible to say at present whether this was land that belonged to Southwick from its foundation as part of the church land or whether it was part of a later grant; the land was conceivably part of the King's holding in Portchester mentioned in Domesday Book. The size and location of the manor of Morralls was exactly like its neighbour Paulsgrove, whose manor-house was recently demolished4 and whose fields were mapped in 1674 — showing a division into furlongs and strips on the narrow coastal plain and broader slope of Portsdown.<sup>5</sup> There is no map of Morralls, except on early nineteenth-century leases, but there is a field survey of 1565 that does not admit of easy mapping.6 These problems may be solved with further work, but for the present Morralls is omitted from the following discussion.

#### Sources

As already indicated, there is a considerable amount of material from which to study the medieval village, and even more for later periods. The aim of this short account is to describe the topography and resources of the village as the backcloth to its economic history. Available evidence does not allow a detailed discussion of the changes in village life and economy over the centuries, although some prominent features can be observed.

Religious Houses, III, 193-5 (S.C.6/Hen. VIII/3340 m. 21 and 30); Monasticon, VI (i), 245 reads 'Weralles in Dorchester' in

<sup>&</sup>lt;sup>1</sup> Colvin, 1951, 184-6; Cal. Charter Rolls, i, 140 (confirmation of grant by Master Humphrey de Millers (q.v. Emden, 1958) to the Bishop in 1231); Graham and Rigold, 1969.

2 V.C.H., Hants, III, 158-9.

<sup>&</sup>lt;sup>3</sup> P.R.O. Suppl. Lists and Indexes III: Lands of Dissolved

<sup>4</sup> Cake, Lewis and Noon, 1972.

<sup>&</sup>lt;sup>5</sup> Map of 'Belney Manor', H.R.O. 4M53/438.

<sup>&</sup>lt;sup>6</sup> H.R.O. 4M<sub>53</sub>/50/7. See map on H.R.O. 4M<sub>53</sub>/78/19.

The primary source for the topography of Portchester is the Rememoratorium terre de Porcestr', by an unknown compiler who also wrote part of the Titchfield Register. It is a complete survey dated 1405, listing in order all the tenements in the village streets and all the strips in the fields, and recording owners, tenure and lordship.¹ It is methodically compiled, giving relative locations and the direction of progress of the survey; there is even an index of furlongs, with instructions for its use.² The purpose behind the survey was to distinguish land held of the Abbot from that held of the King, and to indicate the size and rents of the Abbey's holdings; a postscript explains how the survey can be taken out into the fields and used to settle disputes.³ Similar surveys exist for other field systems, like those for the fields of Oxford and of Cambridge where there were also mixed lordships,⁴ but the remarkable feature of the Portchester survey is the explicit topographical information which allows a fairly reliable reconstruction to be attempted, at least for the fields (fig. 81).

As there is apparently no extant field map of Portchester before enclosure (1809) and the Ordnance Survey field-drawing of 1797 omits open field divisions (pl. XLIV), the mapping base used here has to be the Tithe Award of 1839,5 which clearly depicts the extent of the arable land and the tenement plots before the onset of modern development. The units of the survey are Southfield, Middlefield and Northfield; Morralls Farm and Portsdown are not included. The main road (A27) and White Hart Lane clearly formed the internal bounds between the fields, and each part of the survey begins at the west end of the field. Within these constraints, it is not too difficult to map out the survey following the directions given for each furlong. Middlefield is the most straightforward, setting out in an easterly direction and returning westwards. Northfield starts eastwards along the A27 and returns in a boustrophedon pattern, though the arrangement in the north-west corner is not certain (N.27-35),6 as few relationships are stated. Southfield runs into problems where it turns the corner opposite the castle, but there is at least ample space to accommodate the extra furlongs. Having returned to Wicor, there is a second return to the east, but here there is one piece of corroborative evidence available in a pre-enclosure map of Wicor Farm, sketched on to an 1802 lease of the farm (and doubtless extracted from a full estate map). Incredible as it may seem, the strips shown as belonging to the farm in 1802 are distributed in exactly the same relationship as the demesne strips of Wicor in 1405, and consequently this fragment has been used to impart some circumstantial detail to the west end of Southfield. Similarly in Middlefield two separate \frac{1}{2}-acre strips of demesne in adjacent furlongs have been aligned to stand along the road shown on the 1802 map, and described in the 1381 extent.8

Despite the undue regularity of this idealized reconstruction (particularly in that it makes the strips too straight), a fair degree of confidence can be placed in the relative location of furlongs. Additional confirmation is provided by linked furlong names, either within fields, or between them. There are several instances of pairs of furlongs with the same names prefixed by the cardinal points (e.g. Northdyke, S.10 and Suthdyke, S.31), whilst three furlongs

<sup>&</sup>lt;sup>1</sup> H.R.O. 1M54/4. An edition of this is in preparation.

<sup>&</sup>lt;sup>2</sup> *Ibid.*, ff. 28-9, and see ff. 38v-40 (index of custumal); Titch. Reg. has a similar index.

<sup>3</sup> Ibid., f. 28.

<sup>&</sup>lt;sup>4</sup> Stevenson and Salter, 1939, 507-27; Hall and Ravensdale, 1976.

<sup>&</sup>lt;sup>5</sup> O.S. field drawing in B.L. Map Room, O.S.D. 75, part 3; Tate, 1978, 125; Tithe Map in H.R.O.

<sup>&</sup>lt;sup>6</sup> The furlongs have been numbered as they occur in the survey, prefixed by S., M. or N. to identify the fields in which they lay.

<sup>&</sup>lt;sup>7</sup> H.R.O. 5M53/96/4-5.

<sup>&</sup>lt;sup>8</sup> Titch. Reg. f. 185<sup>v</sup>.

Fig. 81. Portchester in 1405: the village and its fields (a 4½ acre furlong, West Thomascastel, lying N-S between North Dyke (S.10) and the road, has been omitted from the maps, figs. 81 and 83, and from table XXXI; it was in base tenure (3½ acres Abbot,  $\frac{1}{2}$  acre King) with  $\frac{1}{2}$  acre in high tenure (Abbot))

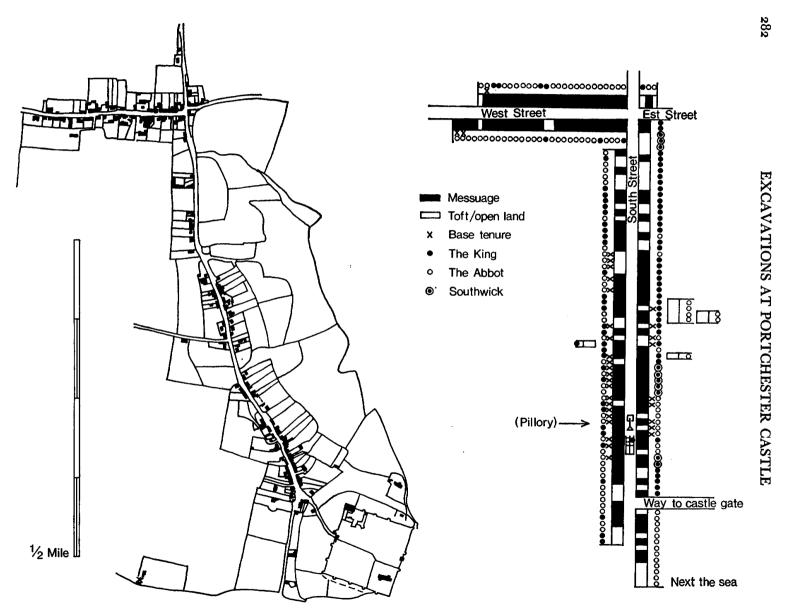


Fig. 82. Portchester in 1405: the topography of the village (with plan as in 1839)

in both Middlefield and Northfield have identical names, perhaps derived from features on the main road (e.g. Haywardeshouse, N.5 and M.3).

The tenement survey is harder to represent topographically, and is given here in diagrammatic form alongside the village plan in 1839 (fig. 82). Further work, based on sixteenth-century annotations in the margin of the survey, and on White's own survey of the village, may well enable a cadastral reconstruction eventually to be made.

The reconstituted field map makes possible a spatial analysis of the information given in the survey, so that details of ownership and tenure can be studied graphically as well as statistically. Only two elements are presented here mapped in this way (fig. 83), but there is potential for a much fuller investigation which would not be appropriate here.

Other sources for the medieval village are to be found in the national records, and in collections dispersed from the Titchfield archive. One early thirteenth-century custumal appears to describe the undivided manor.<sup>2</sup> There are five extents of the castle manor, of c. 1240, 1275, c. 1300, 1341 and c. 1345; the first being in the form of a rental, and the others giving summaries of manorial sources of income.<sup>3</sup> One set of accounts survives that gives the actual income and expenditure for the castle, manor and forest for the years 1324–6.<sup>4</sup> There is one extent for the Titchfield holding, a detailed one of the demesne in 1381.<sup>5</sup> Another laborious collection made about the same time as the Titchfield Register is a thick book containing an edited transcript of court rolls for each of the manors.<sup>6</sup> Account rolls for a number of years beginning 1404–5 survive in the Hampshire Record Office.<sup>7</sup>

Fortunately these records have been the subject of study, and D. G. Watts's thesis on 'The Estates of Titchfield Abbey c. 1245 to c. 1389' places the manorial economy of Portchester in the context of its fellow manors, and the wider scene.8

# THE VILLAGE, ITS FIELDS AND ECONOMY

The 1405 survey describes the village house by house, beginning in 'Weststreet', continuing in the short 'East Street', then down the east side of 'Southstreet' to the sea, and back again up the west side. As can be seen from the diagrammatic representation of the tenements (fig. 82), the extent of the village was approximately the same in 1405 as it was to be when the Tithe Map was drawn in 1839, though there were more houses at the earlier period. The survey includes 209 separate land units, just over twice the number of tenants that are named as land-holders in Portchester. There were 138 messuages (presumably with buildings), 61 tofts (probably vacant) and 10 miscellaneous parcels of land. Both messuages and tofts invariably had curtilages attached to them, that is, garden plots, which in some cases were quite large. The greatest density of buildings would seem to have been in Weststreet and lower Southstreet. The distribution of holdings between landlords is not particularly signifi-

<sup>&</sup>lt;sup>1</sup> H.R.O. 5M50/1323.

<sup>&</sup>lt;sup>2</sup> Titch. Reg. ff. 43v-45v.

<sup>&</sup>lt;sup>3</sup> Extent of c. 1240, P.R.O. SC11/592; of 1275, P.R.O. E143/1/3(9); of c. 1300, P.R.O. SC11/593; of 1341, Titch. Reg. ff. 27-8; of c. 1345, ibid., f. 28.

<sup>&</sup>lt;sup>4</sup> P.R.O. SC6/98o/1 (§57).

<sup>&</sup>lt;sup>5</sup> Titch. Reg. ff. 184-7.

<sup>&</sup>lt;sup>6</sup> B.L., MS. Loans 29/59.

<sup>&</sup>lt;sup>7</sup> H.R.O. 5M50/1281-1307.

<sup>&</sup>lt;sup>8</sup> Watts, 1958a, of which parts have been printed in Watts, 1958b and 1967. The author has generously allowed full use to be made of his unpublished materials here.

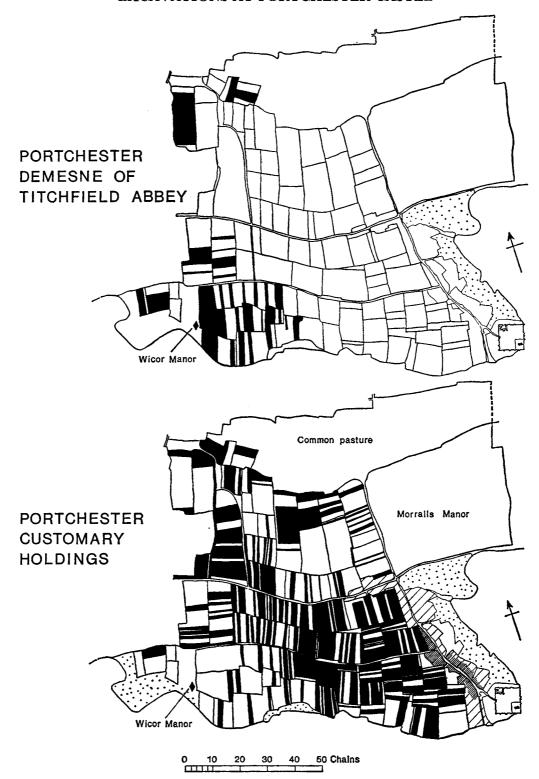


Fig. 83. Portchester in 1405: demesne land of Titchfield Abbey and customary holdings in the fields

cant, except that Weststreet was predominantly Titchfield land, and the upper east side of Southstreet was mostly the King's. Southwick Priory, with no lands in the three fields of Portchester, had seven messuages and three tofts on the east side of Southstreet. Tenements held in 'base tenure', that is, part of the customary land-holding of the villein farmers, were clustered in the lower centre of Southstreet, and mostly on the west side of it, perhaps pointing to the early nucleus of the village. The base tenants were, however, villein sokemen, being tenants on 'ancient demesne'.¹ There is no mention of the five cottages and fourteen places inside the castle that are mentioned in the extent of c. 1300, but they need not necessarily have been included in the survey, or were perhaps swept away for the purposes of defence later in the fourteenth century. The extent of 1341 mentions only a house by one of the gates, taken over for the porter, and the vicarage with its curtilage.² A pillory stood in the middle of Southstreet, with two tofts next to it. To the east of the road, between the tenements and the sea, were the salines, which are mentioned but not enumerated in the survey.

Analysis of the pattern of land-holding is hampered by ignorance of the scale of sub-letting (as in the field survey this is only mentioned for holdings in base tenure). However, in those cases there are no great concentrations of tenements held by any individual, as there might have been if sub-letting was widely practised as a profitable enterprise. Most tenants had one messuage, fewer had two, only sixteen had no messuage and only fifteen had three or more (two individuals with five and seven messuages respectively represent the largest holdings). As might be expected, the tenants of larger holdings in the fields had the greater number of tenements. The 'second homes' could have been lived in by members of the family, or let to people engaged in craft activity who, if landless, would escape mention in the survey. But if there was a fair number of such people largely involved in crafts or trades, then the number of those with tenements but no land in the fields might be expected to be greater than it is (only thirteen). As it is, of this small number, only one individual (with four) had more than a single messuage, whilst three people had only a toft. This is not to suggest that crafts and trades were not practised, but that agricultural activity on some scale was practised by a majority of the community (assuming again that extensive sub-letting is not a hidden factor in the field survey).

# The Fields (figs. 81, 83; table XXXI)

The division of arable land into three fields is here to be seen as a descriptive convenience rather than a reflection of a classic three-field rotation. Individual holdings were not equally divided between the three fields, and the Abbot's demesne was concentrated in Southfield (see table XXXI), so cropping arrangements must have cut across the simple topographical divisions. Not all land was of equal quality, a fact that was well appreciated: there is an explicit statement in the extent of c. 1240: 'note that each acre which lies on the south part of the road from Portchester to Fareham extends at 12d., and the part... on the other side of the road extends at 6d. because it is much worse than the other, and some at 4d. because it is worst'. Evidently here as elsewhere on the coastal plain, soils on the brickearth were more favourable than those overlain by hill-wash, or actually on the slope of the

<sup>&</sup>lt;sup>1</sup> Watts, 1958a, 112; Watts, 1983; see Miller and Hatcher, 1978, 118–19.

<sup>&</sup>lt;sup>2</sup> For medieval buildings in the outer bailey, see Cunliffe, 1977, 37–42, and 14–16 for a building by the water

#### EXCAVATIONS AT PORTCHESTER CASTLE

## TABLE XXXI

## Land in the Common Fields of Portchester

	Southfield	Middlefield	Northfield	Totals	
Abbot					
Demesne	$53\frac{3}{4}$	16	24	94 <del>3</del>	
Alta Tenura	<b>58</b>	41 <del>1</del>	115 <del>3</del>	2151	
Bassa Tenura	76 <del>§</del>	93 <del>1</del>	78 <del>1</del>	248 <del>§</del>	
King					
Alta Tenura	50 <del>3</del>	37 <del>1</del>	52½	140 <del>1</del>	
Bassa Tenura	49	41½	53 <del>1</del> 2	144	
Totals					
Alta Tenura	108 <del>3</del>	78≵	168 <del>1</del>	355₺	
Bassa Tenura	1258	135 <del>1</del>	131 <del>3</del>	392 <del>§</del>	
Abbot	bbot 188\frac{3}{8} (65\%)		218 (67%)	558\$ (66%)	
King	99‡ (35%)	783 (34%)	106 (33%)	284½ (34%)	
Whole field	289 <del>}</del>	230	324	8431	

Down.¹ A further indication of better land is to be found in the payments of heychynge for 'inhoking', that is the planting of leguminous crops on land when it is fallow. In 1405 the payments were due entirely from base tenure lands in Middlefield and Southfield.²

The Abbot's demesne arable lay towards the western end of Southfield and Middlefield, around the grange at Wicor (fig. 83). As already indicated, it was much the same in 1405 as it was to be 400 years later on the eve of enclosure, and not improbably much as it had been nearly 200 years earlier when the manor was divided. In 1405 the Abbot's demesne was 94\frac{3}{4} acres (compared with the largest individual holding in the village, that of John Plumber senior, with 43 acres). The King's demesne occurs in the extent of c. 1240, as 43 acres, but it is not heard of later; even then there is a note that  $63\frac{1}{2}$  acres had been let out 'before the war' (?1216-17). If the King's demesne is not mentioned as such in 1405, it is no doubt lost amongst the holdings in high tenure from the King, many of which were adjacent to the Abbot's demesne. While successive holders of the castle may have abandoned demesne farming, other manorial resources were maintained and will have been useful in providing rent and food for the castle. The Abbot's demesne was kept together for longer, though it was leased out in the fifteenth century.<sup>3</sup>

The villagers' lands lay scattered through the fields in holdings of a few acres up to those of tens of acres. Many held land from both the King and the Abbot, and of both tenures. There are 103 people mentioned in the 1405 survey (though only 64 different surnames), including 23 women and 13 with no land in the fields. The largest number, 53, had less than 6 acres, while 21 had between 6 and 14 acres, and only 16 had more than that; the largest

<sup>&</sup>lt;sup>1</sup> Hodgson, 1967, 10-13, 65-87 and 91-7.

<sup>&</sup>lt;sup>2</sup> Watts, 1958a, 17-18 and 73-5; custumal in 1405 survey, f. 32 (no. 19).

<sup>&</sup>lt;sup>3</sup> See account rolls, H.R.O. 5M50/1281-1307. Small amounts had been leased out from the thirteenth century, Watts, 1958a, 227-8.

holding was of 43 acres. Only 25 people held customary lands in base tenure (fig. 83); these were of variable size and were held in whole, half or quarter units (called 'lands': terra). They were not broken up beyond these fractional divisions, but had been subject to a certain amount of consolidation; the 18 base tenants of the Abbot held land that had previously belonged to 23 people. All but one of the 16 largest landowners was a base tenant, as against only one of the 53 smallest landowners.

The first question about these figures is the extent to which they reflect the actual distribution of land as it was worked, since the apparent figures could be substantially altered by sub-letting. The survey records sub-letting on base-tenure lands (which was allowed by custom at a rate of 4 acres per whole land),<sup>2</sup> but not on high-tenure land. Evidence from elsewhere suggests the possibility of extensive sub-letting if only for short periods, and this may indeed have happened.<sup>3</sup> The court rolls for Portchester do not come down to the period of the survey, but cover, in edited form, the 100 or so years after 1246, and include a large number of ordinary land transactions in the manorial courts.<sup>4</sup> It may well have been simpler to surrender land into the lord's hands and let another have it (though this involved a payment to the lord by the new owner) rather than make a private agreement which could then be presented at court and be the subject of a fine. Certainly the compiler of the survey was not expecting static ownership in the future; his instructions on how to use the survey advise counting out the acres rather than relying on the names of the tenants, as they change so frequently.<sup>5</sup>

The second and more interesting question concerns the small size of so many of the holdings. Whereas on other Titchfield manors a typical holding might be between 8 and 16 acres, in Portchester half the named individuals held less than 6 acres (the manor of Cadland also had a similar distribution). Comparison with acreages of the Tithe Map does indicate that these acres were somewhat larger than statute acres. Such a large proportion of small-holdings had not been unusual in the thirteenth century, being seen as indicative of land hunger in the face of a rising population, but is less to be expected after the Black Death. Even taking account of the effects of land exchange, this would have been necessary on a very large scale to bring these smallholdings up to the level where they could have been the principal support for a family. Assuming that individual holdings were grouped together in joint family enterprises does not much alter the picture. Though the smallholders will have included poor cottagers, widows and those who in old age had given up their land, they must still have comprised a substantial number whose chief livelihood did not come from agriculture, or at least not from farming their own land.

Information on the crops grown in the fields is minimal. On the Abbot's demesne in 1381 the amounts that could be sown were as follows: 5 qr. wheat, 4 qr. barley, 5 qr. drage, 1 qr. oats, 1 qr. peas and 2 qr. vetches. There is little doubt that these were sown in rotation, but as has been remarked, the rotation cannot have been between the three great fields, and must

<sup>&</sup>lt;sup>1</sup> The holdings in base tenure are identified in 1405 by the names of their former tenants. In the early thirteenth century custumal the full holding was 15½ acres, the half 7 acres (Titch. Reg., ff. 43<sup>v</sup>, 44<sup>v</sup>).

<sup>&</sup>lt;sup>2</sup> Custumal in 1405 survey, f. 30<sup>v</sup> (no. 9).

<sup>&</sup>lt;sup>3</sup> Hilton, 1975, 48.

<sup>&</sup>lt;sup>4</sup> Watts, 1958a, 194 and analysis of transactions at 218-26, and table 13.

<sup>&</sup>lt;sup>5</sup> 1405 Survey, f. 28.

<sup>6</sup> Watts, 1958a, 63-4.

<sup>&</sup>lt;sup>7</sup> Miller and Hatcher, 1978, 141 f.; Bolton, 1980, 110-11 and 237 f.; Hilton, 1975, 39.

have been by particular furlongs. Fertilizing the fields was an important part of arable farming. The practice of 'inhoking' on fallow has already been noted; this involved the planting of leguminous crops. Common pasture for beasts in the stubble after harvest will have been the most effective form of dunging, but provision was also made for marling. The tenants' works enumerated in the early thirteenth-century custumal include carrying white and black marl to Wicor and to the upper field. White marl probably included chalk or lime, and black marl may well have been dug off the mud flats. The extent of 1275 refers to granting licence for carrying marl in boats from the sea. On one nearby manor of Titchfield seaweed was also used.<sup>1</sup>

Seed-corn might be fetched by tenants, according to the early thirteenth-century custumal, from Titchfield, Fareham and Southwick, and they might be required to carry grain to the mills at Wickham or Funtley. The King's mill was built nearer at hand, next to the castle, and probably opposite the north-east corner of the castle walls. This was a water-mill, which must have been driven from a tidal flooding of the great outer ditch.<sup>2</sup> It was rebuilt several times, expecially after the destructive inundations of 1341, when it was put out of action.<sup>3</sup> The mill wharf was used as a landing place for building materials brought to the castle by water.

### Pastoral Husbandry

Grazing was provided for in a variety of places in and around Portchester. That essential feature of the common-field system, the common grazing in the arable fields after harvest, is described in the 1381 extent. In Northfield, all animals, pigs and sheep could graze between August and March. Middlefield was open for as long, but sheep were only allowed in from late September. Southfield, open only from September to March, took pigs only from November. These arrangements, which may reflect the different crops grown in the fields,4 are given for the lord's beasts, and may not have been the same for the tenants. For them other pastures were also available, in Wikoureswode and Wikouresmarsh (fig. 81) where there was winter pasture for sheep from Christmas until March, and summer pasture for draught animals from April to August. The Abbot had demesne pasture of his own, 3 acres at Wicor in Wykourescroft, 16 acres in West radesmondesfeld in Northfield (N.39), and 'common pasture' in a small group of furlongs in Northfield (N.26, 27 and 31). The King had pasture in the castle, in the outer bailey and inside the outer ditch, both of which were let out in the fourteenth century; he also had rights to a third of the income from Wikoureswode and Wikouresmarsh.<sup>5</sup> In addition there was pasture in Kingesden on Portsdown. This was the demesne woodland, located in 1381 to the north of furlong N.26,6 and of unknown size, though it may have extended some way along Portsdown. The wood was exploited in building and munitioning works, though for wood rather than timber. Sales of underwood occur in the

<sup>&</sup>lt;sup>1</sup> Watts, 1958a, 75–82.

<sup>&</sup>lt;sup>2</sup> Molendinum iuxta castrum in c. 1240 extent, molendinum aquaticum in 1275 extent; for the archaeology of the ditch and inner rampart see Cunliffe, 1977, 24-7 and fig. 132, where a date after the twelfth century is proposed. Whilst a four-teenth-century date for the enlarging of the rampart is likely, the ditch must have been in existence in the thirteenth century.

<sup>&</sup>lt;sup>3</sup> See table XIII, p. 164, §48 (1289), §84-5 (1341) and §107 (1376).

<sup>&</sup>lt;sup>4</sup> Paul Harvey has observed (pers. comm.) that the implied harvest dates may indicate that wheat was restricted to South and Middle fields and that perhaps oats were grown in North field.

<sup>&</sup>lt;sup>5</sup> Extents of c. 1240, 1275, c. 1300 and 1341.

<sup>&</sup>lt;sup>6</sup> Titch. Reg. f. 186.

extents, though that of 1341 explains with its usual pessimism that the value of it was so much less because the cover of oaks impeded the growth of underwood. The pasture in Kingesden, 28 acres in 1275 and 12 acres in 1341, may have been accessible to some tenants.

Portsdown itself is not mentioned in any of the manorial surveys, and, if an open common as it was later, would have provided grazing for the tenants.<sup>1</sup> They might also use the curtilages next their messuages for this purpose, or the empty tofts in the village.

The Forest of Bere provided pasture all the year round, though at some distance from Portchester itself (the nearest entrance, at Walton Heath was about 3 miles from the cross-roads). In 1381 the Abbot claimed common pasture 'between Meslingforde and Rolokes-castel'2 all the year round for all his beasts that were kept at Wicor over winter, though sheep were excluded for 'deermonth' (presumably the same as the New Forest 'fencemonth' between 20 June and 20 July). A post-medieval custumal states that tenants have common of pasture within the forest 'and that it shall be lawful for them to bring and drive their cattle wheresoever they be unto a certain Oake called Portchester Oake of longtime so named, and have pannage all over for swine, without rent'. In the early thirteenth-century custumal pannage was to be had, for a payment, in the lord's demesne after harvest, and from 'Meslingford to Roulakeswelle', with piggeries in Creech (Cryche)<sup>5</sup> when necessary.

There was no hay-meadow in Portchester, and one acre of this valued commodity was held jointly by the Abbot and the King outside the village. It was one acre on the river by Titchfield next the ditch of Fareham Park and Cams meadow, called *Porcestresacre*. The hay-crop was divided in the usual proportions, two parts to the Abbot and one to the King.<sup>6</sup>

As with crops, it is quite impossible to get any clear view of peasant livestock-holdings, though they must have been widespread. The usual manorial heriots were taken in the form of the best beast, whilst the thirteenth-century custumal implies regular possession of oxen, sheep and pigs. The wide incidence of chicken and egg rents suggests that hens were generally kept. None of the extents of the King's manor mentions livestock, but the Abbot's extent of 1381 does: the manor could then sustain two horses, seven cattle, three cows, one pig and 300 wethers between August and March. As Watts has shown, the sheep were moved around between the Tichfield manors, and evidently spent a time at Portchester as part of a specialist sheep-rearing programme.<sup>7</sup>

### Other Resources

Several miscellaneous food resources existed in Portchester. The King had a rabbit warren in Kingsden, at the west end of Portsdown (and still named as such on the 1839 Tithe Map). It was mentioned first in the extent of c. 1300, and there are references to the appointment of keepers in the fourteenth and fifteenth centuries. At the time of Norden's survey in 1609 it contained 24 acres 'having the name of a warren, but most fitte for coppice' (see p. 206).

Licences were granted for taking fowl, and in the extent of c. 1300 a small income was received from ceux qi demanderount congee apprendre volata sour la terre nostre soigneur le Roi.

<sup>&</sup>lt;sup>1</sup> cf. Southwick rights on Portsdown V.C.H., *Hants*, III, 162 n. 12.

<sup>&</sup>lt;sup>2</sup> Mislingford (SU 588141) is on the River Meon, and Rowlands Castle (SU 734105) on the Sussex border.

<sup>&</sup>lt;sup>3</sup> Tubbs, 1968, 67; Stagg, 1979, 31-2.

<sup>&</sup>lt;sup>4</sup> B.L., Add. MS. 8153, f. 177<sup>v</sup> (Lake Allen Collections).

<sup>&</sup>lt;sup>5</sup> Creech Plain, in the east walk of the Forest (SU 6411).

<sup>&</sup>lt;sup>6</sup> Mentioned in c. 1240 extent and described in 1381 extent.

<sup>7</sup> Watts, 1958a, 168-71.

<sup>8</sup> Cal. Pat. Rolls, 1361-4, 144; Cal. Pat. Rolls, 1429-36, 67.

Fishing did not come within the purview of either of the manors, but was undoubtedly an activity that engaged some of the villagers. On the King's visit to Portchester in July 1324 the first payment made out of the Chamber was 18d., 'a ij pescheours de Porcestr pour pesshon que le Roi prist de eux'. Large stranded fish were always good matter for manorial disputes, like the whale claimed by the King as wreck in 1331 which an inquiry found to be not of the King, but 'a fish called Thurleheved taken by the fisherman there'.

Salt-working was an important means of livelihood for some of the villagers. As mentioned above, the salines lay to the east of Southstreet, on what is now the extensive area of reclaimed marsh north of the castle. In 1259 the Abbot of Titchfield had ten tenants with salines (nine with 1 acre and one with 4 acres); in 1341 the King's tenants had five salines (with 17½) acres there in c. 1300). An inquiry of 1269 reported that the salt-workers had been deprived by Simon de Montfort of their turbary in Suthmore, for which they paid 30 quarters of salt.4 Salt-production in Hampshire goes back at least as far as Domesday Book, and a seventeenthcentury map shows salt-works in the environs of Portsmouth Harbour.<sup>5</sup> Camden reported: 'In several places along this shore, out of sea-water that comes up, they make salt, which at first is of a sort of pale and green colour; but by an art they have, 'tis afterwards boil'd into a pure white.'6 Celia Fiennes, visiting Lymington, gave a more detailed description of how the water was first collected in large ponds for evaporation, and was then drawn off and boiled in pans. Traces of these activities might well be found in Portchester, as the area of the salines is relatively undisturbed. Although the production of salt continued after the medieval period, it had become less important after the growth of salt imports in the fourteenth century and later,8 and may have been largely for local sale, or for salting the local catches of fish. Rent paid in kind to the castle and abbey will have kept them well supplied. There were still large-scale salterns in the early nineteenth century.9

# Change in the Village

It is easy to depict Portchester as a village whose life changed little through the centuries. To an extent this was true, in that the topography of the village was a continual constraint, from the unknown date of origin of the open-field system until enclosure in the nineteenth century. There was also the dual lordship of Portchester for over 500 years, which will have been a conservative factor. The tempo of pre-industrial rural life had an underlying continuity, until the marshes were reclaimed, the pastures ploughed up and the commons enclosed. But changes there were, in population and economy, that will have altered the structure of the village in each generation.

Harvest failure and plague were always capable of causing sudden and drastic changes to the community, in ways that can rarely be appreciated through surviving records. The Black Death in 1349 was a big enough catastrophe to leave a distinct mark in the court rolls of Titchfield Abbey, which have been analysed by Watts. The evidence for Portchester is

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<sup>1</sup> P.R.O. E101/380/4, f.14 (§56).
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<sup>&</sup>lt;sup>2</sup> Cal. Pat. Rolls, 1330-4, 203, Cal. Inq. Misc., ii, 304, no. 1242; Thurlhead = Thirlepoll, whale (q.v. O.E.D.).

<sup>&</sup>lt;sup>3</sup> Watts 1958a, 138-40; 1958b, 33 (B.L., MS. Loans 29/59, f. 12).

<sup>4</sup> Cal. Inq. Misc., 1, 122 (362).

<sup>&</sup>lt;sup>5</sup> Darby and Campbell, 1971, 343, fig. 100; Hodson, 1978, no. 3a (B.L., Add. MS. 16371a).

<sup>6</sup> Camden, 1695, 123.

<sup>&</sup>lt;sup>7</sup> Bridbury, 1955, 16 f.

<sup>8</sup> Ibid., 101 f.

<sup>9</sup> O.S. maps, Margary, 1981.

difficult, but a least twenty-eight tenants died, and possibly as many as sixty; this, of course, omits those who were solely tenants of the King. Although most of the lands of plague victims were taken on by new owners, the effect of immediate mortality may have been a reduction of population to something like 40 per cent of its pre-plague size, judging from the Titchfield manors as a whole. Entire families disappeared, and, although the business of the courts was back to normal within 10 years, it probably took about 30 years for the population to reach 80 per cent of its former size. The gaps will to some extent have been filled with immigration into the village, and growth in the scale of land-holding. Absolute figures for population size are dangerous to estimate, and the usual type of manorial evidence is not reliable, but the attempt can be made with the figures in the 1405 survey. As at least 103 individuals are named, from a minimum of 63 families, living in some 138 messuages, one might hazard a figure in excess of 300 and perhaps not greater than 400. If this can be taken as something like the pre-plague population, then that figure must be seen as a summit reached over many years, with the general growth in population during the twelfth and thirteenth centuries.

One matter in which Portchester was ahead of the other Titchfield manors was in the commutation of services owed to the Abbot for cash payments; this was allowed for in the thirteenth-century custumal and was regular by the early fourteenth century.<sup>2</sup> It released the customary tenants from obligatory days of works and added yet another payment to their various cash outgoings over the year. One service that remained was not manorial, but due to the castle; that of finding twelve foot-soldiers to serve in the castle in time of war (15 days at their expense, and thereafter at the King's). Certain lands were charged with providing the arms for these men, and are mentioned in the 1405 survey; even the post-medieval custumal claims the right of all tenants to serve King in time of war in no other place than at the castle.<sup>3</sup>

In another classic area of change in the medieval manor, the consolidation of landholdings, there was not much progress by 1405, as has already been indicated. The case of Alice atte Benithe was most unusual, where 15 acres of base-tenure land was held in two adjacent furlongs in Northfield (N.19 and 20). In general it would seem that not even purchases of high-tenure land were so arranged as to create blocks of land, and exchanges of strips in the fields were few: Watts has found only seventeen instances in the century after 1270.<sup>4</sup> Nine of these involved the Abbot, who evidently was making additions to the demesne. However, as we have seen, the changes after 1405 were slight, and the demesne was never enclosed. It would require much more work on the post-medieval records to determine the nature of changes after 1405 in the distribution of non-demesne land.

# PORTCHESTER: VILLAGE, SMALL TOWN OR BOROUGH?

Attention has already been drawn to the fact that Portchester was a manor that was divided between the Abbot of Titchfield and the King, and that no 'town' or 'borough' had a separate existence within it. That its function was that of a small market town, a villa merca-

<sup>&</sup>lt;sup>1</sup> Watts, 1958a, 185-218.

<sup>&</sup>lt;sup>2</sup> Ibid., 114-18; Titch. Reg. f. 45v.

<sup>&</sup>lt;sup>3</sup> Book of Fees, 11, 1364; Titch. Reg. f. 28; B.L., Add. MS. 8153, f. 180.

<sup>&</sup>lt;sup>4</sup> Watts, 1958a, 40–9.

toria, can be fairly easily demonstrated, but it is harder to find any traces of burghal status. It is a matter on which the excellent documentation for Portchester is generally silent, and perhaps intentionally so.

The appearance of Portchester in the Burghal Hidage is not followed by its designation as a borough in Domesday Book (only Southampton was accorded that status in Hampshire, the city of Winchester not being included). If Portchester remained a central place after the military requirements of the tenth century had receded, it is notable that it did not have a mint, and its appearance in Domesday Book marks it out as no different from any other manor. No doubt Portchester might have become a borough, being a large manor with an important castle in it, but the foundation of Portsmouth by John de Gisors in c. 1180 must have stemmed any such tendency (and even Portsmouth had a long struggle with Southampton to maintain its rights and independence). After Titchfield Abbey acquired two-thirds of Portchester in 1231, it might further be supposed that the Abbey would have frowned on any burghal aspirations, if only to maintain the position of its own market town of Titchfield. So Portchester never received a borough charter, and never sent burgesses to Parliament.

It might be supposed from a variety of royal taxation returns that Portchester was a 'taxation borough', i.e. was treated as such by the collectors.<sup>2</sup> In the twelfth-century borough aids it was not a contributor, except in 1177 and 1187 when the tax was widely assessed on the royal demesnes as well as the boroughs.<sup>3</sup> After 1306 Portchester appears sporadically in subsidies paying at the higher rate due from boroughs, but less consistently than any of the other 'taxation boroughs' in Hampshire; it had previously paid as a vill on royal demesne rather than as a borough. The 1316 Nomina Villarum listed Portchester as a separate 'Liberty', neither a vill nor a borough. In the 1334 Lay Subsidy 'Portchester Foreign' paid at the ordinary rate (one-fifteenth):6 the Foreign included hamlets of Hilsea, East Cosham, Wanstead and Boarhunt Herbelyn, i.e. the castle-guard manors.<sup>7</sup> The 'Intrinsic' part paid as a borough at the higher rate (one-tenth).8 The designation of taxation boroughs was somewhat at the whim of the tax-collectors, and as royal demesne (in part) Portchester should in any case have been charged at the higher rate. A Hundred jury in 1322, choosing foot-soldiers from each vill to go to Scotland, was in no doubt, however, stating that Portchester, like other places in Portsdown Hundred, answered as a vill before the itinerant justices, and that Portsmouth 'is a Borough and that there is no other Borough in the Hundred'.9

Despite this, Portchester had been represented as a borough by its own jury before the itinerant justices in 1236,<sup>10</sup> and there are a few hints that the men of Portchester had at one time had burghal pretensions. In 1258, in a case concerning the wardship of some land held by serjeanty of finding twelve men to serve in the castle, the others who similarly held land from the King were described as 'burgesses of the *villa* of Portchester'.<sup>11</sup> As Watts has found from

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<sup>1</sup> Hoad, 1981, and Beresford, 1967, 447-9.
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<sup>2</sup> Willard, 1933.

<sup>&</sup>lt;sup>3</sup> Stephenson, 1933, 160 f. and app. iv (omitted from last two columns, cf. 163 n. 4); P.R. 23 Hen. II, 174 and 33 Hen. II, 201.

<sup>4</sup> Willard, 1933, 422, 425 and 432.

<sup>5</sup> Feudal Aids, II, 323.

<sup>6</sup> Glasscock, 1975, 111 (assessed at £36. 7s. 6d.).

<sup>&</sup>lt;sup>7</sup> Titch. Reg. f. 69, as defined in 1322 (see below). To these should be added the other manor, Bere in Southwick.

<sup>8</sup> Glasscock, 1975, 121 (assessed at £82. 11s. 8d.).

<sup>9</sup> Titch. Reg. f. 69.

<sup>&</sup>lt;sup>10</sup> Beresford and Finberg, 1973, 29-30 and 120, quoting P.R.O. JI 1/775 m. 15.

<sup>11</sup> Plac. Abbrev., 146.

the court rolls: 'tenants of Portchester were frequently referred to as burgesses, and aldermen took the place of tithingmen in making presentments. In 1312 Richard Segar's heir was declared not to be liable for relief because he held by burgage tenure.' However, such evidence is harder to find in the Titchfield Register, and non-existent in the 1405 Rememoratorium, and one wonders how much editing-out was practised by the indefatigable compiler of these volumes. Miss Bateson was able to find 'burghal characteristics' in the post-medieval custumal of Portchester, but free devise is elusive in earlier custumals.<sup>2</sup>

Leaving aside for now the more technical question of whether Portchester was a borough, it will be somewhat simpler to turn to the matter of what sort of place it actually was. Unfortunately, the Poll-tax assessments for 1381, which have provided so much Midlands evidence for Hilton's study of 'The Small Town in Peasant Society',<sup>3</sup> do not survive for Portchester, so the information on trades and occupations is harder to come by. There are chance references to occupations scattered through the court rolls, from which the Titchfield manors can be compared. Watts has found that whereas 6 to 12 named occupations (other than purely agricultural ones) might be found on a normal manor, the abbot's tenants alone in Portchester provide 20 to 25, a figure matched by Wallsworth and Cadland; in Titchfield itself there were over 50.4

Hilton has found, in studying occupation lists of small towns, that many of them, although not specialized communities, showed a 'sharp functional differentiation from the agricultural hinterland. Their inhabitants were overwhelmingly concerned with commerce and manufacture and the weekly market was the focus of their lives.'5 Portchester, like Titchfield, had a market and fair (granted in 1294),6 and it may be supposed that the non-agricultural occupations were geared to the market. Whether these were the sole occupations of the people concerned is another matter. The unusual evidence for Portchester is of course the 1405 survey, which includes only thirteen people with no land in the fields (the Titchfield rental of 1381 has fifty-eight such). The topography of Portchester has nothing remotely 'urban' about it, and even the widening of Southstreet towards its southern end can be seen as a village green as much as a market. The survey speaks only of messuages and tofts, and mentions no shops, though this may not be significant; in any case shops are more appropriate to an urban setting than a small town.8 Perhaps, as already mentioned, the most interesting revelation of the survey is the widespread holding of small amounts of land, which implies an economic structure where by-occupations in some sort of husbandry must have been practised alongside other crafts. The peculiarities of Portchester by comparison with the other Titchfield manors — its more active land-market, the smaller holdings and the earlier commutation of services — can partly be explained if it was a flourishing small town with diverse economic

The region round Portchester had a number of small market towns,9 under varied lord-

<sup>&</sup>lt;sup>1</sup> Watts, 1958a, 136; 1958b, 32.

<sup>&</sup>lt;sup>2</sup> Bateson, 1906, II, 100, 157 n. 1 and 198 n. 3, quoting B.L., Add. MS. 8153, ff. 175-80 (Lake Allen Collections).

<sup>&</sup>lt;sup>3</sup> Hilton, 1975, cap. v, 76–94.

<sup>4</sup> Watts, 1958a, 132; 1958b, 31-3.

<sup>&</sup>lt;sup>5</sup> Hilton, 1975, 85.

<sup>6</sup> Cal. Close Rolls, 1288-96, 360-1 (Saturday market and

three-day fair at the Assumption); also Cal. Close Rolls, 1318-23, 403 (Monday market, same fair).

<sup>&</sup>lt;sup>7</sup> Watts, 1958a, 132, referring to B.L., MS. Loans 29/58.

<sup>&</sup>lt;sup>8</sup> But see entry on court roll of 8 Jan. 1249, 'I messuage with selds next the bridge over the castle ditch': B.L., MS. Loans 29/59, f. 11<sup>v</sup>.

<sup>&</sup>lt;sup>9</sup> Hughes, 1976.

ship, and whose markets were competing for trade from the same rural hinterland (fig. 77). The distribution of these places seems remarkably concentrated, and they were not all equally successful. The assessments of the boroughs and market towns in the Lay Subsidy of 1334 gives some indication of their relative standing at one date and before the Black Death:

TABLE XXXII

1334 Assessments of Towns

	556; Southam	pton £511; Chichester £220	
Titchfield	£111	D.B. Market	(Titchfield Abbey)
Wickham	£96	Market 1268	(Scures family)
Portchester	£82	Market 1294	(Titchfield/the King)
Emsworth	£65	Market 1239	(Fitzherbert family)
Havant	£44	Market 1200	(Monks/Bishop of Winchester)
Southwick	£43	Market 1235	(Southwick Priory)
Fareham	£35	(Borough in 13th c.)	(Bishop of Winchester)
Waltham	£30	(Market in 1275)	(Bishop of Winchester)
Petersfield	£25	Borough 1183×97	(Earl of Gloucester)

Source: Glasscock, 1975.

The figures have been multiplied by 10 or 15 according to the rate of tax.

Other information from V.C.H., Hants, III, Beresford and Finberg, 1973 and Hughes, 1976.

From this it can be seen that the truly urban centres were in a class of their own, while the small towns of higher rank (Titchfield, Wickham and Portchester) outstripped by far the smaller market centres, and the Borough of Petersfield was assessed at a level equal to that of many ordinary villages.

The economic connection between market town and country, or between the towns themselves, is a dark area rarely illuminated by records and a matter of great interest, but there are a few instances where something can be said about Portchester. Reference has already been made to the early thirteenth-century services due in carrying the lord's food from Winchester, Southampton and Chichester, and the buying of seed-corn or selling of grain at Titchfield, Fareham or Southwick. That men from Portchester might travel to other markets to sell is also suggested by the presence of one selling meat at Titchfield in 1398.2 What we would really like to know is the frequency of villagers' travels to market, and the sort of purchases they made there. Some indication of the local availability of goods and materials is given by the fourteenth-century building accounts of the castle, and, whilst not strictly comparable, the requirements of the castle will in some respects have overlapped with those of villagers.<sup>3</sup> All specialist imports — coals, iron, steel, plaster and board — came from Southampton, while particular items would be sought from specialized traders colours from Chichester and Portsmouth, hawsers from Portsmouth and Southampton. Tiles were made locally, and came in from Crockerhill and Portsmouth, but if necessary were brought from London, Southampton and Chichester. Small items of equipment, mostly

<sup>&</sup>lt;sup>1</sup> Titch. Reg. f. 44<sup>v</sup>.

<sup>&</sup>lt;sup>2</sup> Watts, 1958a, 142; 1958b, 35.

<sup>&</sup>lt;sup>3</sup> Details of the following from accounts for 1321, 1324, 1337-8, 1362 and 1396-9 (nos. §53, §56, §58, §79, §98 and §125).

wooden, were perhaps made on site, or in the village; few sources are named, but on one occasion a tun was made in Portchester. Laths were bought in Southampton, Fareham and Southwick, which were perhaps merely redistribution centres for woodland craftsmen: hurdles were usually made in the woods and brought direct to the castle. Ironwork came from a surprising variety of places. Nails were made in Titchfield, Fareham, Cosham and Meonstoke, hinges in Portchester and Southwick, locks in Fareham and quarrell tips in Gosport. It is notable how many sources were required for these basic items, though it may be that the sheer bulk that was needed (especially the thousands of nails) made it necessary to search out smiths prepared to do the work. Whilst places of purchase are by no means always mentioned, it is perhaps surprising how rarely Portchester itself occurs, unless it was so common a source for minor purchases that there was no need to name it. What the village could and did supply was a ready source of labour for the castle works, and many local men were among the unskilled 'assistants' to the building craftsmen, or engaged on digging and collecting jobs. If the wealthiest man in Portchester in 1405, John Plumber senior, was the same of that name who was working on the castle leadwork in the 1390s, his family may be an instance of castle workmen settling in the village, or alternatively a village family that could look to the castle for employment from time to time.

There is little evidence for the long-distance contacts of Portchester men, though some were evidently mariners engaged in either coastal or overseas trade. In 1343 there was an order to arrest the ships La Margarete and La Jouette of Portchester, which had gone with the King to Brittany and departed from Brest against his command.<sup>1</sup>

#### Conclusion

Portchester was without doubt a prosperous community, a market town that never quite achieved full burghal status, though it may have benefited from the relative freedom imparted by its dual lordship. We have seen that the agrarian side of the manor was more allpervading than might otherwise be expected, and we must imagine a mixture of occupations that does not fit any neat view of a 'village' or 'town'. At the time of the last great medieval building campaign on the castle, the days were long past when the lord could demand attendance at his bibulous 'scotales' lasting three days,<sup>2</sup> or the carrying of buckets of marl up the side of Portsdown, though the tenants might still have been seen collecting their lances and caps to do castle-guard at the latest military emergency.3 Between collecting sand and flints for the castle, or carting stone from the mill wharf, the labourers must have found time to tend their strips in the fields, manage the salt-pans or drive their beasts over the hill to Bere. Perhaps the most abiding picture is of the anonymous compiler of the survey trudging through the furlongs counting up the helves and headlands, or sitting in the scriptorium engrossing and indexing his meticulous work. Without him we should know very little about the community that surrounded the castle, or of the mundane context in which the great affairs of state were transacted within its walls.

<sup>&</sup>lt;sup>1</sup> Cal. Close Rolls, 1343-6, 128-9.

<sup>&</sup>lt;sup>2</sup> Titch. Reg. f. 44<sup>v</sup>.

<sup>&</sup>lt;sup>3</sup> References in Titch. Reg. f. 28 and the 1405 survey, f. 6 (S. 24), suggest that this was not altogether a thing of the past.

# XI. SYNTHESIS

THE location of Portchester in Portsmouth harbour was the key to its importance, being the most secure base westward from Dover, accessible from central-southern England and a convenient point of departure for Normandy. In the long history of the harbour defences it gradually declined in importance with the construction of other defences in and around Portsmouth, but the large area enclosed by the Roman walls for long ensured its use as a secure base for maritime expeditions.

The castle was not the feudal centre of a large castellany, but became a royal castle with a small appurtenant estate, and was kept in repair throughout the Middle Ages as the home of a resident constable, with sporadic building campaigns initiated by the royal visitors who so infrequently made use of their creations. The very survival of its buildings reflects the diminishing importance of the castle, but has left a very instructive ruin, the history of which is illuminated by an impressive series of written sources, to which the archaeological investigation has now added an extra dimension.

In the following pages a summary is given of the history of the site, incorporating the various sources of information available to us. The detailed evidence has been laid out in the preceding sections, where areas of uncertainty have been considered in full. For this reason we have felt justified in omitting many of the qualifying adjectives which would otherwise have stultified the text. To provide a visual accompaniment a series of reconstruction drawings has been provided by Terry Ball (pls. XLV–XLIX).

At the time of the Norman conquest Portchester consisted of three manors, one or more of which must have been centred on the complex of buildings excavated in the outer bailey (Cunliffe, 1976). These substantial buildings were largely abandoned, probably after the Conquest. By the time of Domesday Book (1086) the three manors belonged to William Mauduit, along with other unnamed manors in Portsdown Hundred (D.B., f.47°, cap.35). It is likely that this land extended up to the Forest of Bere, and possible that it represented the reconstitution of a large estate that had existed earlier and been fragmented by 1066. William Mauduit may have held Portchester by serjeanty of the Chamberlainship of the Treasury (Round, 1899, 82–3; Poole, 1912, 35–6), and been the first of his family to hold this hereditary office at court (Mason, 1976; 1980b, lii–iii). Later evidence suggests the convenience of the castle as a safe deposit *en route* from Winchester to Normandy (Le Patourel, 1976, 150 and 167). In any case it would have been necessary for a reliable figure to have held this part of the coastal defence system, which comprised a succession of coastal strong-points reaching from Dover to Corfe.

Under Mauduit (who died c. 1100) the inner bailey of the castle was probably created, moving the centre of activity from the old location by the church to the north-west corner of the Roman fort walls. The outer bailey was strengthened by the rebuilding of the land gate, whilst the water gate retained its late eleventh-century tower (Cunliffe, 1976; 1977). No certain evidence survives for the earliest form of the inner bailey, but it must have involved the demolition of the Roman walls back from the corner, the recutting of the outer ditches

and the beginning of the keep. The possibility that this was simply a single-storey hall is suggested by certain features of the keep, principally its double-splayed windows.

The creation of the two-storey keep, by thickening and raising the walls, could thus have been a secondary phase, perhaps associated with the digging of a ditch round the inner bailey and the creation of an entrance through the curtain wall on the south-west side. Parallels to the keep suggest a date in the first third of the twelfth century for these works, and they were most likely carried out by William Mauduit's son Robert, before his death by drowning in the White Ship disaster of 1120. Robert's brother William (II) only received some of the family land (Mason, 1980b, xxvi-vii) and the castle apparently reverted to the King. Henry I frequently used Portchester as his departure point for Normandy (Le Patourel, 1976, 175); the building of the keep and inner bailey defences created a secure castle at a key location. The stone keep contained a large hall and chamber on the first floor over a basement, with garret rooms above. To the ditch surrounding the inner bailey was soon added a stone curtain wall and gatehouse.

It was probably at about this time that lands from Portchester and the royal manor of Wymering were made into several small manors to be held directly from the Crown by service of providing soldiers to guard the castle (Rigold, 1965, 5). The castle itself may have been under the care of the Sheriff, William of Pont de l'Arche, and in 1129-30 he owed the King 1,000 marks (£666. 13s. 4d.) for Robert Mauduit's Chamberlainship and daughter Constance (P.R. 31 Hen. I, 37; Mason, 1976; 1980a); included in this must have been the castle and the lands adjacent to Portchester. Pont de l'Arche was a leading figure at court, successively acting as Chamberlain of the Treasury to Henry I, Stephen and the Empress Matilda. In the anarchy he appears in a vivid anecdote in the Gesta Stephani, imprisoned in 1143 in his castle (no doubt at Portchester) whilst a soldier sent to help him against the Bishop of Winchester 'enjoyed his castle, wealth and wife' and came to terms with the Bishop, and ultimately to a gruesome end (Potter, 1955, 100; Mason, 1980a, 3).

Pont de l'Arche may have been responsible for some work at the castle (perhaps the curtain wall of the inner bailey) but directed his energies to the priory church at Portchester. It has now been shown that the priory was founded not by Henry I in 1133, but by Pont de l'Arche some five years earlier, and that its successor at Southwick Priory falsified its history 'by judicious pruning of its archives' so as to appear to have a royal patron (Mason, 1980a, 1-2 and 7). The building of the church in Portchester in the 1130s (Cunliffe, 1977, 106) perhaps implies that work on the castle was completed. Endowment of the new foundation caused a further depletion of the land appurtenant to the castle, and disposed of most of the land held to the north of Portsdown. The priory itself moved over Portsdown, to the more peaceful and spacious site at Southwick: the canons were still at Portchester in 1147, but may have moved away after the death of William of Pont de l'Arche in c. 1148, and were certainly there by 1150 (Mason, 1980a, 3-4).

Portchester may have remained in the hands of Robert, the son of Pont de l'Arche, but was promised to William Mauduit (II) when he joined the Angevin cause in 1153. The grant by Duke Henry apparently restored the castle, Chamberlainship and appurtenant lands to William, but its present form is spurious (Mason, 1980b, liii and no. 167). William (II) was succeeded by his son William (III) before 1158, and the royal confirmation of his father's land does not include Portchester (*ibid.*, no. 176), so the castle may quickly have reverted to King

Henry II. It was used for shipping bullion to Normandy in 1163-4 (P.R. 10 Hen. II, 26) and the King was there in 1164, 1166 and 1172 (Colvin et al., 1963, 783; V.C.H. Hants, III, 152); but for what the negative evidence is worth there are no building records on the surviving Pipe Rolls from 1155 to 1173.

It was about the middle of the century that the keep was heightened and the forebuildings added: this increased the accommodation of the keep by two large rooms on the top floor, with a chapel and chamber in the forebuildings. This might have been done late in the time of William of Pont de l'Arche, or even by William Mauduit (II), but is less likely to be royal work.

The castle was now to remain in the King's hands, looked after by a constable or custodian. The lands associated with the castle had now been diminished by the creation of castle-guard manors, the endowments of the priory and the lands returned to the Mauduits. The manor held with the castle was largely in the parish of Portchester itself, perhaps linked with the keepership of the Forest of Bere, as was the case later. We first hear of the castle at work in the rebellion of 1173-4, when, along with small repairs done to the castle, it was munitioned and garrisoned by ten and later twenty knights, and was the place of imprisonment of the Earl and Countess of Leicester (§1).

It may have been at this period, if not before, that the domestic buildings of the castle were extended round the inner bailey. On the west side were two stone-built single-storey ranges on the site of the later hall and chamber, in which there still survives a fragment of decorative arcading which may indicate a date earlier in the century. A similar range was added on the south-east side. To the north was a large building, with a first-floor hall or chamber over a vaulted undercroft, later to become the constable's house. The completion of these works, perhaps in 1181 (§2), marks the fullest extent of the Norman castle, with ample accommodation for the resident constable, garrison, or royal visitors. Only minor additions were to be made in the course of the next century.

The growth of the royal castle beside a strategic port may have been part of the stimulus for the foundation of Portsmouth, now shown to have been founded by John of Gisors c. 1180 rather than by King Richard I in 1194 when he gave the town a charter (Hoad, 1981; Beresford, 1967, 447-8). There was for a while a royal residence of some sort at Portsmouth (Colvin et al., 1963, 988) but no doubt many arrivals and departures from 'Portsmouth' were in fact made from Portchester, or involved a visit there, with its facilities for entertaining King and retinue. What the foundation of Portsmouth did ensure was that the growth of Portchester as a town or port was doomed, and despite its island location and rivalry with Southampton, Portsmouth was able to make headway as a naval base and urban centre.

The two visits of Richard I to England brought him to Portsmouth/Portchester, and the castle was kept in repair in his reign, being one of many fortified and garrisoned against invasion in John's rebellion in 1193 (§4–6). The garrisons of five or ten knights, with their serjeants, were retained by the week rather than being permanent fixtures in the castle.

Under King John, his restless itineration made Portchester a regular stopping place, and base for his military expeditions. It was here that he learnt of the loss of Normandy in 1204, and was frustrated in his attempts to sail for Poitou in 1205 and 1213, and finally sailed in 1214 (V.C.H., *Hants*, III, 152). The modest expenditure on the castle buildings in his reign included a 'chamber and wardrobe' built by 1211 (§13), which may be the building NW1 added to the forebuildings of the keep (period 3).

After the invasion of Prince Louis at Thanet in May 1216 to aid the rebellious barons, Portchester was one of a number of castles which surrendered to the French. At the end of the civil war it was ordered to be demolished, as was Chichester Castle (Colvin et al., 1963, 613 and 784). Whatever the intention, Portchester was not dismantled, and was maintained in Henry III's reign with constant expenditure of small amounts on the buildings, and some evidence for larger campaigns in 1229–30 and the 1250s. Its use in the intermittent wars with France is attested by the collection of munitions (typically gangways and hurdles) there in 1226, 1229 and 1242 (Cal. Lib. Rolls, 1226–40, 3, 7, 136–7, 140, 489; ibid., 1240–45, 185) and the occasions of the few royal visits (V.C.H., Hants, III, 152–3). The one discernible alteration that belongs to this period (period 3) is the addition of the east range (E1), possibly belonging to the work of 1229–30 which included a kitchen and chamber (§19–23).

The land area appurtenant to the castle was now again diminished, by the grant in 1231 of two-thirds of the manor to the Bishop of Winchester, who was promoting the foundation of Titchfield Abbey. Division of the rental produced a complex territorial fraction, and led sooner or later to the abandonment of the one-third demesne farm. The manor remaining to the constable was little more than rents and courts, but still included responsibility for the Forest of Bere, with its courts and duties of controlling hunting and making gifts of game or timber at the King's order (e.g. Cal. Close Rolls, 1234-7, 23; 1256-9, 236; 1268-72, 5).

The increased building activity of the 1250s was part of a general programme of inspection and renovation which presaged the eventual formal organization of the Office of Works; Master John the mason and Master Alexander the carpenter visited several places, including Portchester in 1256 (§30; Colvin et al., 1963, 107-8), and advised on the need and cost of works. During the next few years the keep was reroofed (perhaps even given its topmost courses of masonry) and floored with abandoned gangways (§33), the chapel was repaired and other unspecified work done. The results of a considerable expenditure are hard to identify in the remaining structures, though the first phase of the extension to the gatehouse (Bay II) may have been begun then. No doubt the main necessary outlay was on new roofing, whilst it is not unlikely that much of the fenestration of the castle would have been brought up to date, if this had not already been done in previous decades.

Royal visits were now too infrequent to make extensive rebuilding worthwhile, though the buildings would have to suffice for the constable and his household, occasional prisoners and even those who sought the King's permission to stay in the castle (Cal. Close Rolls, 1256–9, 146; Cal. Pat. Rolls, 1258–66, 295). Despite further works in the 1260s, a manorial extent of 1275 describes the buildings as old and ruinous, unsuitable for habitation and in need of great repair (§47); no doubt this was somewhat exaggerated and little was done about it.

Shortly before this, in 1273, the castle had been granted by Edward I to his mother, Queen Eleanor, who held it until her death in 1290; subsequently it was held by Queen Margaret, from 1299 to 1317, and Queen Isabella from 1327 to 1330, but it did not remain as part of the Queens' endowment (Colvin et al., 1963, 784–6; Wolffe, 1971, 55–6 and 234). It is possible that unrecorded work was undertaken during these periods, but there is evidence for the mill being rebuilt in 1289. Repairs carried out in 1296 during the war with France are described in an inquisition (§51–2, p. 136), and included work on all the gates, particularly the middle one, where a new bridge and brattice had been constructed. No existing structure of this date can be identified with certainty.

Throughout the twelfth and thirteenth centuries the inner bailey was kept comparatively free of rubbish, domestic debris no doubt being carted away and dumped or spread on neighbouring fields, but the few deposits which, for a variety of reasons, do survive produce a sufficient range of faunal remains and potsherds to throw some light on domestic affairs. Pottery is generally coarse ware derived from local sources, but a few imports from Normandy occur, providing a surprisingly pale reflection of the frequent intercourse which is known to have gone on between the two areas. No doubt what survives is merely kitchen wares, the King's table being graced with silver or pewter.

The food remains, on the other hand, provide a vivid impression of the rich and varied diet. Beef, mutton and pork predominated, the meat arriving as joints or butchered carcasses. Boars' heads and sucking pig are represented; venison, rabbits and hares added variety. The diet was supplemented with a surprisingly wide range of birds and fish. Most common were geese, duck and domestic fowl (both chicken and bantams), but decoying or netting added teal, wigeon, partridge, curlew, pigeon, rock dove and many others. Among the fish, conger eel, cod, ling, bass and plaice (or flounder) were predominant: altogether seventeen different species are listed. Most of the fish could have been caught by shore-line or from small boats in the harbour, but conger eel, large cod, ling, herring and hake are deep-sea fish and there is evidence that some at least were salted down to keep. Meals in the castle were evidently varied.

During the fourteenth century the castle entered its most active period. The wars with France, the repeated invasion scares or preparations for expeditions gave the fortifications of the south coast a new role, with the defences of castles and towns often being repaired simultaneously (Turner, 1970, 147 f.). However, the first major building programme at Portchester was begun by Edward II in 1320 and does not seem to have been connected with any war, but was possibly the result of personal interest. It is curious that Portchester was in the hands of Hugh Despenser the Younger from 1320 to 1324 (Cal. Fine Rolls, 1319–27, 32 and 290), and the one other castle in the south on which there was exceptional outlay, Hanley (Worcs.), was also held by Despenser (Colvin et al., 1963, 162 and 667).

The work at Portchester continued for six years, and towards the end of this period the castle was visited regularly by the King, who now feared the invasion that was, in the event, to deprive him of his throne (V.C.H., Hants, III, 153). Weekly accounts for 1320-1 indicate an organized campaign of work on the castle walls (perhaps in the outer bailey) and the preparation of materials for building at the land gate and middle gate. The enrolled accounts for 1321-5 provide more information on materials than on where they were employed, but together with a variety of miscellaneous sources they make it clear that the gates were refurbished, and that various 'halls' and 'chambers' were built or reconstructed (and that at least one of these was in the outer bailey) (§§53 and 55).

Archaeological evidence that can be associated with this phase (period 4) is plentiful. All three gates of the castle display similar mouldings on their door jambs (fig. 52B, p. 114) and the middle gate into the inner bailey (Bay II) survives much as built then, with its vaulted entrance passage, portcullis, buttresses and flanking roundels. The plan of the castle was radically revised. To the hall range in the south-west was added a kitchen, whilst the kitchen range on the east side of the court was divided into two. Flanking the south and east sides of the keep forebuildings two ranges were built with another building standing out at the corner (NW2). The eastern of these was probably a covered passage giving access to the keep,

its forebuildings, and the new postern gate in the north curtain. At the corner, the projecting building may have been a tower or porch controlling access to the new ranges and the west side of the courtyard. The southern range could have contained one large chamber, or was perhaps storeyed, and overlooked a private garden that had been made by fencing off the west side of the courtyard. There is little doubt that this side of the castle had now become a small self-contained palace, or set of apartments for the itinerant court (one source mentions the King's wardrobe in a turret at the head of the hall, which must be the south-west bastion). The refitting of the eastern side of the courtyard implies a reorganization of the domestic arrangements for the constable, who presumably used the hall in the north range, and may have had a private chamber at the north end of the east range. The appearance, albeit fleetingly, of references to buildings in the outer bailey is a reminder of the need there will have been for additional accommodation for the King's retinue, as well as stabling.

The expenditure of over £1,100 had now brought Portchester up to date with more secure gatehouses and renovated quarters for the constable and his occasional visitors. There is now some evidence for aspects of the normal life of the castle. Appointments were made of a porter in 1324, at 2d. a day (and a robe) 'for the custody of the gate', and in 1325 of a custodian of the keep who could oversee the outer bailey and had charge over the armour, crossbows, springalds and engines for its defence (Cal. Pat. Rolls, 1324-7, 3 and 197). The only surviving set of constable's accounts, those of the 'custodian' Thomas of Sandford from 1324 to 1326, show an annual income of £13 or £14 from manorial receipts, a small outlay on miscellaneous items and only a few shillings' income from the perquisites of the Forest of Bere (§57). In 1330 the castle was rented at 25 marks a year (£16. 13s. 4d.), which could hardly have been profitable (Cal. Fine Rolls, 1327-37, 215), though in 1323-4 the constable had been paid 12d. a day in fees (§63). Following an extent of the manor and investigation in 1341 the farm was reduced to £10. 11s.  $7\frac{1}{2}d$ ., mainly on account of the damaged mill and reduced income from the Forest (§84-5).

Within a decade repairs were again in hand (§76), and in 1335 an Inquisition reported on the buildings, munitions and victuals of the castle (§77, p. 141). This provides a useful picture of the food and weaponry that were thought to be necessary, and reports in customary vein on the poor state of the buildings, especially the 'ruinous and almost decayed' building next to the keep. It so happened that this was just prior to the outbreak of the Hundred Years' War in 1337, which first made itself felt with the raids on Portsmouth and Southampton in 1338, and was reflected in the urgent defensive preparations made all along the south coast (Hewitt, 1966, 6). Portchester was already in some state of readiness, as after the 1335 report general repairs had been made to its defences by the Sheriff of Hampshire in 1336, and to the defences and buildings by the Earl of Arundel in 1337-8 (for which accounts survive: §79, p. 142). Much of the account is taken up with work on two buildings, the 'Queen's Chamber' and the 'Knighten Chamber', which can only tentatively be identified. The great crack in the keep (still visible on the north side) was filled, and defences were constructed of which no trace survives: a false wall against enemy ships outside the water gate, bars and an embattled earth wall outside the land gate (probably also at the inner bailey gate) and new ditches were dug. The outer earthwork probably dates from this time (Cunliffe, 1977, 27). The greater and lesser springalds, large stationary engines firing wooden quarrels, were got into order, with ammunition being purchased for them and for crossbows.

Richard, Earl of Arundel was keeper of the maritime lands in Hampshire, part of the coastal home-defence system (Hewitt, 1966, 13). With the castle repaired, victuals were laid in store by the constable, John Haket, in August 1338 and the Earl was ordered to keep ten men at arms and forty archers in the castle for its safe-keeping (Cal. Close Rolls, 1337–9, 446 and 564). Within a few months the pay had fallen into arrears and there were fears that Wiltshire men serving in the castle might defect (Cal. Close Rolls, 1339–41, 65, 113 and 123). Thus the castle played its part in defence as well as being kept prepared to act as a base for assembling men and materials of war. The expected arrival of the King in 1346 led to hasty repairs of the hall, chambers and kitchen, and the building of a new 'chamber', whilst bridges were repaired in 1344 and 1351 (§87–91). The east range may have been modified at this time (E2). Delays kept the King at Portchester through June 1346, as his army of some 15,000 assembled, until he finally sailed for the campaign that was to lead to the victory at Crécy and the taking of Calais (McKisack, 1959, 132).

In the years of relative peace which followed, little is heard of the castle, until in 1356, the year of Poitiers, works were again initiated. Only the barest outlines of this are recorded: an order to work, and the enrolled account for works on 'the castle buildings and making a chamber 104 ft. long and 25 ft. wide de novo' (§92-4). Although the measurements do not fit exactly, this is most likely to refer to the hall range (SW3), which was completely rebuilt some time in the mid fourteenth century, as its archaeology indicates. Only partial remnants of this phase (period 5) stand above ground, and it is the sequence of foundations which proves that the hall was rebuilt as a two-storey range slightly to the east of its former position reaching to the edge of the gatehouse. A separate chamber was created at the west end with a new kitchen at the east. The principal survival from all this is the passage which connected the hall and chamber at first-floor level, and gave access to the roof up a spiral stair. The new chamber at the head of the hall led off from the great chamber and was lit from the hall with small high windows: this must have been the King's chamber. The only feature in the great chamber that survives is part of the door from the court at ground level. The fenestration of these buildings can only be guessed at. Probably contemporary with this was the rebuilding of the east range, again divided, and perhaps now given a tower in the north-east corner.

Some of this work must have been done, or finished, in 1362, when a larger amount was spent on the hall, chamber and bakehouse, on releading the keep and reconstructing the chapel (§95–8, p. 144). It is instructive that the building account, for all its details, can no more than the brief references of 1356 be related with certainty to the major operations revealed by the archaeology of the buildings.

Now Portchester will have been truly updated, with a storeyed hall and chamber in the King's apartments, a new chapel, and renovated lodgings on the opposite side of the court. Though small in scale and with most of its structures removed by subsequent work, it is not impossible to get some appreciation of this minor aspect of Edward III's great building programme (Colvin et al., 1963, 166-7).

In 1361 the Earl of Arundel granted to John of Edyndon his life interest of the keeping of the castle, vill and forest, at £10. 11s.  $7\frac{1}{2}d$ . a year, and fees of 8d. a day in peace and 12d. a day in time of war (Cal. Pat. Rolls, 1358-61, 539; Cal. Close Rolls, 1360-4, 181). The old porter, William of Portchester, a yeoman of the King's spicery, who had held his position since 1340, had been pensioned off in 1356 and was replaced (Cal. Close Rolls, 1339-41, 395; Cal. Pat.

Rolls, 1354–8, 366; ibid., 1358–61, 107). Appointments of Keepers of the Warren (in Kingesden, on Portsdown) now appear (Cal. Pat. Rolls, 1361–4, 144), and the series of Inquisitions post mortem shows that manors were still held by service of providing armed men in the castle in time of war (e.g. Cal. Inq. P.M. ix, 256, 315; xi, 157, 201 and 213). Between the alarms of war, the castle continued to function as the residence of the constable with responsibilities for the manor and forest. There was an invasion scare in 1360, when 50 quarters of wheat, 12 tuns of cider, 60 quarters of oats and 12 tuns of wine were sent to the castle; in the following year the inhabitants of Portchester were granted remission from taxes for having taken part in the defence of the castle and vill at the time of the raid on Winchelsea (Cal. Close Rolls, 1360–4, 14, 31, 39 and 197). Otherwise there was a further interlude of peace until hostilities resumed in 1369.

The repairs to Portchester in this year were part of a general programme of defensive work on the castles and town walls of the south coast, and not without cause, for Portsmouth was burned by the French (V.C.H., Hants, III, 187). The building accounts of 1369 (§103) are largely concerned with repairs to the gates and walls of the castle in the inner and outer bailey. Only at the water gate is there surviving work which can be attributed to this period (Cunliffe, 1977, 10–14), and nothing else is known of the great round tower of timber that was built opposite the church, possibly as a harbour look-out or beacon. A garrison account attached to the particulars of building work gives the garrison from May to November: two armed men and eighteen (later twelve) archers. A subsequent garrison account also includes a small amount for building and shows that the castle was kept fully manned for some five years (§104).

After the death of the Earl of Arundel in 1376, the keeping of the castle passed to Sir Robert of Assheton; the income was, as before, 8d. a day in peace and 12d. a day in time of war. A porter was to receive  $4\frac{1}{2}d$ . a day and have charge of the warren, and a groom under him; there was an artillier receiving 6d. a day and a watchman at 3d. These were to be paid for from manorial income, the excess to be paid by the sheriff (Cal. Pat. Rolls, 1374-7, 250 and 353). Assheton (of Ashton under Lyne, Lancs.) was a figure of some importance, who had been Chancellor of Ireland (1364-7), twice Admiral of the Western Fleet (1369 and 1371), King's Lieutenant in Ireland (1372-3), and was Treasurer at the time he was granted Portchester (q.v. D.N.B.; Tout, 1928, III, 278; Powicke and Fryde, 1961). He kept the castle, though not his other office, at the beginning of Richard II's reign, and then in 1381 was moved on to become Constable of Dover Castle and Warden of the Cinque Ports (Cal. Pat. Rolls. 1377-81, 589-90). It was during his period of office that the tower named after him must have been built, though the only reference is to its completion in 1385 (see below). With his reduced responsibilities after 1377 he might have had more occasion to visit the castle and a need for a more comfortable residence.

Works were begun at the castle in 1376, and continued for over a year (§105–13), under the supervision of Adam of Hartingdon, the Clerk of Works at Windsor (Colvin et al., 1963, 168). All that is known of this is that the mill was rebuilt (§107), and there is a reference to a lime-kiln in the castle (§111) which might be the one excavated in the outer bailey, if that does not belong to the 1390s (Cunliffe, 1977, 58–9). The renewal of war in 1377 after the accession of Richard II led to a further series of general defensive works on the south coast, and some of the expenditure must have been directed to that purpose.

The lack of specific references to the building of Assheton's Tower (period 6) may imply that it was built at his own expense. It provided, in association with the hall on the north side of the courtyard, a couple of private chambers with south-facing windows, latrines and fireplaces. They were accessible from the wall-walk above the hall, whilst the wall-walk itself continued round in the thickness of the wall, with gun-ports shaped like inverted keyholes facing out east and north. The private chambers also had gun-ports, possibly facing in all directions. This is the earliest example in England of a purpose-built structure with provision for all-round gunfire. Firearms are first recorded at Portchester in 1379, and were becoming an essential part of the equipment of any major castle at about that time.

Robert Bardolf, a Knight of the Chamber, succeeded Assheton in 1381, and took the castle on the same terms as him (Tout, 1928, IV, 344; Cal. Pat. Rolls, 1377-81, 594; Cal. Close Rolls, 1377-81, 441-2). The appointment of Bardolf emphasizes the political importance of a castle, which could be used to reward members of the household, and in turn placed trusted men about the kingdom to serve the King's interests (Tuck, 1973, 60). Accounts survive for his works of 1385 (§114–17), undertaken at a time of renewed fears of invasion (Colvin et al., 1963, 237). As previously mentioned, these included the completion of Assheton's Tower, which received a new lead roof, and minor fittings. The King's chief craftsmen, Henry Yveley and Hugh Herland (Colvin et al., 1963, 210 and 221) directed the operations of the masons and carpenters respectively, though the accounts are not explicit enough about what was done. The Queen's chamber was given new walls and roofing, and the chapel was refurnished and given new windows. From scattered references it would appear that the gate to the inner bailey was now extended: this would be Bay III, which added further lengths of wall flanking the entrance-passage, and another portcullis with a new bridge (period 6). Attention was again paid to the wall-walks, with rails being fitted to them, and stairs up to them built or repaired. The 'archery' section of the account refers to the two springalds, and the purchase of two iron guns firing lead pellets.

The fourteenth century saw comparatively little change in the life-style of the occupants in so far as the domestic rubbish can show. The greater diversity of pottery forms reflects wide-spread changes in the ceramic industry in general rather than changes in local taste, though a higher than expected ratio of pitchers to cooking pots might say something of household habits. Imported pitchers from Rouen and the Saintonge are a reminder of the lively wine-importing industry which would have supplied the castle.

The supply of meat, fowl and fish continued unabated. Fallow deer now appear and the quantity of rabbits and hares increases. The diet was also supplemented by swan, among a feast of birds of all kinds.

Further work was undertaken in 1390, to rebuild part of the western wall of the outer bailey, which had fallen (§118–20), but nothing more is recorded in Bardolf's time. In 1395 the castle passed to Roger Walden and his brother John (Cal. Pat. Rolls, 1391–6, 572). Walden had been a clerk in the King's service for about 10 years, had been Treasurer of Calais in 1387–92, the King's Secretary from 1393 and became Treasurer later in 1395; he was at the time Dean of York and held prebends in Lincoln, Exeter and Litchfield, and he was for a short while to be Archbishop of Canterbury (q.v. D.N.B.; Tout, 1928, IV, 7 and 1930, V, 221–3). The grant of the castle to Walden again shows the royal concern for having the castle in good hands, and raises questions about the motivation for the great building campaign of

1396–9. Could Walden have used his influence to encourage the initiation of the building programme? (As Treasurer he did issue the warrant for the Letters Patent in April 1396.) Or is this date of significance, being shortly after Richard II's marriage to the daughter of the King of France? It was not until November that the nuptial blessing was given in Calais (the wedding having been by proxy) and that the Queen came to England (Tout, 1928, IV, 2–5). While the truce with France had temporarily reduced the military importance of the castle, it is conceivable that the King envisaged a reception for his Queen at Portchester, or that he foresaw that the castle might be useful for future Channel crossings. His interest in certain royal houses was manifest in his building works of the previous decade, and the palace at Sheen had even been demolished after the death of his first wife (Mathew, 1968, 32–7 and see Sherborne, 1983, 25–6). In the 1390s a new house was built in Windsor Park and there was the great rebuilding of Westminster Hall (Colvin et al., 1963, 527 and 1008). With nothing of the grandeur of that project, the new palace at Portchester, fully recorded in a series of building accounts (§125, p. 151), does at least stand complete, if in ruin.

The new building (period 7) entailed the demolition and replacement of the kitchen, hall and chambers in the west half of the courtyard. The outer forebuildings of the keep were demolished and replaced by a smaller range on the south side of the keep. The privy garden was thus opened up, allowing the new palace to enjoy more natural sunlight. As in the apartments created by Edward III, the hall and chamber were raised on the first floor, with domestic offices and chambers beneath them. The hall was now approached through a vaulted porch, with a chamber in the tower above it, and a chamber over the service end of the hall. Besides the larder and storerooms, there were two chambers beneath the hall, and two more beneath the great chamber. The passage from the hall to the chamber was retained from the previous building (as were the end walls of the hall). At the south-west corner there was still the small chamber leading off the great chamber, with its adjacent bastion; here must have been the King's private chamber, now with elaborately contrived false windows in the south curtain wall. At the other end of the great chamber, on the return against the keep, were two rooms one above the other, the lower one probably being the 'Exchequer Chamber' referred to in the accounts. Above the constable's hall, on the north side of the courtyard, a chamber was made in the bastion at wall-walk level, with window, fireplace and adjacent latrine; a similar one was perhaps built over the south-west bastion.

All the windows of the palace were fairly plain, of similar width and identical tracery, but of different height according to their function. The impression of a small series of modules being disposed according to design needs is reinforced by the arrangement of windows which lend themselves more to external symmetry than to the requirements of the rooms they light. The walls were built of mixed rubble, reused stone and ashlar detailing, mostly from the Isle of Wight and some from Beer in Devon: they were rendered, and probably whitewashed. Some decorative glass was fitted to the windows and floors were tiled. All roofs were low-pitched and lead-covered, precluding the use of hammer-beams in the hall.

A certain amount of work was done elsewhere in the castle, with the cellar of the keep being vaulted, the land gate receiving double vaults as part of a general rebuilding, and the water gate being reroofed (Cunliffe, 1977, 11 and 19).

The building accounts supply a wealth of information on the organization of the whole programme, on the gathering of materials, their working and transport to Portchester; the

information on the work-force and their wages gives a rough outline of the order and progress of the works (p. 156). The actual processes involved in the rebuilding are also well demonstrated in the archaeological record: slates were being temporarily stockpiled, an iron smithy was set up temporarily against an old wall while the plumbers made use of the ground-floor chambers of the hall to produce roof sheeting and other fittings for the roof and gutters. With the sudden end of Richard II's reign, the work promptly ceased, on the verge of completion. Neither King nor royal servant was to enjoy the results of three years' labour, and the castle was soon granted by Henry IV to Thomas Lord Camoys, in November 1399 (Cal. Close Rolls, 1399–1402, 8).

The last substantial medieval work on the castle was now finished. Strong gates protected both approaches to the outer bailey, and the ditch, drawbridge and three-bay gateway to the inner bailey provided for internal security. The western half of the inner bailey was taken up with the new palace, small indeed for the needs of a large royal retinue, but as spacious as the restricted area would allow. The keep, obsolete except as a store, lookout and prison, stood in the north-west corner, with the chapel before it. Wall-walks facing out to the north and west had gun-ports alternating with larger loops, and one or more guard-chambers at parapet level. The north side of the castle provided a comfortable residence for the constable or his lieutenant: a large hall over the vaulted cellar, and in the north-east corner Assheton's Tower, with its private chambers and elaborate artillery defences. Attached to this living unit was the domestic range on the east, with kitchen and bakery/brewery and perhaps some stabling. A further domestic unit was in the south-east range, though its use is not clear. Thus the castle was to remain with little alteration for almost 200 years. Its military importance declined, though its use as a convenient expeditionary base remained, and future defensive developments were directed to Portsmouth, where a chain across the harbour planned for its protection (Colvin et al., 1963, 792-3) would render Portchester almost useless.

It is now that the village of Portchester is depicted in astonishing detail, in a survey made in 1405. Motivated by the need to determine the exact extent of the divided lordship in the fields between the Titchfield and the castle manor, the unknown author of the survey traversed each of the three great fields and the full length of the village streets to record the ownership, tenure and rent of each piece of land. This makes possible a graphic reconstruction of land-holding in the village and provides a firm base for understanding the economic life of the township, which in some respects had not changed for centuries, and was to remain almost unchanged for another 400 years. Other records enable us to see Portchester as a small market town, functioning in a network of similar places in the hinterland of the larger urban centres of Portsmouth, Chichester, Southampton and Winchester. The castle in its final stage of military and domestic development can thus be seen also fulfilling the role of a manorial centre in a typical village, or small-town setting.

Little need be said here of the castle in the rest of the fifteenth century, when alterations to the fabric were so minimal. Occasional royal visits included the muster in 1415 prior to the campaign of Agincourt (V.C.H., *Hants*, III, 153). The keepers of the castle continued to be trusted royal servants or nobles, but little is known of their tenure, though Portchester was joined with the Governorship of Portsmouth from after the Act of Resumption in 1451 (Cal. Pat. Rolls, 1446–52, 517; Wolffe, 1971, 258).

The office of Clerk of Works for Portsmouth and Portchester was in existence from 1420

(Colvin et al., 1963, 1047) and it is in this dual capacity that expenditure on the castle is recorded in the 1440s and 1450s (§128-35). A report of 1441 claimed that parts of the castle were so 'ruinouse and feeble' that they were likely to 'fall to ground' (§129), and in 1450 the King's Esquire, Robert Fienys, who had held the castle since 1446 (Cal. Pat. Rolls, 1441-6, 417-8), detailed the 'great ruin, decay and delapidation' of the castle (§134). Despite these complaints only modest sums were laid out on the fabric (§131-5).

The one alteration attributable to this century is represented by fragmentary remains in the forebuilding of the keep: the royal arms of Henry VII on the south wall of the chapel below the base of an oriel window, and the large oriel windows existing in the outer wall of the north forebuilding. The chapel and its adjacent chamber were evidently rebuilt, and this

might be associated with assignment of moneys in 1489 or 1501 (§137-8).

Life in the castle is for a short time illuminated by the correspondence of Arthur Plantagenet, Viscount Lisle, who as Vice-Admiral held the castle from c.1525 for 15 years, though was not resident for long (Byrne, 1981, I, 193 f. and passim). We hear of harvest and plague at Portchester (ibid., I, 233; II, 199 and 201), of the voyages of Honor Lisle's 'galleon', the 'Sunday of Portchester' fetching herrings from the Isle of Man (ibid., I, 340), and of preparing the castle for a royal visit in 1534 (ibid., II, 589-91, 593). The greatest anxiety was caused by the loss of the Letters Patent granting the castle, which were frantically searched for (ibid., II, 92 and 117). Building work was taken in hand, with the construction in 1527 of a 'new storehouse for the King's ordnance and a Key [Quay] within the castle of Portchester', and repairs to the timber and leadwork of the inner bailey (\$139-40). The long storebuilding excavated in the outer bailey can probably be associated with this (Cunliffe, 1977, 42-4) and building debris, including painted window glass, was brought out of the inner bailey to fill an old ditch nearby (ibid., 51-2). Purbeck slates were purchased for the storehouse in 1535 (\$141), and during the King's visit in that year there was discussion about repairs to the castle, for which permission was eventually granted (\$142).

Apart from the storehouse, no work of this period can be identified in the castle, and it would seem that when Lisle was in Hampshire he lived more at Soberton than at Portchester (Byrne, 1981, 1, 246); after 1533 he was Lord Deputy of Calais, and mostly lived there. In 1539 Lisle surrendered his interest in the castle to the Earl of Southampton (*ibid.*, v, 345). By then, Titchfield Abbey had been dissolved and granted to Thomas Wriothesley (Graham and Rigold, 1969, 8), who thus held the Titchfield portion of the manor. His steward was puzzled by the division of the manor, writing that 'the King has but one foot of ground and you two. It is thought that you are wronged and the matter should be tried by commissioners' (L. & P. Hen. VIII, XIII (i) 51 no. 151). However, the Titchfield portion passed to John White of Southwick in 1556, whilst the King's manor was not finally alienated until 1632 (V.C.H., Hants, III, 159, which confuses the separate manors here).

Not much is known of the castle in the later sixteenth century. There was talk in 1563 of its advantage as a place of muster, and later in that year it was used as a hospital for the wounded from the French war (V.C.H., *Hants*, III, 153). In 1583 an allocation was made to spend money in anticipation of invasion (§144), and the undated estimate for repairs to the buildings may belong to this year if not to 1581 (§143, p. 163). By 1585 the storehouse had been demolished and moved (perhaps only its roof) to Portsmouth (§145).

The final phase of work with which we are concerned was carried out by Sir Thomas

Cornwallis, Groom Porter to Queen Elizabeth, who possibly entertained her there in 1601 (V.C.H., Hants, III, 153). Documentary evidence for construction is limited to an order to supply timber in 1608, and Norden's estimate that Cornwallis had spent over £300 (§146-7). The surviving buildings indicate that he transformed the eastern half of the castle, adding an upper floor to the east and south ranges, and probably refenestrating the north range as well. Large mullioned windows, and fireplaces made the constable's lodging rather more spacious and domesic in character than it had been. Cornwallis also may have added the final section of the gateway (Bay IV) which was certainly domestic rather than military.

The archaeological deposits, in particular kitchen refuse preserved in the ground-floor rooms of the south-east range, show something of the life of the constable's household in the sixteenth century. The locally made pottery was now supplemented by mugs imported from the Rhineland and the southern Netherlands but was otherwise unremarkable. The diet had, however, changed: pigs were fewer and the cattle and sheep represented were mature animals killed some time after their prime. Among the birds there was an increase in the number of gulls (if eaten, a somewhat less succulent meat!). The fish remains show a distinct rise in the number of deep-sea species, which were no doubt supplied as salted imports to supplement the local catch. Whether or not these changes reflect a decline in status consequent upon the lack of royal interest in the castle after the fourteenth century or more widespread changes in economy and diet, it is difficult to say.

Norden's survey of 1609 (§147, p. 163, pl. XLIII) describes and illustrates the castle at the end of its active life. The western half of the inner bailey was fairly derelict, and thought more worth stripping of materials than rebuilding. The keep would be better demolished by half because of the trouble it caused to chimney-smoke. The new buildings seem also to have been partly unroofed and in need of glazing.

Although Cornwallis did not die until 1618 (he is buried in the church), the castle was granted to the Earl of Pembroke in October 1609, to be held with Portsmouth (Cal. S.P. Dom., 1603–10, 551). No further repairs are recorded (Colvin et al., 1975, 292) and it is unlikely that the Governor of Portsmouth would have still wished to reside there. The castle and manor were sold in 1632 to Sir William Uvedale.

## INDEX TO TEXTS

This is an index of people and places mentioned in the texts printed on pp. 176-206. Minor variations in the spelling of personal names are not noted. The following abbreviations are used: C, carpenter; CF, carpenter-feller; Ch, chalk-digger; J, juror; L, labourer; mag., master; M, mason; P, positor(layer); Pl, plumber; R, roofer; S, sawyer; Sm, smith; T, timber-supplier.

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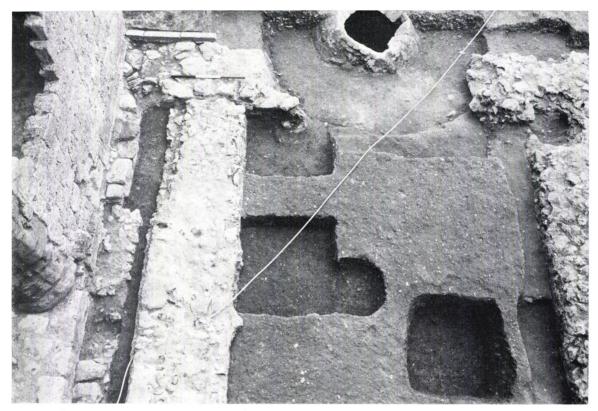
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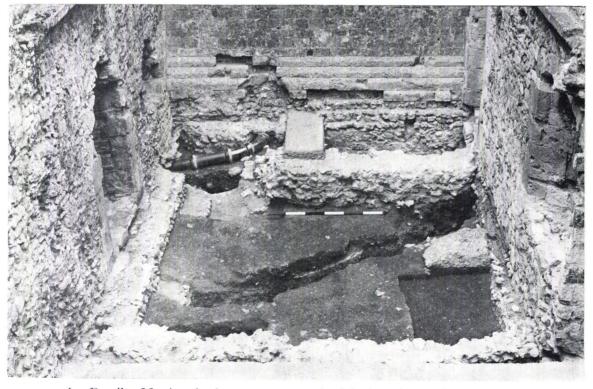
# **PLATES**



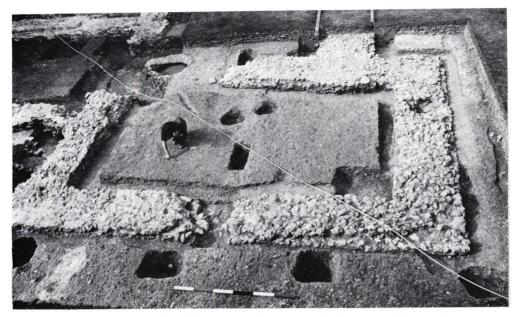
# PLATE I



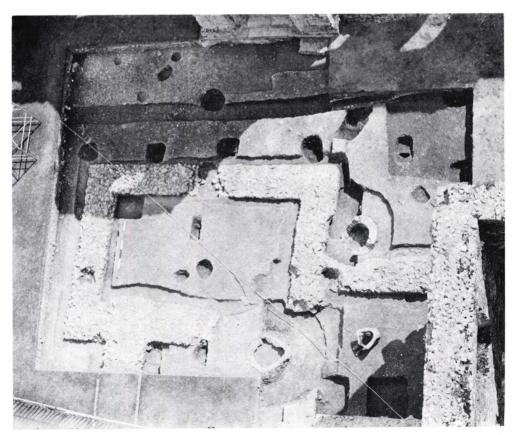
a. Detail of footings of north-west range in trench C39. South wall of forebuilding to left (pp. 15, 30)



b. Details of footings in the west range south of the keep in trench C31 (p. 21) Photographs: Mike Rouillard



a. Footings for NW2 in trenches C39 and C40 (pp. 18-19, 23)



b. Footings for NW2 in trenches C39 and C40. View from the keep (pp. 18–19, 23)  $Photographs:\ Mike\ Rouillard$ 

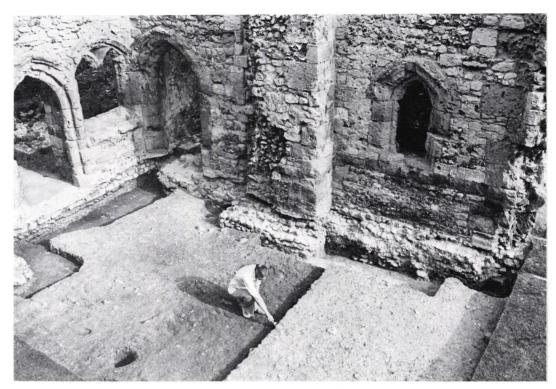




a. Trench C40 looking to the porch of Richard II's hall (p. 18)

b. South wall of forebuildings with footings of north-west ranges exposed in trench C39 (pp. 18, 23, 30)

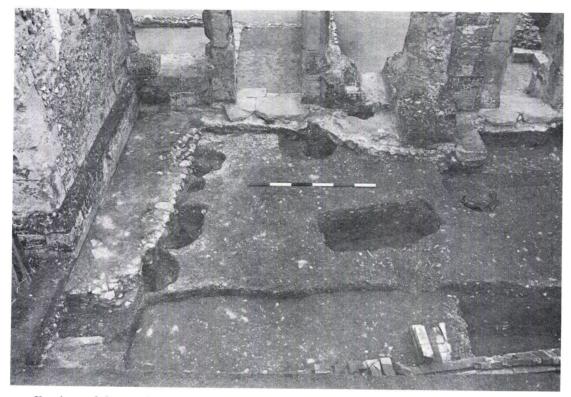
Photographs: Mike Rouillard



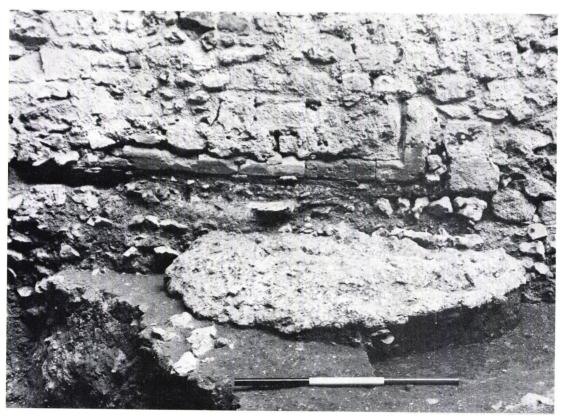
a. Footings of north-west and west ranges exposed in trench C34 (pp. 18-19, 30)



b. Footings of the south-west range exposed in trench C35 (pp. 18, 25, 30)  ${\it Photographs: Mike\ Rouillard}$ 



a. Footings of the south-west range exposed in trench C35. The porch is to the left (pp. 18, 30)

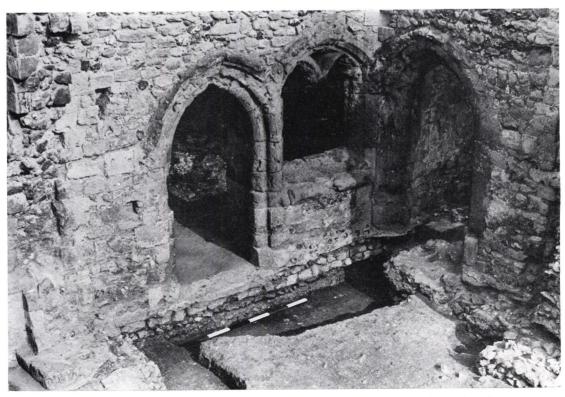


 $b. \ \ Blocked\ fireplace\ and\ earlier\ mortar\ mixing\ pit\ in\ the\ Norman\ west\ range.\ Trench\ C31\ (pp.\ 16-17)$   $Photographs:\ Mike\ Rouillard$ 

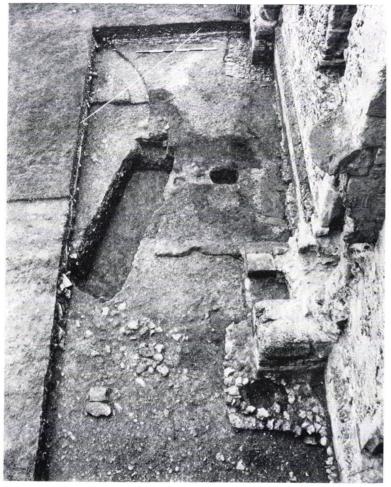
# PLATE VI



a. Footings of Norman door leading from the south-west to the west range in trench C36 (p. 17)



b. Footings of the north-west and west ranges in trench C34 (pp. 16, 30)  ${\it Photographs: Mike\ Rouillard}$ 





- a. Courtyard excavation north of the kitchen of Richard II in trench  $C_{43}$  (p. 33)
- Detail of drain and culvert below in the kitchen of Richard II.
   Part of the original kitchen floor offsets in situ. Trench C42 (p. 32)
   Photographs: Mike Rouillard



a. Interior of hall basement, looking east. Trench C47 (pp. 21,26, 30)



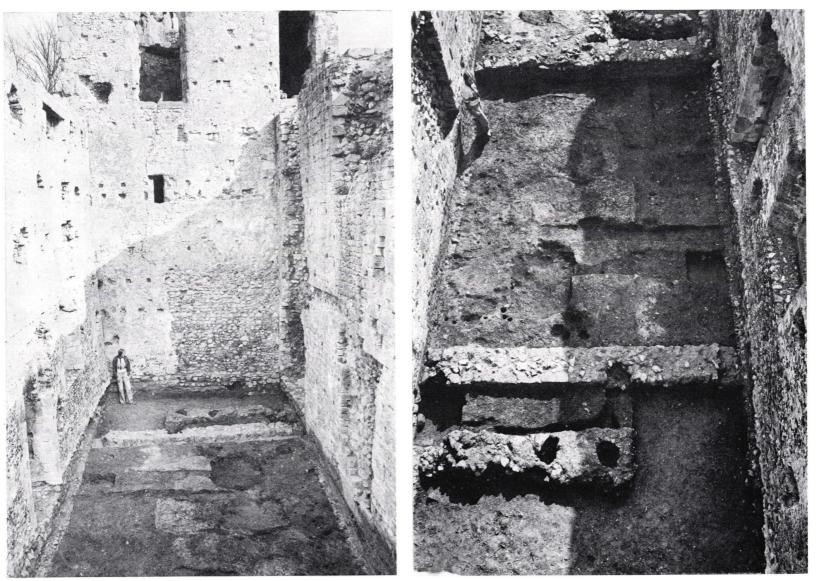
b. Interior of hall basement, looking east. Trench C44 (pp. 21, 26, 30)

Photographs: Mike Rouillard



Oven and tank in east range in trench C45. Roman structure below (pp. 47, 69)

Photograph: Mike Rouillard



Trench C<sub>45</sub> (pp. 39, 43)

a. The east range excavation, looking north to Assheton's Tower. b. The east range excavation from Assheton's Tower. Trench C45 (pp. 39, 43)

Photographs: Mike Rouillard

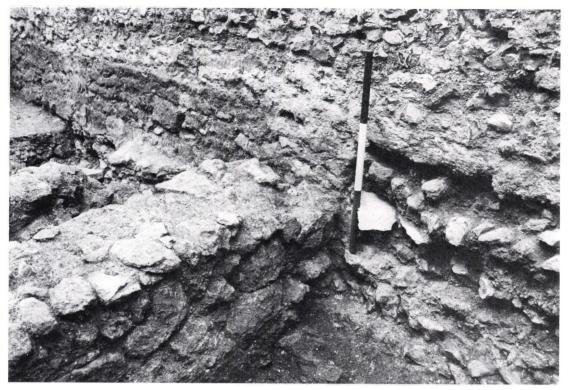




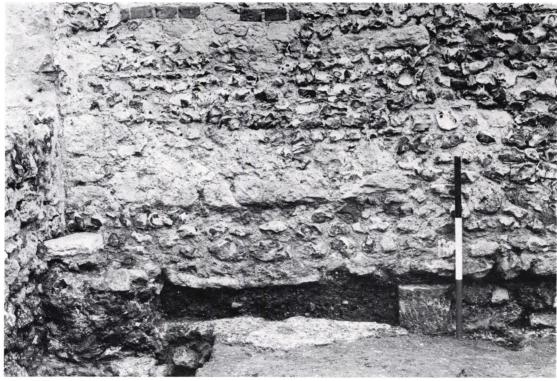
a. Fireplace in first floor of east range: seventeenth century (pp. 51, 119)

b. Blocked door leading to the first floor of the east range from the inside (pp. 51, 117)

Photographs: Mike Rouillard



a. West wall of east range: east face exposed in trench C45. See section 21 (pp. 39, 43, 46)



b. West wall of east range: west face showing base of Norman doorway in trench C46 (pp. 39, 43, 46)

Photographs: Mike Rouillard





h

a. Drain leading to east range in trench C50, looking south (p. 51)

b. Drain in east range replaced by Napoleonic brick drain and hearth, in trench C48 (pp. 34, 44, 51)

Photographs: Mike Rouillard

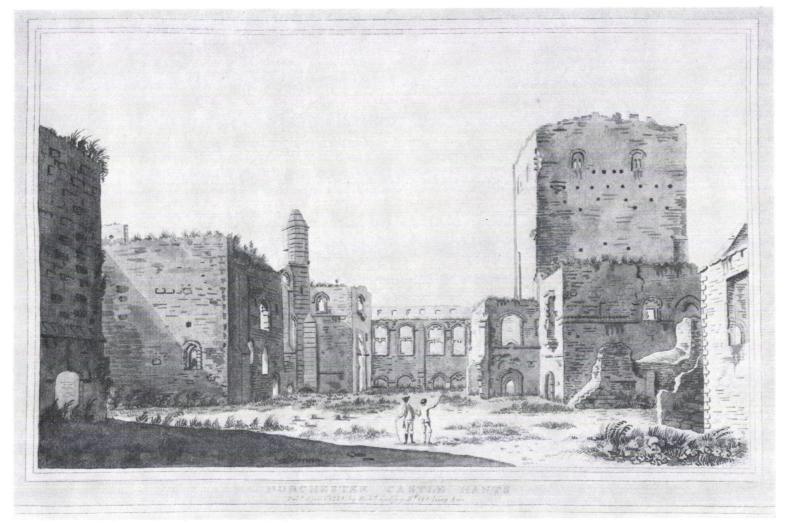


a. Interior of south-east range, looking east. Features cut into top of Roman layers. Trench C49 (pp. 34, 49)



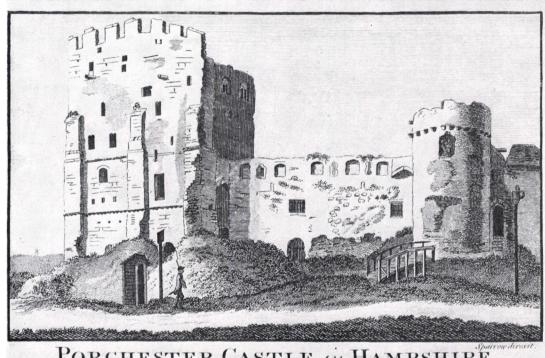
b. Chimney-breast for fireplace in south-east range in trench C50. The capping beneath the rod is modern (pp. 34, 49)

Photographs: Mike Rouillard



View of castle. Etching with colour wash. Artist unknown. 1733 (pp. 52, 78, 85–6, 101, 103, 111, 115–16)

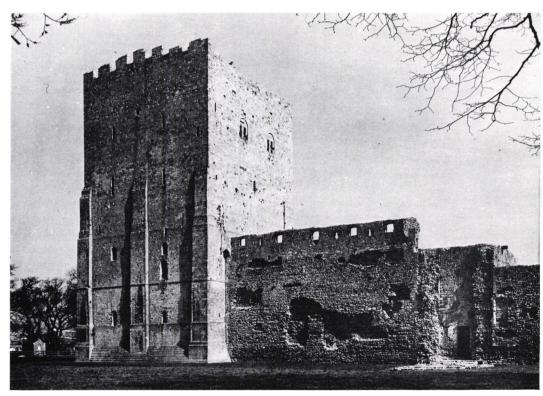
Photograph: Portsmouth City Museum



PORCHESTER CASTLE, in HAMPSHIRE.

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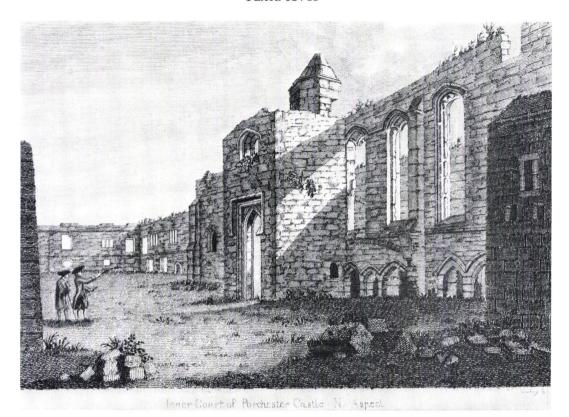
a. Exterior view of the castle in the late eighteenth century. Engraved by Sparrow (pp. 97, 105)  ${\it Photograph: Bob\ Wilkins}$ 



b. Exterior view of the castle in 1964 (pp. 95, 105)

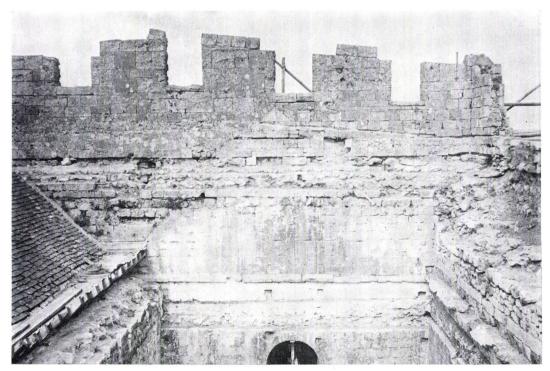
Photograph: David Baker

### PLATE XVII



a. Interior view of the castle by Godfrey: 1781 (p. 103)

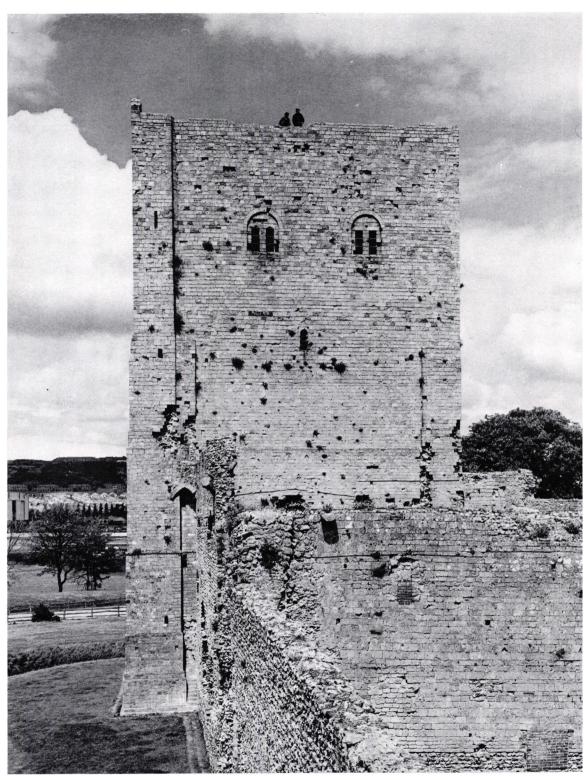
Photograph: Portsmouth City Museum



b. The roof of the keep during restorations in 1926 (p. 81)

Photograph: Department of the Environment

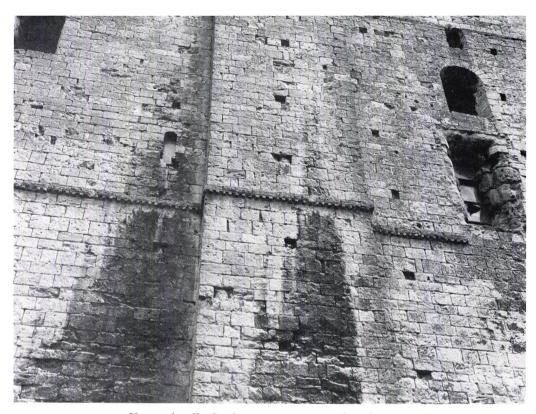
# PLATE XVIII



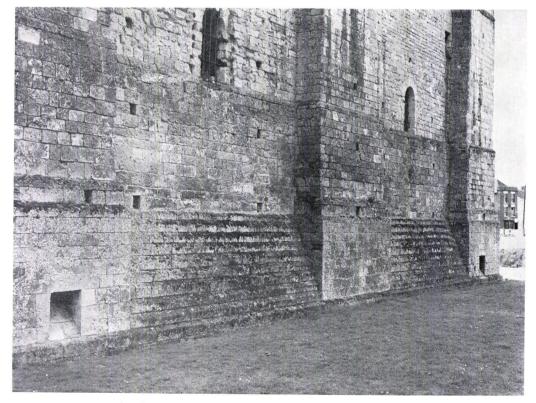
The keep from the south (pp. 12, 75, 77, 81, 105)

Photograph: Department of the Environment

# PLATE XIX



a. Keep: detail of string-course on west face (pp. 12, 75)



b. Keep: detail of plinth on north face (pp. 12, 77)

Photographs: Department of the Environment

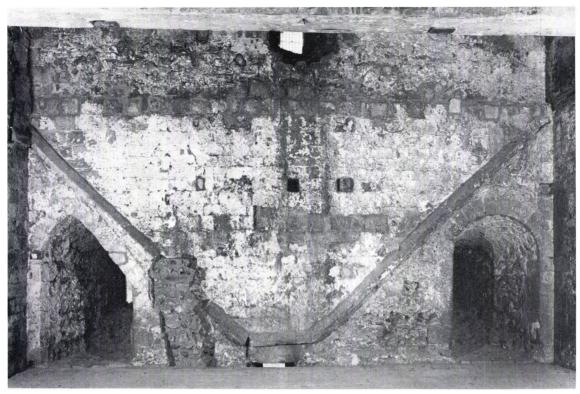




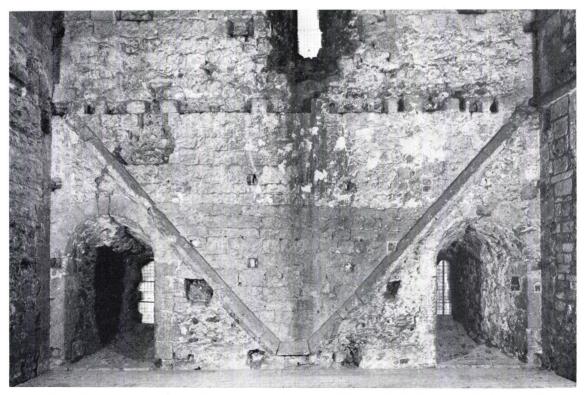
a. Keep: detail of south-west corner (pp. 12, 75, 99)

b. Keep: detail of south face showing roof lines of various dates (pp. 12, 78, 99)

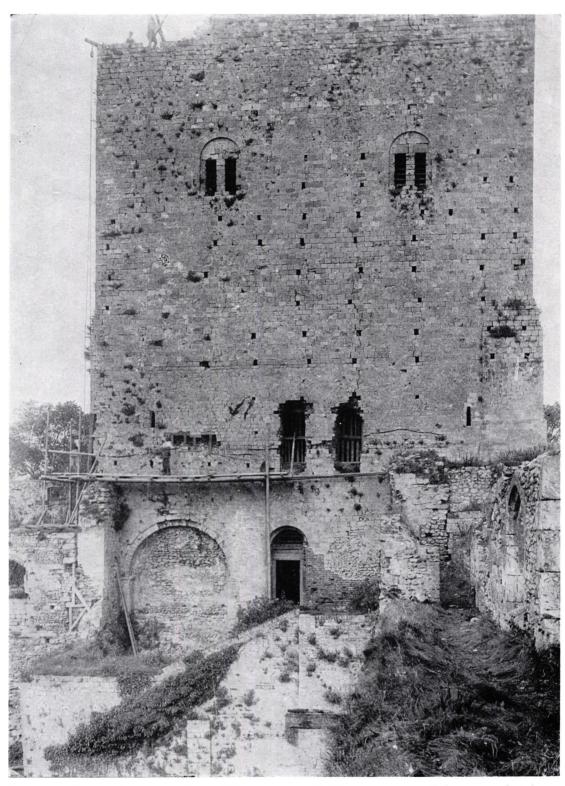
Photographs: Department of the Environment



a. Keep: interior view of creasings for the original roof (south half of west wall) (pp. 12, 80)



 $b. \quad \text{Keep: interior view of creasings for the original roof (north half of west wall) (pp. 12, 80)} \\ \qquad \qquad Photographs: \textit{Department of the Environment}$ 



Keep: east face during restorations of September 1926. Note support wall for external staircase (pp. 12, 77, 78, 81, 82)

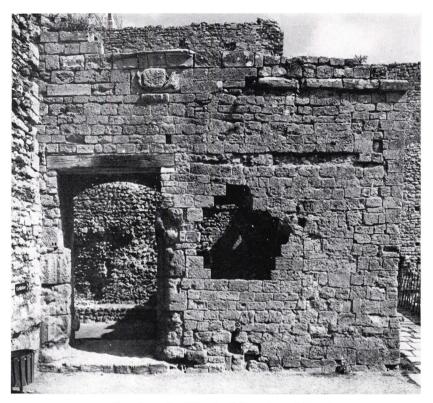
Photograph: Department of the Environment



Keep: east face on 9 May 1979. The position of the external stairs may still be seen (pp. 12, 78, 82)

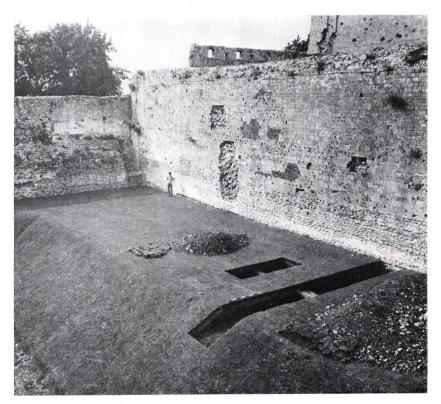
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### PLATE XXIV

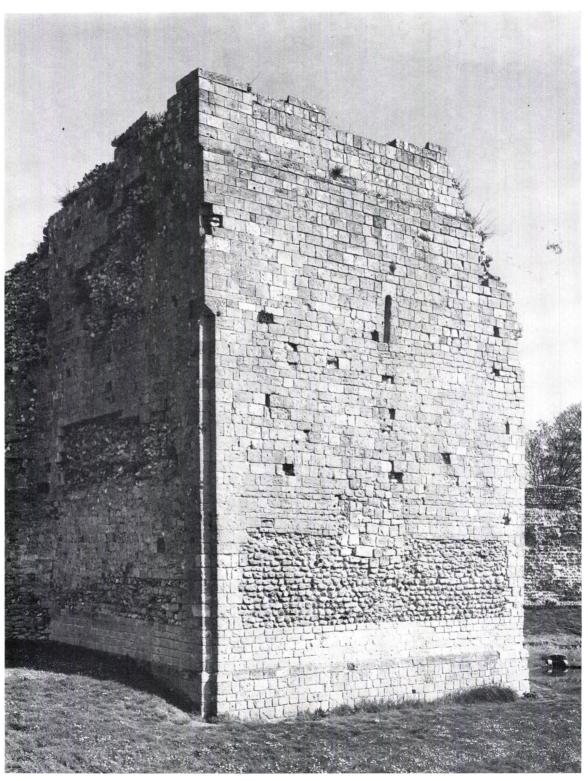


a. South wall of forebuilding (pp. 86, 93)

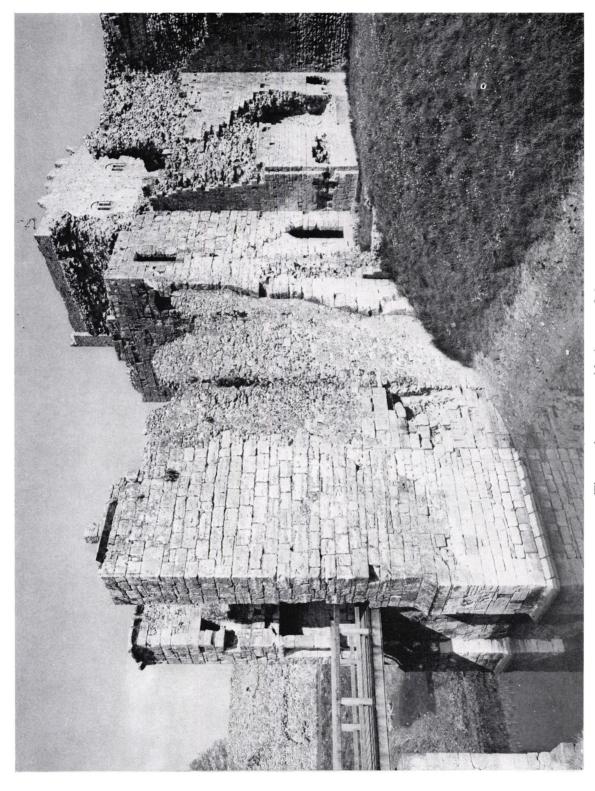
Photograph: Department of the Environment



 $b. \quad \text{Trenches on berm between inner bailey wall and ditch (pp. 6, 93)} \\ Photograph: David Leigh$ 



South-east corner tower of inner bailey wall (pp. 6, 93–4) Photograph: Department of the Environment



The gatchouse, east side (pp. 11, 87) Photograph: Department of the Environment

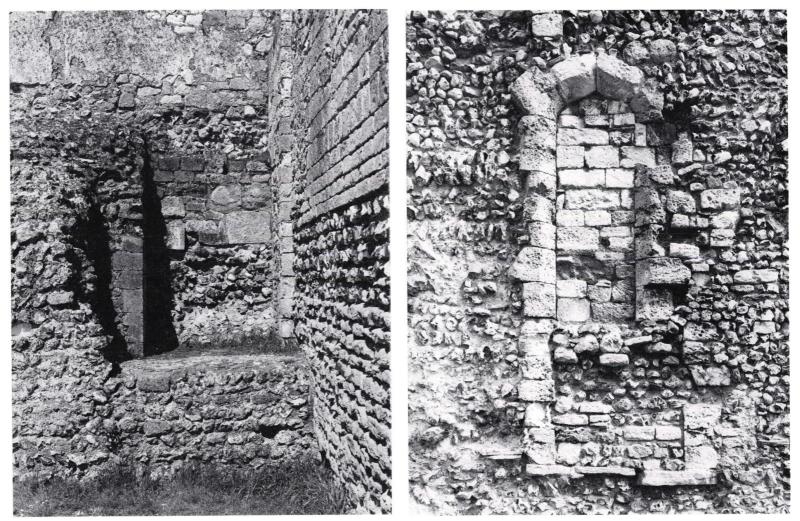




a. The gatehouse, Bay II (pp. 11, 89)

b. The gatehouse: vaulting of Bay II (pp. 11, 89)

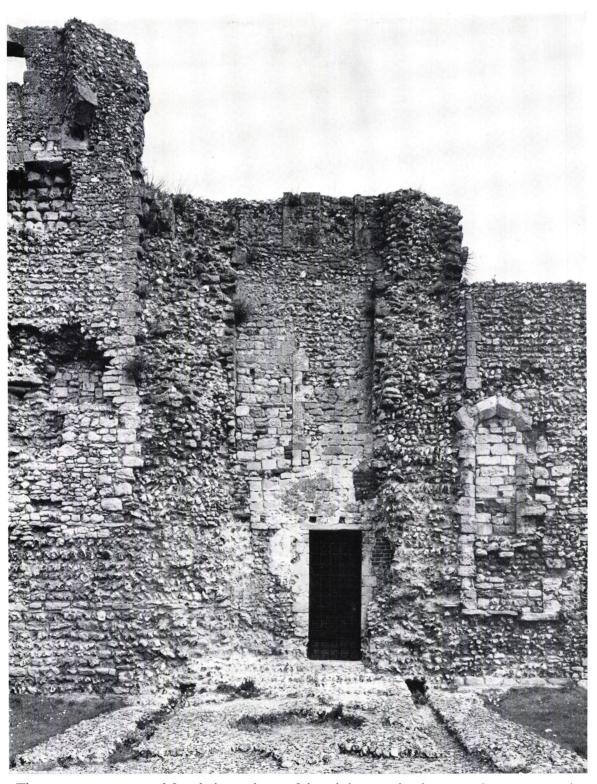
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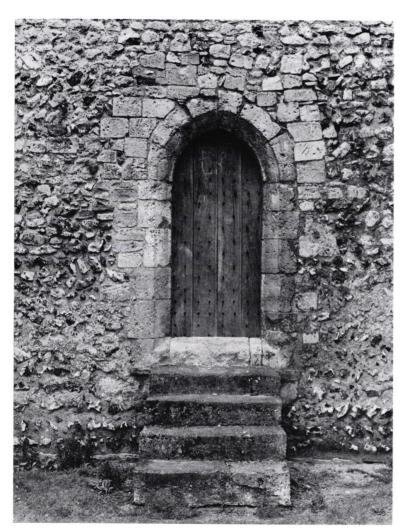
a. The west postern gate from inside the fort (Norman phase) (pp. 6, 15, 93, 97)

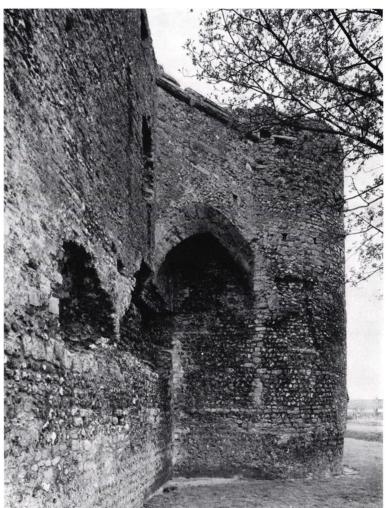
b. The west postern gate from outside the fort (fourteenth-century phase) (pp. 6, 93, 97)

Photographs: Department of the Environment



The west postern gate and foundation and scar of the missing west bastion tower (pp. 93, 97, 105) Photograph: Department of the Environment





a. The north postern from outside the fort (pp. 93, 97)

b. Squinch containing latrine shoots attached to the north bastion tower (pp. 95, 113, 115)

Photographs: Department of the Environment

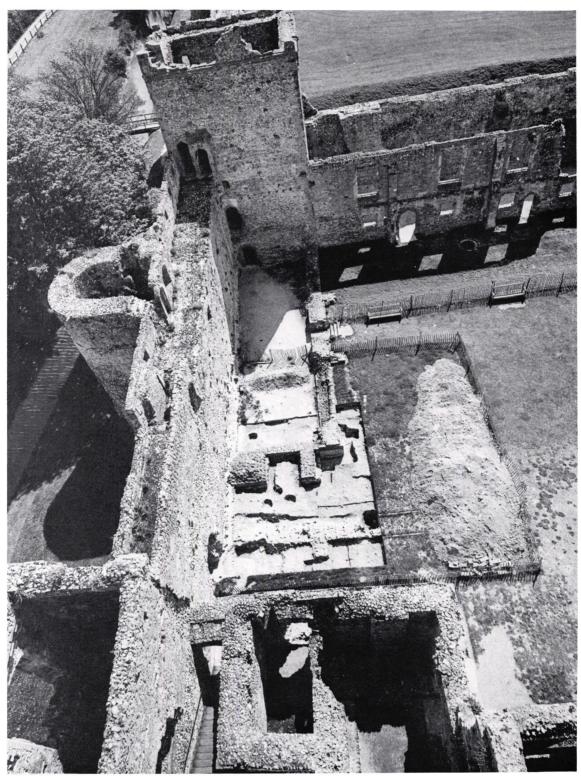


a. Assheton's Tower from the north (p. 95)

 $b. \quad \text{Norman windows or arcade in hall (south-west range)} \\ \quad \text{(pp. 17, } 98-9)$ 

Photographs: Department of the Environment

# PLATE XXXII

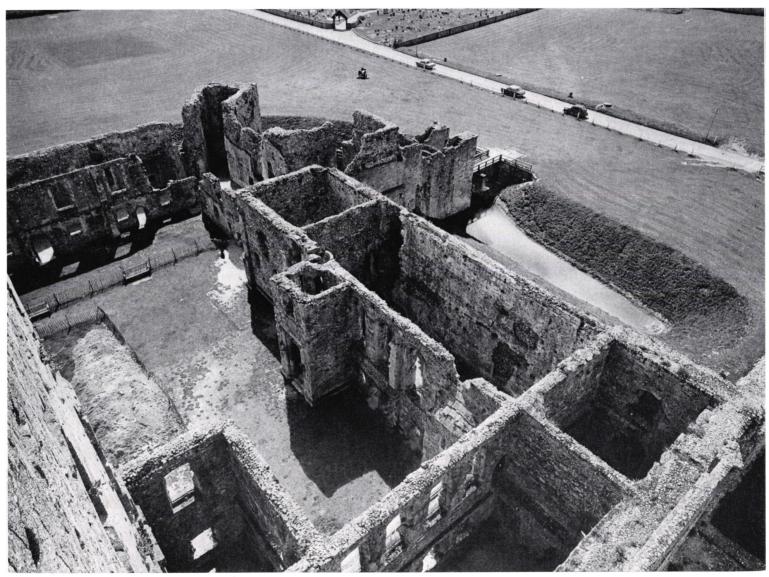


View of the north and east ranges with forebuildings at the bottom during the excavation of trench C51 (pp. 37, 113)
Photograph: Department of the Environment



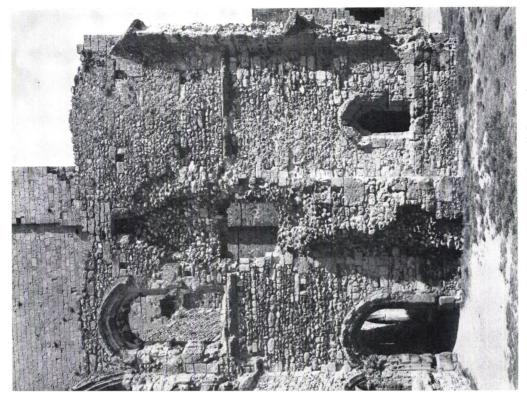
General view across the inner and outer baileys, looking south-east (p. 101)

Photograph: Department of the Environment



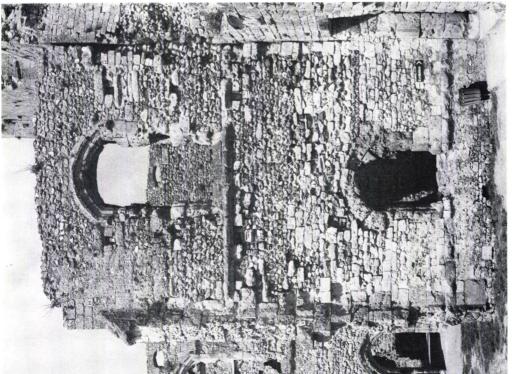
General view of the Richard II palace complex from the keep (p. 101)

Photograph: Department of the Environment

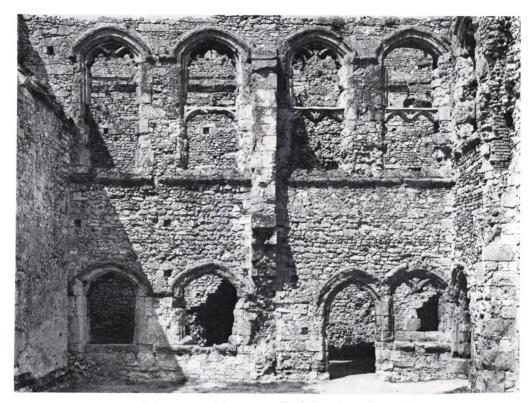


Building NW4: south wall (p. 101) Building NW4: east wall (p. 101) Photographs: Department of the Environment

a.



### PLATE XXXVI



a. West range (4): east wall of chambers (p. 101)



b. South-west range (4): north wall of hall (p. 101)

Photographs: Department of the Environment

# PLATE XXXVII

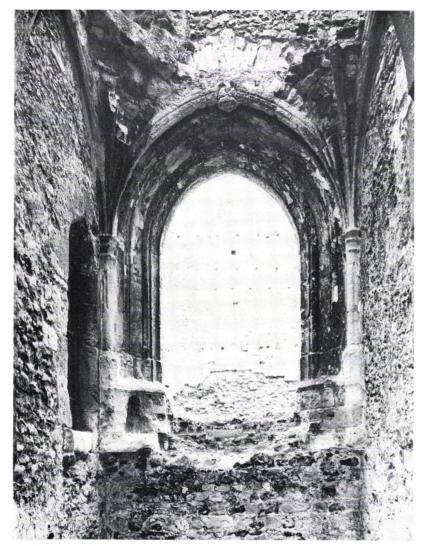


South-west range (4): north face of porch (p. 103) Photograph: Department of the Environment

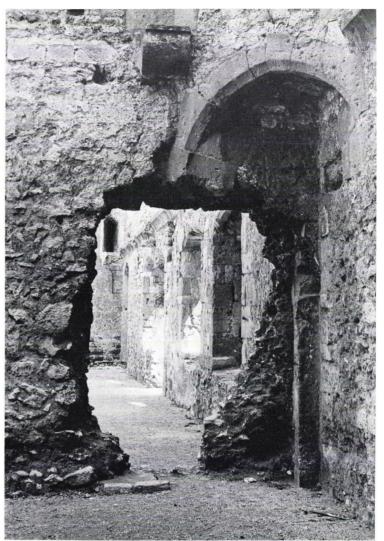


South-west range (4): north wall of kitchen (p. 101)

Photograph: Department of the Environment

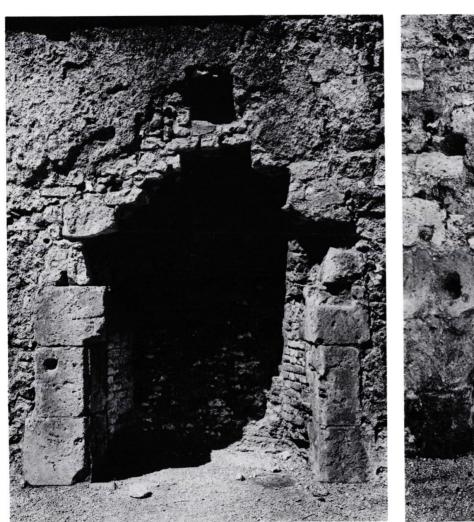


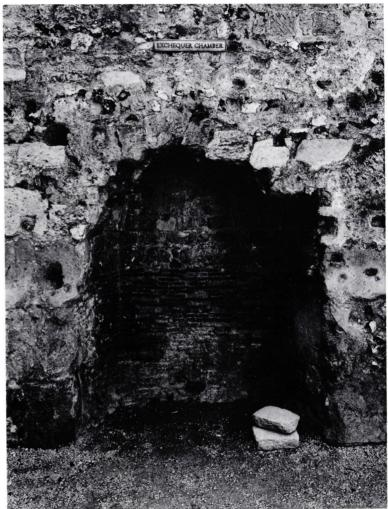
a. Door leading from the porch to the screens passage in the hall of south-west range (4) (p. 103)
Photograph: Department of the Environment



b. Chamber in the south-west corner of the inner bailey showing Norman door with some fourteenth-century blocking in position to support the squinch taking the spiral stair from the first floor passage to the roof (pp. 17, 100–1)

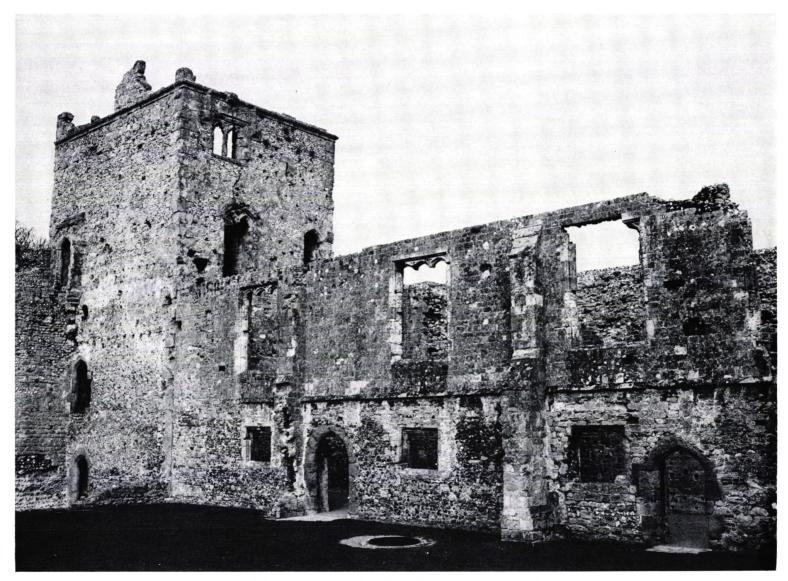
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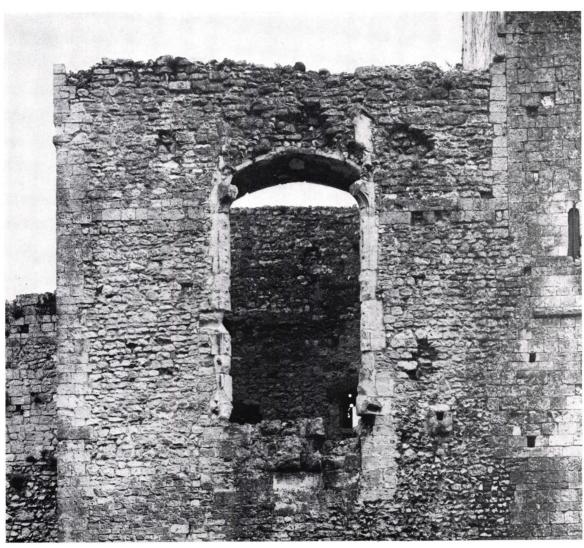
a. Late fourteenth-century fireplace in the north part of the west b. Late fourteenth-century fireplace in the north-west range (4) range (4), showing use of Flemish bricks (p. 108) (p. 108)

Photographs: Department of the Environment

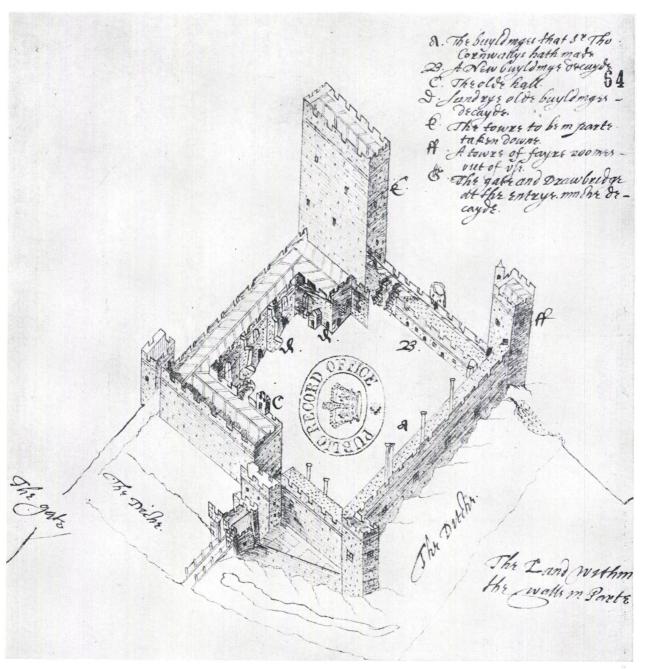


The east range and Assheton's Tower (pp. 51, 95)

Photograph: Mike Rouillard



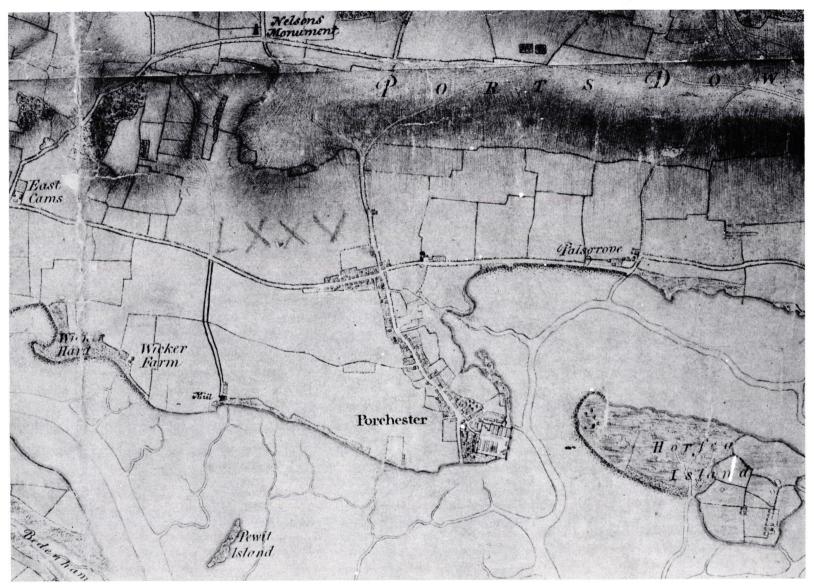
Oriel window in north forebuilding of keep (p. 84) Photograph: Department of the Environment



Drawing of the castle in 1609 from Norden's Survey (pp. 163, 205)

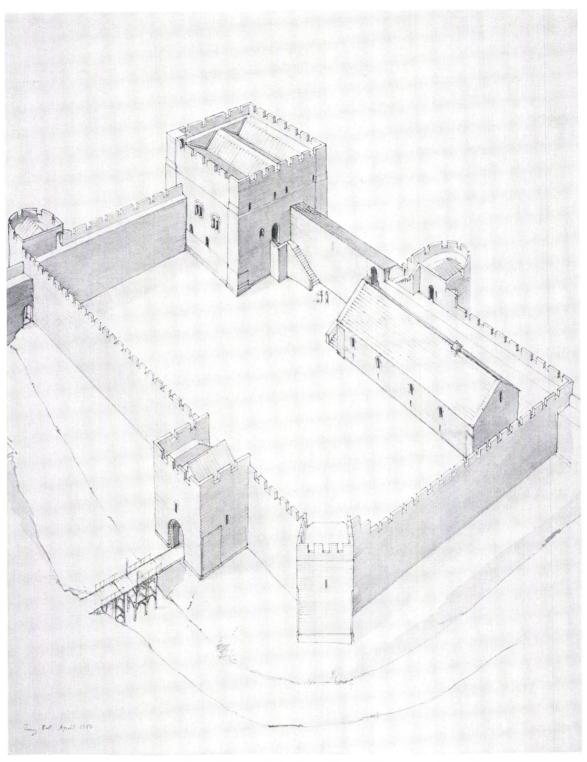
Photograph: Public Record Office

(Key: A. (East range) The buyldinges that S. Tho. Cornwallys hath made; B. (North range) A New buyldinge decayde; C. (Southwest range) The olde hall; D. (North and west ranges) Sundrye olde buyldinges decayde; E. (Keep) The towre to be in parte taken downe; F. (Assheton's Tower) A towre of fayre roomes — out of use; G. (Gate) The gate and Drawbridge at the entrye nowe decayde; also marked are 'The Ditche', 'The gate' and 'The land within the walls in Porte..')



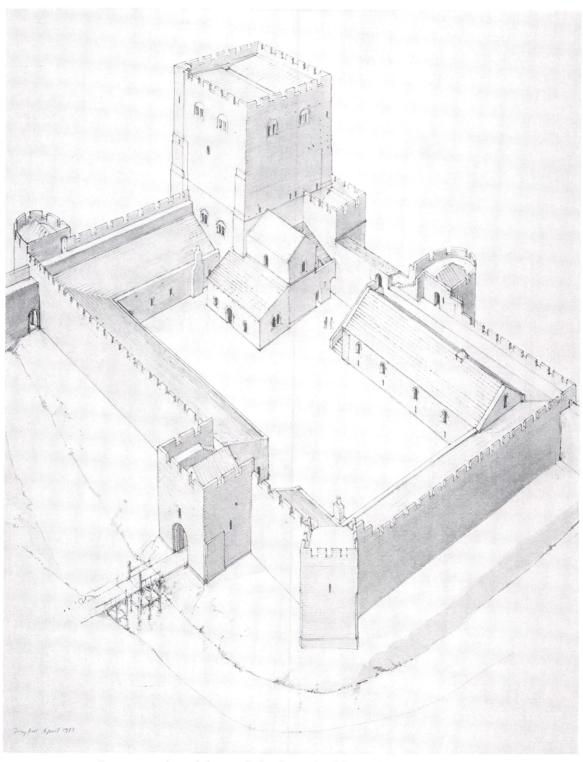
Detail of Portchester from the Ordnance Survey field drawing of 1797 (B.L., OSD 75 (part 35) (p. 280) Photograph: British Library

# PLATE XLV



Reconstruction of the castle in the mid twelfth century (p. 296)  $$\it Drawn\ by\ Terry\ Ball}$ 

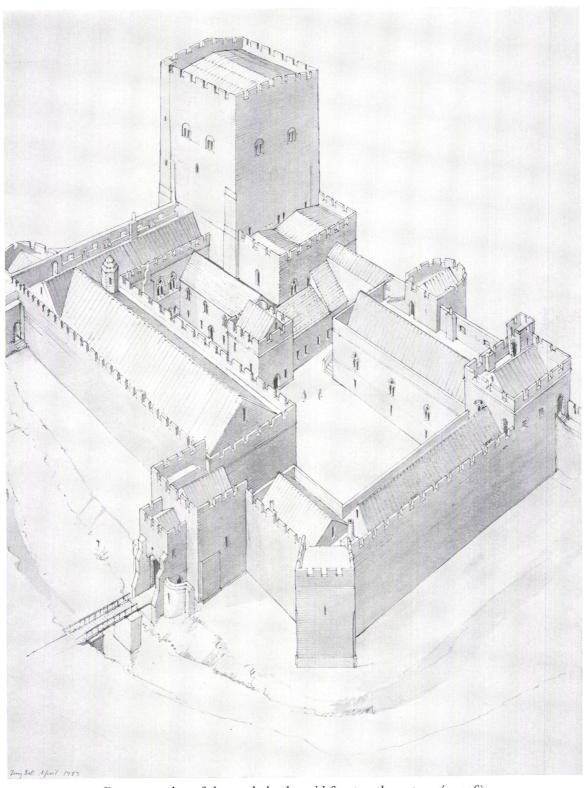
# PLATE XLVI



Reconstruction of the castle in the early thirteenth century (p. 296)

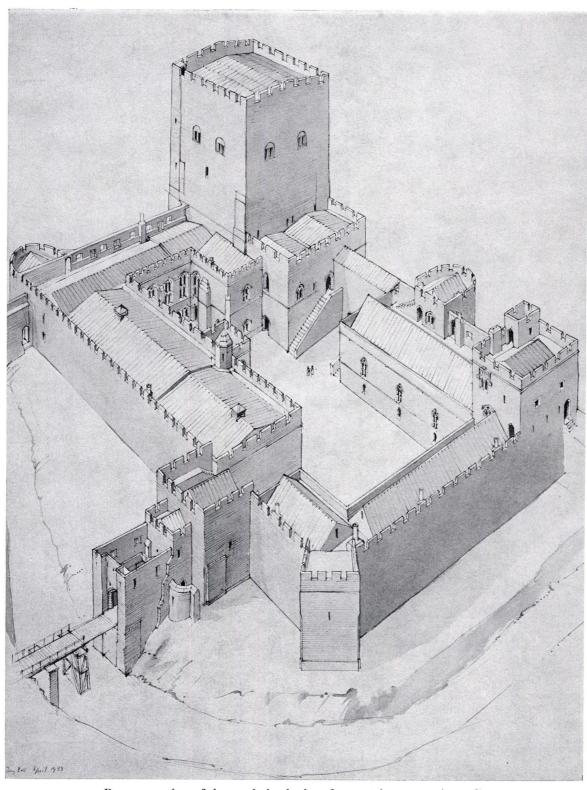
Drawn by Terry Ball

### PLATE XLVII



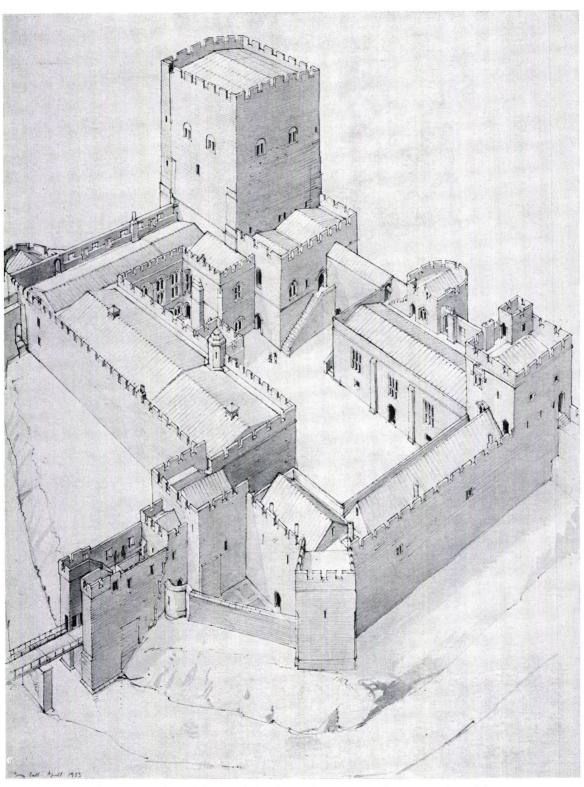
Reconstruction of the castle in the mid fourteenth century (p. 296)  $$\it Drawn\ by\ Terry\ Ball}$ 

## PLATE XLVIII



Reconstruction of the castle in the late fourteenth century (p. 296)  $Drawn\ by\ Terry\ Ball$ 

## PLATE XLIX



Reconstruction of the castle in the early seventeenth century (p.296 )  $\it Drawn\ by\ Terry\ Ball$ 

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Vol. IV: Medieval, the Inner Bailey by Barry Cunliffe and Julian Munby

## FOLDING ILLUSTRATIONS

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THE REPORT OF THE PARTY OF THE PARTY.	The gatchouse: periods 3 and 4
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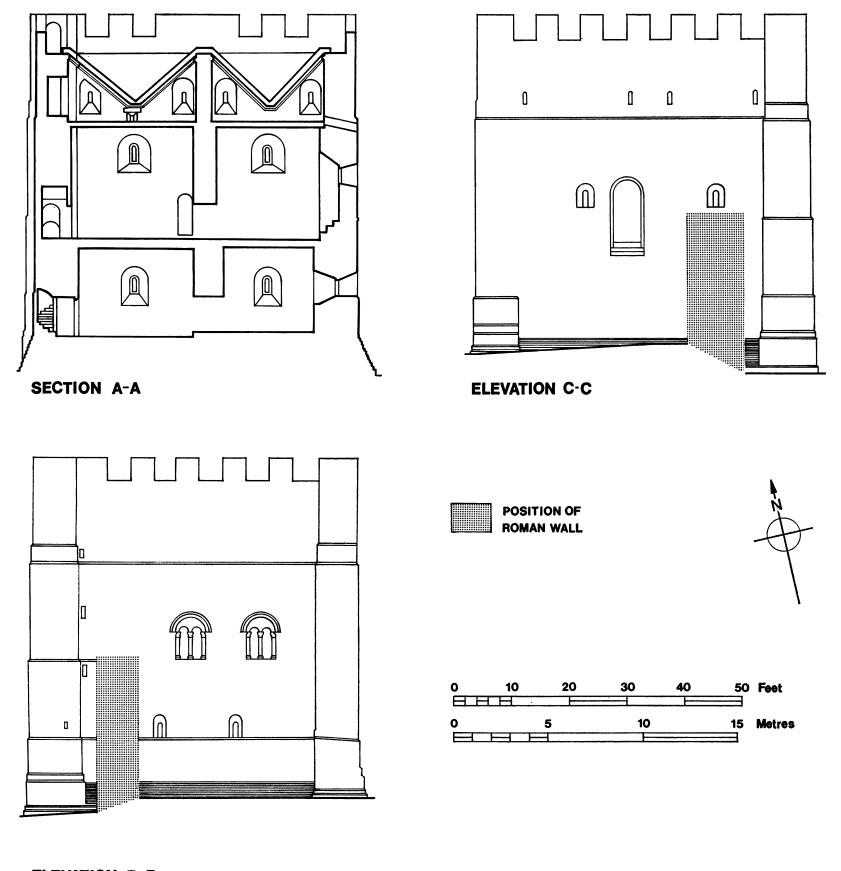
Fig. 105. The east and south-east ranges: plans, elevation and sections

Fig. 106. The south-west range: plans, elevation and sections

Fig. 107. The west and north-west ranges: plans, elevation and sections

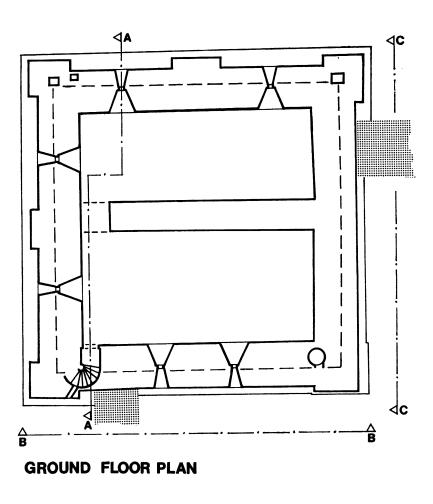
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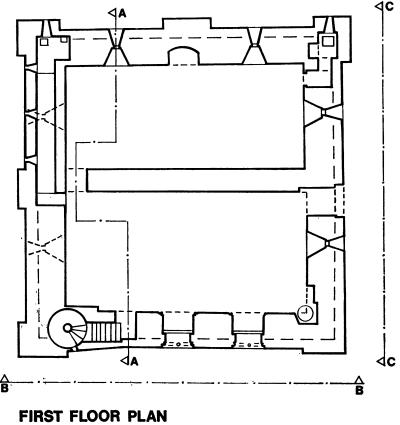
Cunliffe and Munby
Portchester Castle, IV
Fig. 84. The keep: period i



**ELEVATION B-B** 

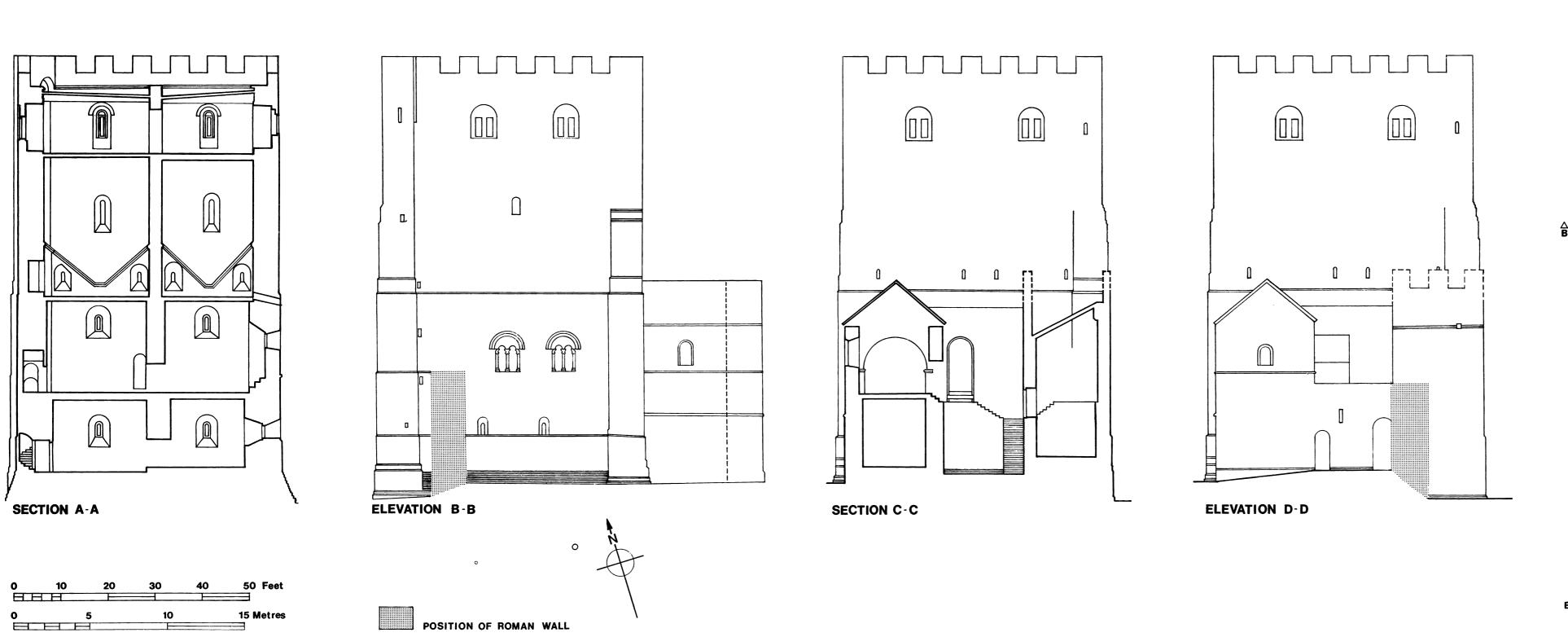
Fig. 84. The keep: period i







Cunliffe and Munby
Portchester Castle, IV
Fig. 85. The keep and forebuildings: period 2



\_ <u>\_</u> **GROUND FLOOR PLAN** 

FIRST FLOOR PLAN

Fig. 85 The keep and forebuildings: period 2

Cunliffe and Munby
Portchester Castle, IV
Fig. 86. The keep and forebuildings: period 7

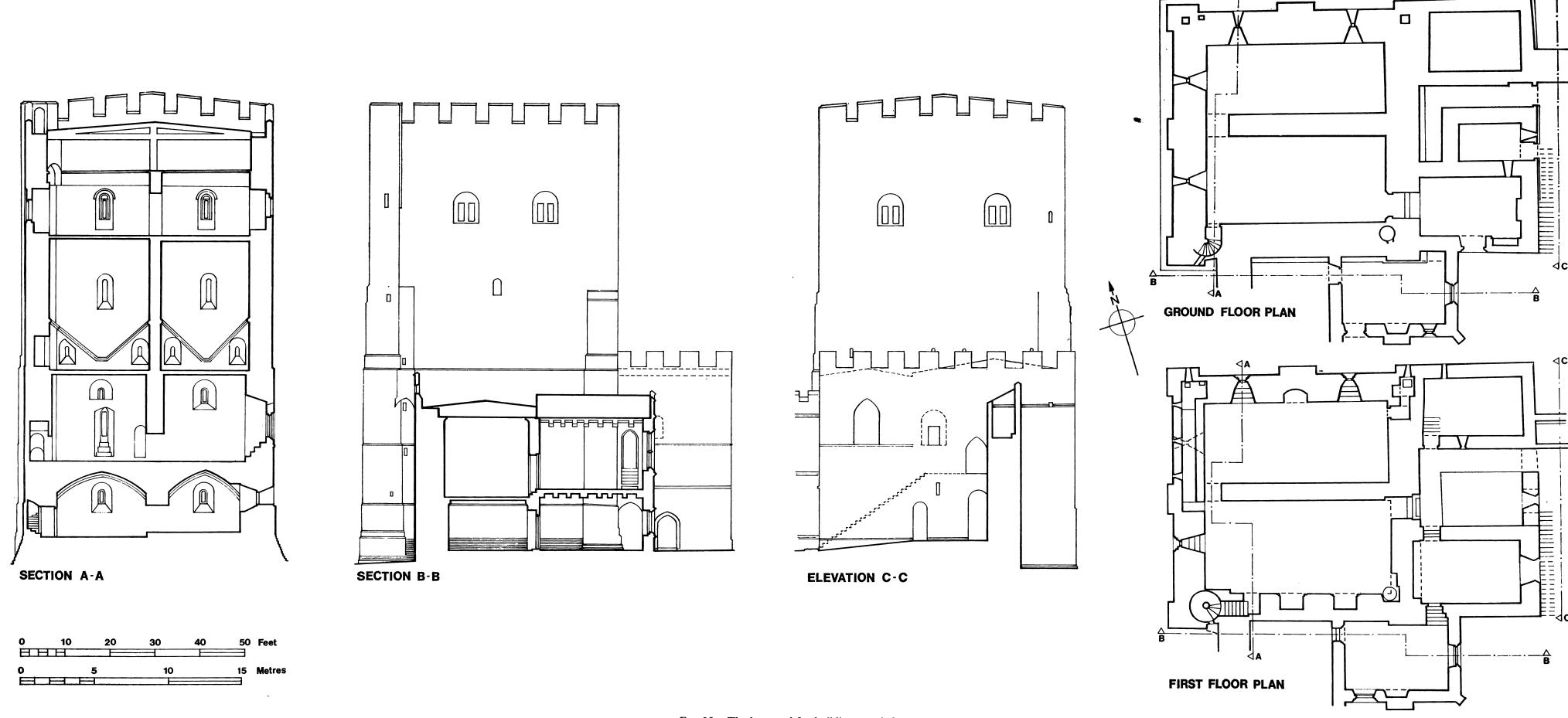


Fig. 86. The keep and forebuildings: period 7

Cunliffe and Munby
Portchester Castle, IV
Fig. 87. The gatehouse: period 1
Fig. 88. The gatehouse: periods 3 and 4

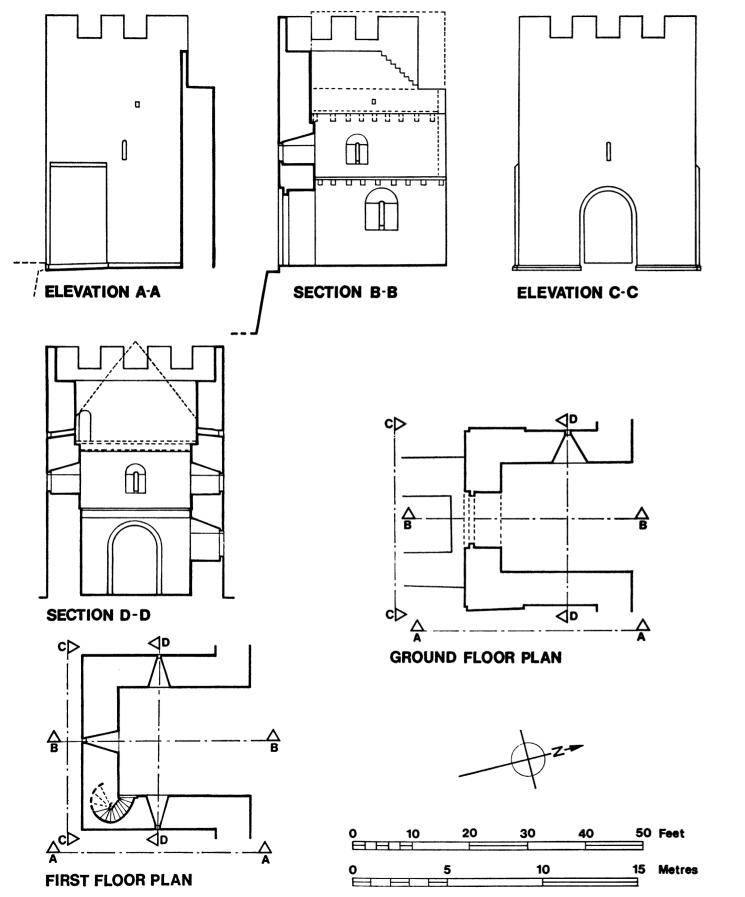


Fig. 87. Gatehouse: period 1

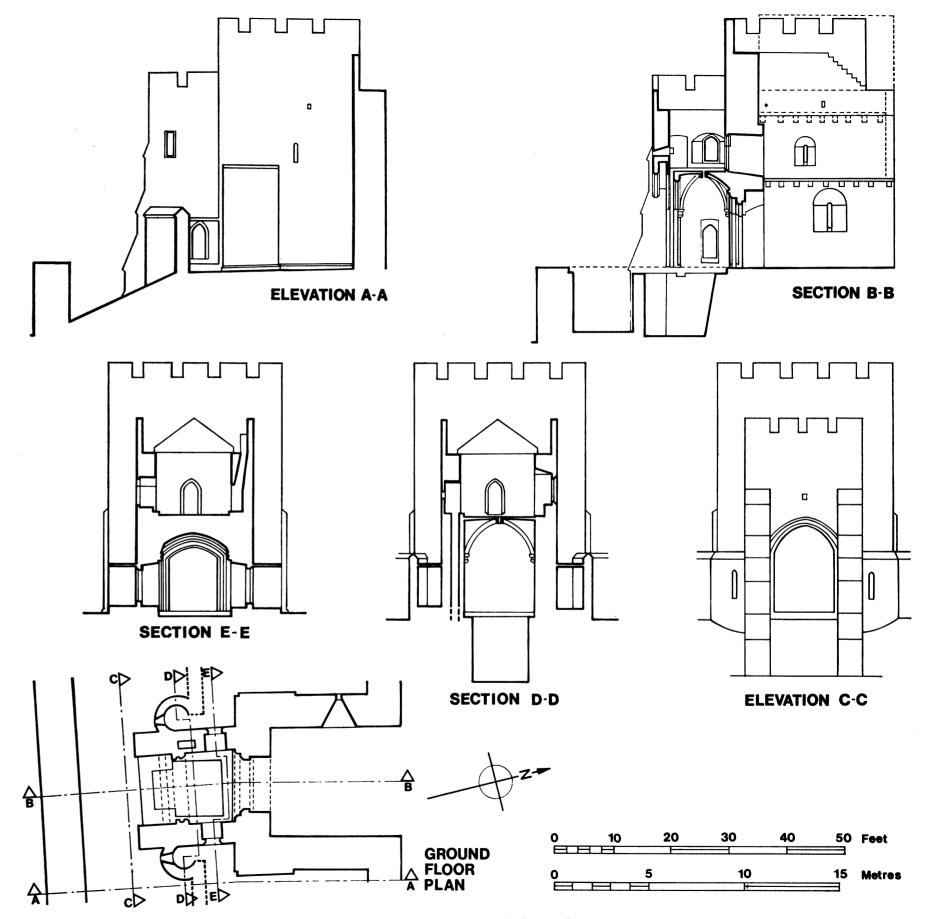
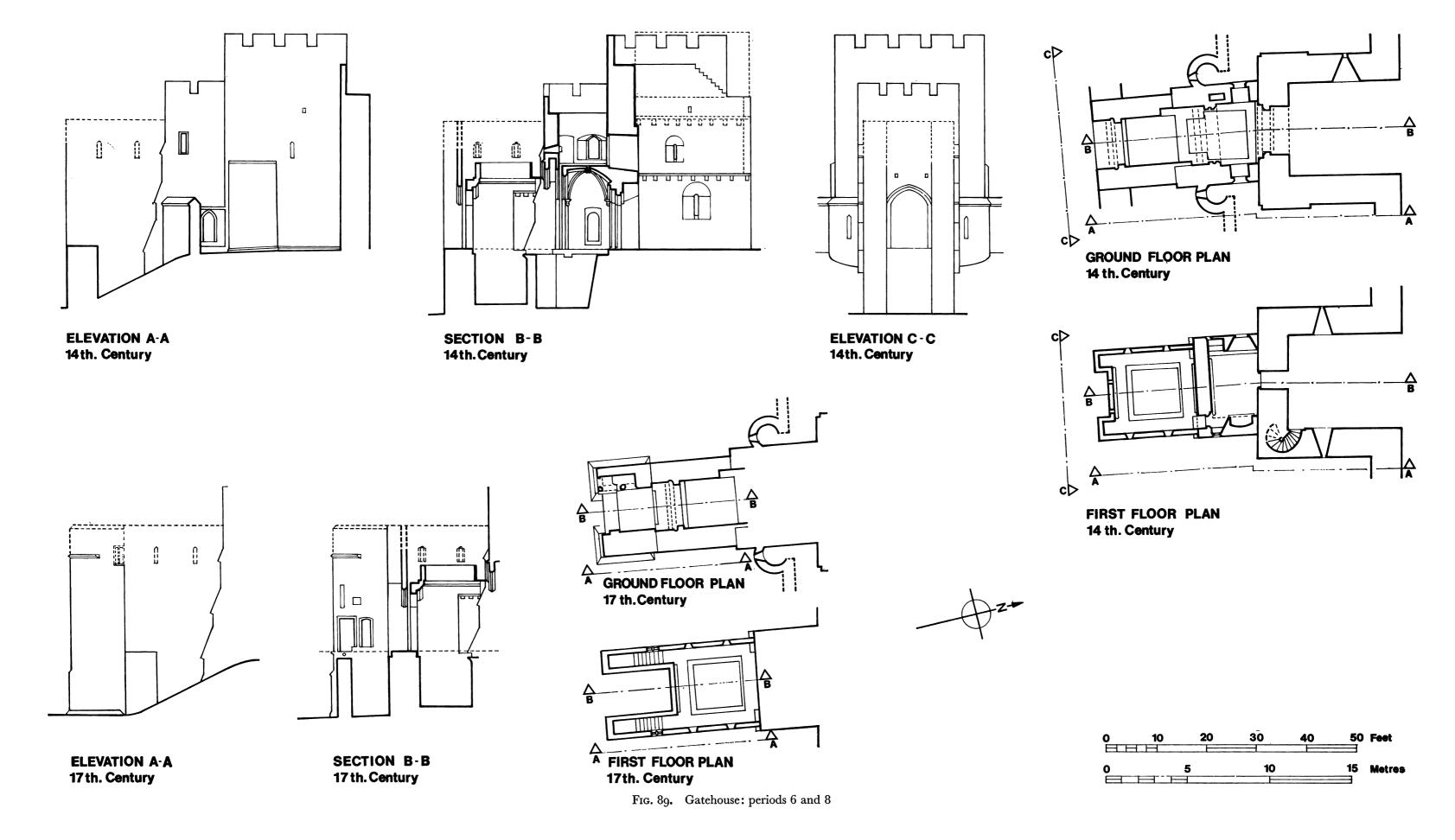


Fig. 88. Gatehouse: periods 3 and 4

Cunliffe and Munby
Portchester Castle, IV
Fig. 89. The gatehouse: periods 6 and 8



Cunliffe and Munby
Portchester Castle, IV
Fig. 90. Assheton's Tower

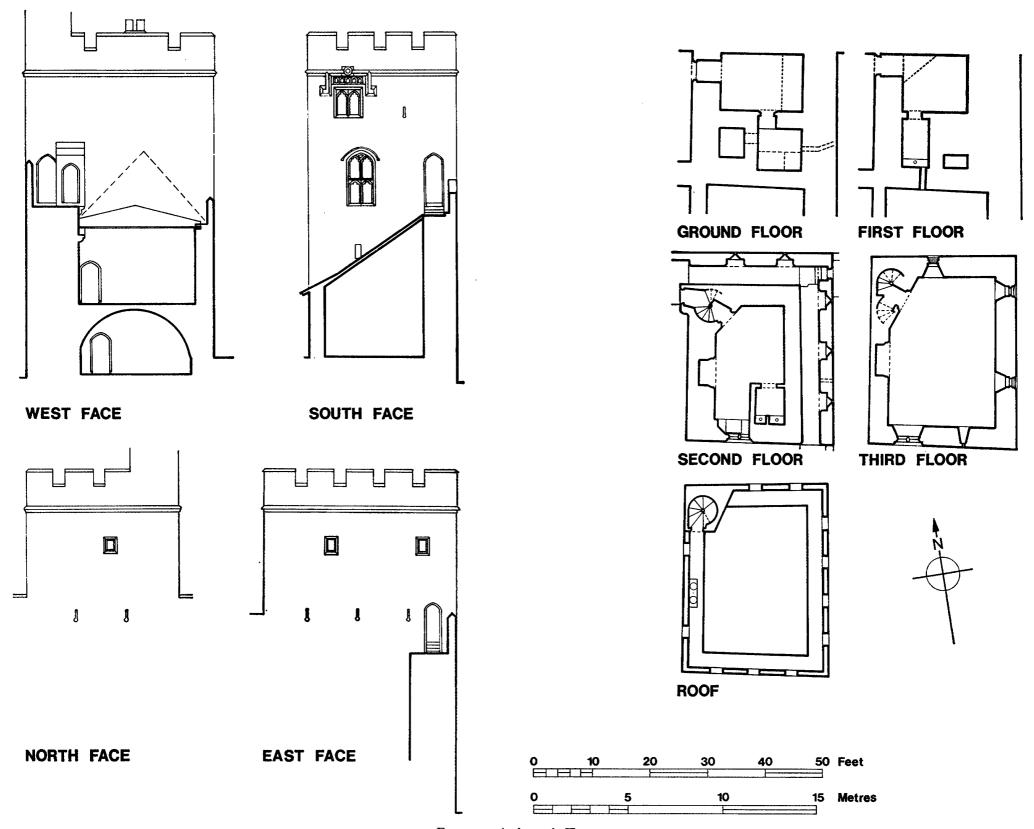


Fig. 90. Assheton's Tower

Cunliffe and Munby
Portchester Castle, IV
Fig. 91. The great hall of Richard II

Fig. 91. The great hall of Richard II

Cunliffe and Munby
Portchester Castle, IV
Fig. 92. The west range: twelfth and mid fourteenth centuries

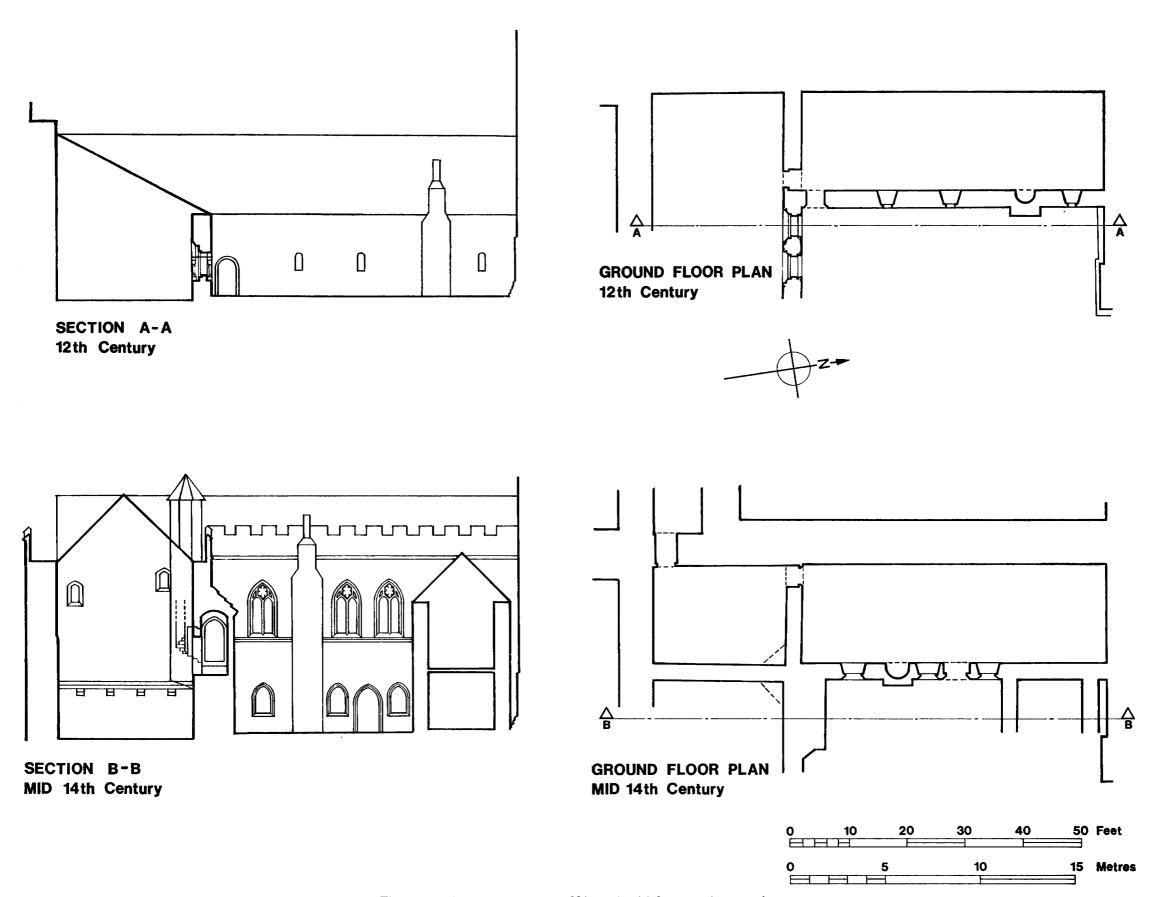


Fig. 92. The west range: twelfth and mid fourteenth centuries

Cunliffe and Munby
Portchester Castle, IV
Fig. 93. Passage between the hall and King's chamber
Fig. 95. The windows of the King's chamber

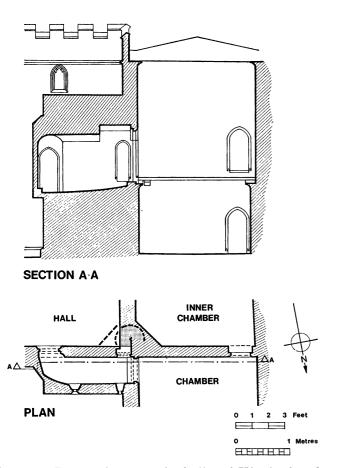


Fig. 93. Passage between the hall and King's chamber

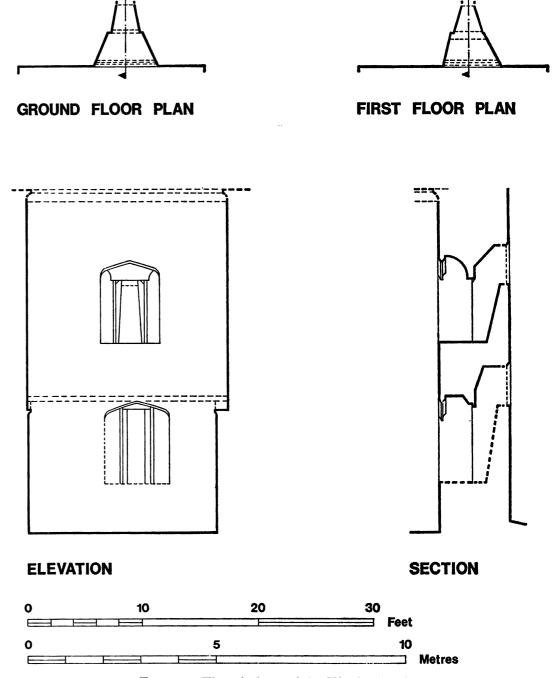


Fig. 95. The windows of the King's chamber

Cunliffe and Munby
Portchester Castle, IV
Fig. 94. The west range and exchequer chamber of Richard II

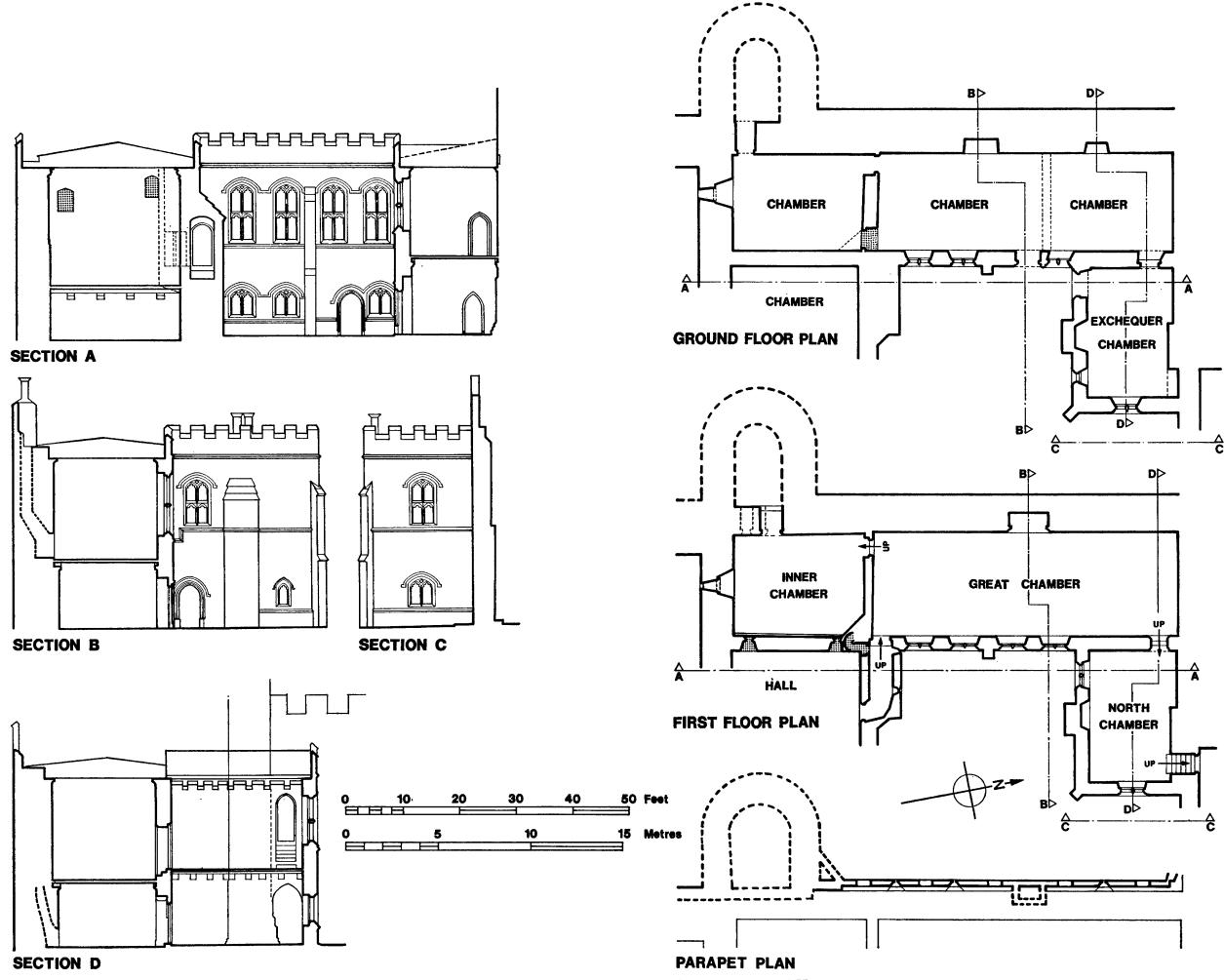


Fig. 94. The west range and exchequer chamber of Richard II

Cunliffe and Munby
Portchester Castle, IV
Fig. 96. The north range

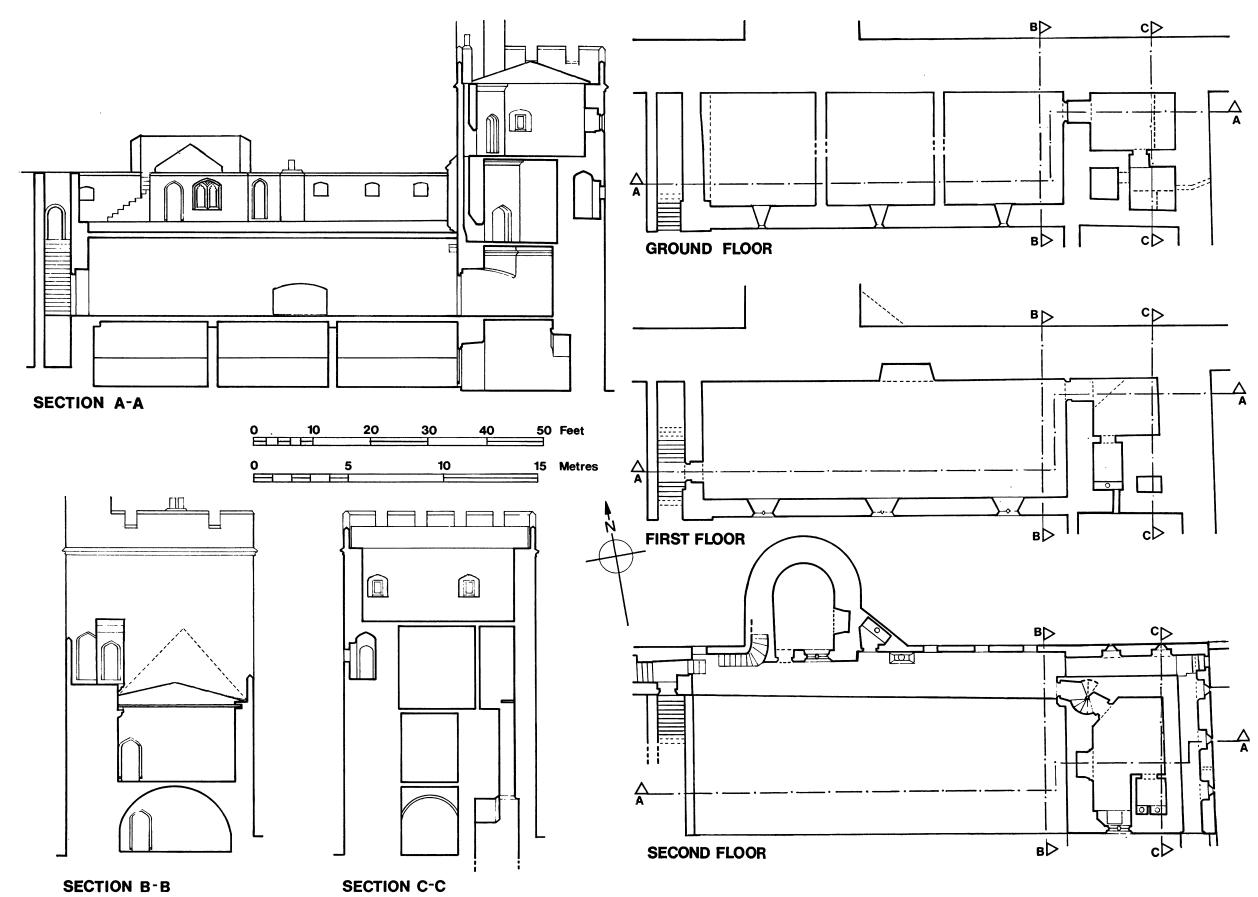


Fig. 96. The north range

Cunliffe and Munby
Portchester Castle, IV
Fig. 97. The east and south-east ranges: thirteenth century

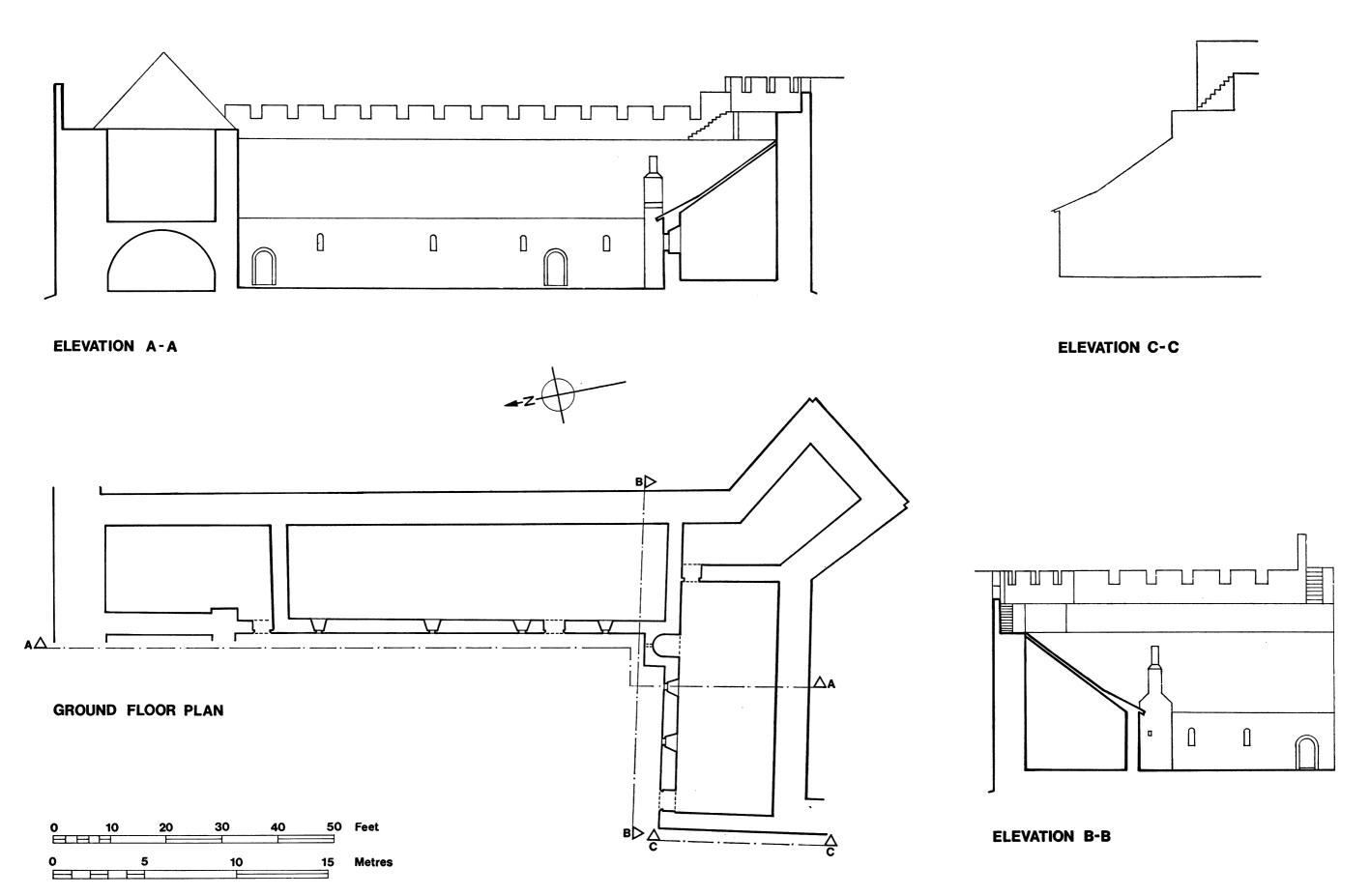


Fig. 97. The east and south-east ranges: thirteenth century

Cunliffe and Munby
Portchester Castle, IV
Fig. 98. The east and south-east ranges: late fourteenth century

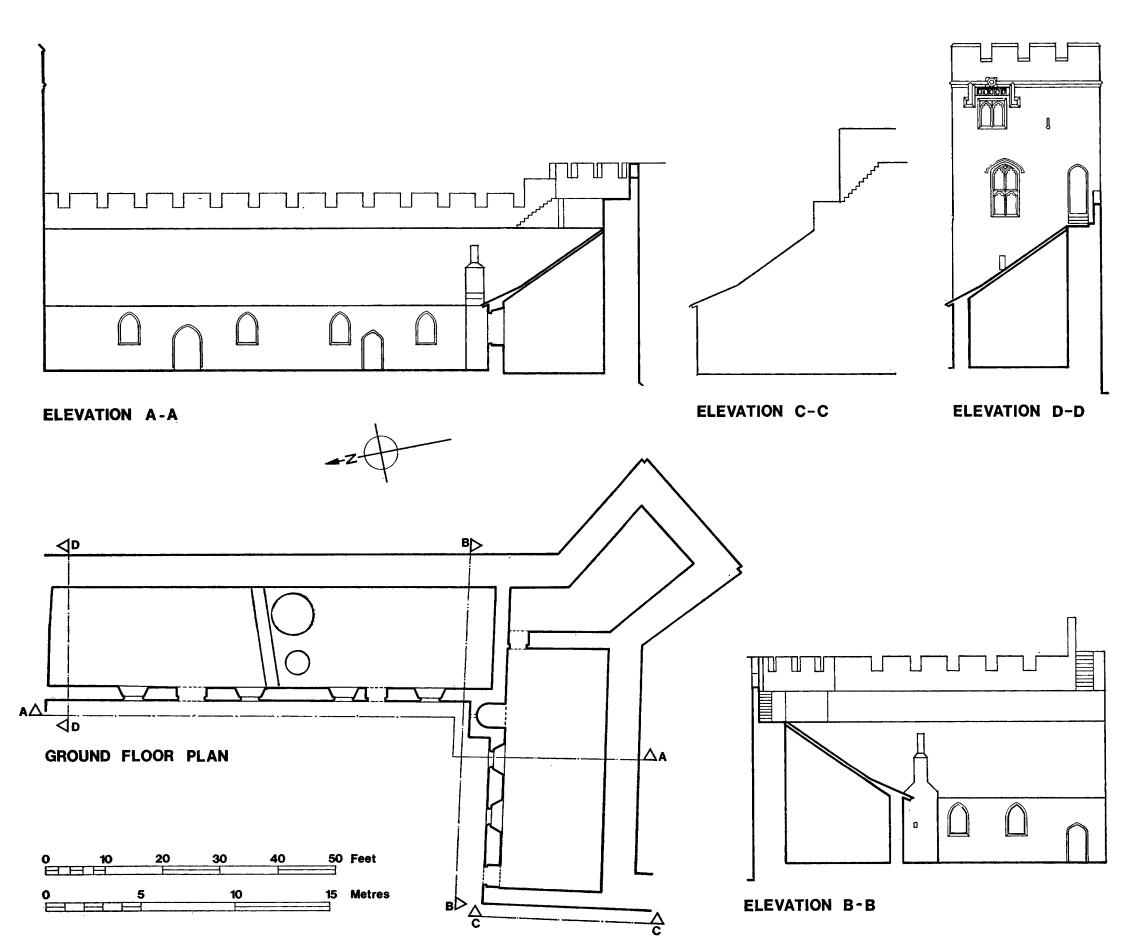


Fig. 98. The east and south-east ranges: late fourteenth century

Cunliffe and Munby
Portchester Castle, IV
Fig. 99. The east and south-east ranges: early seventeenth century

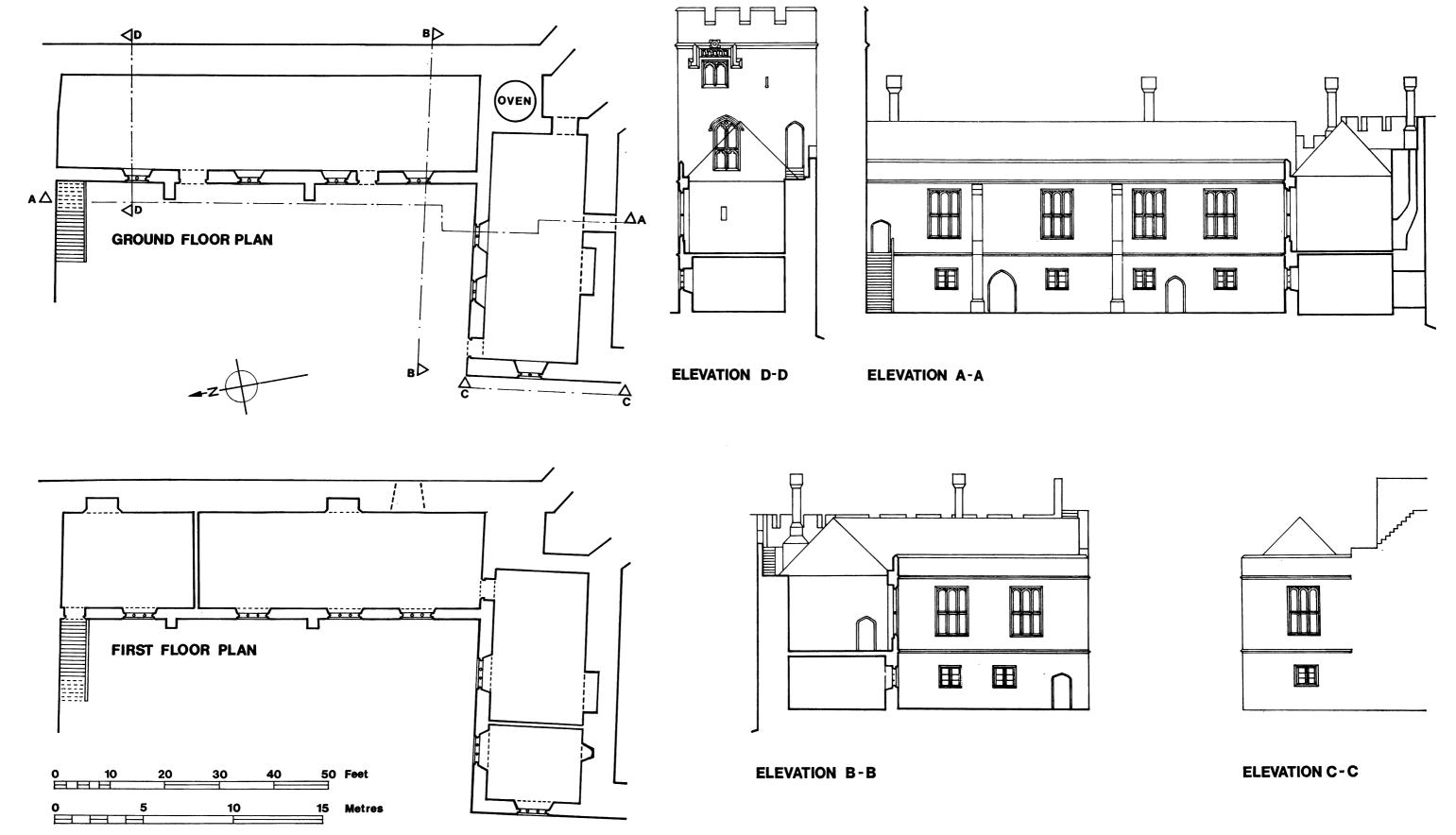
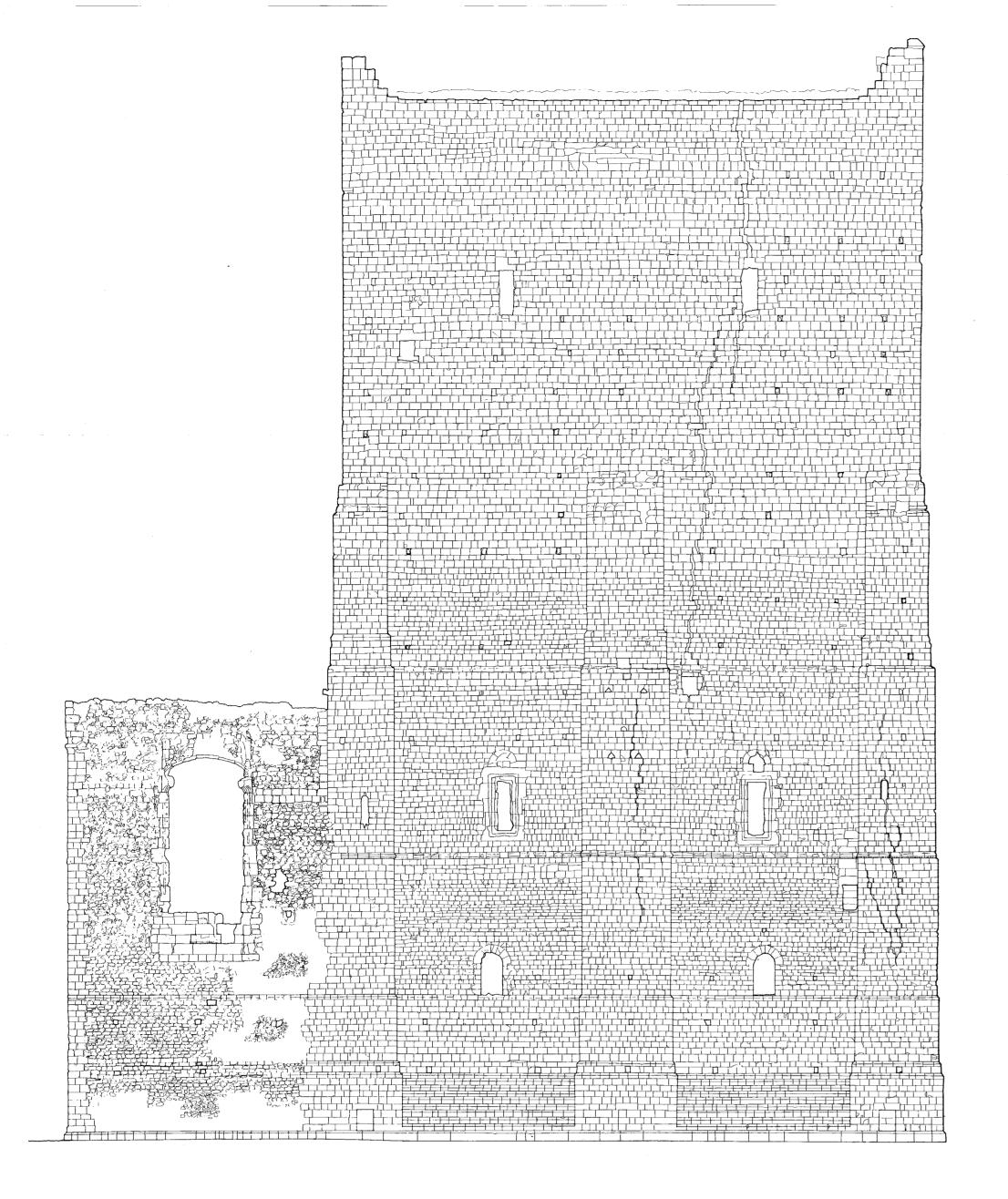
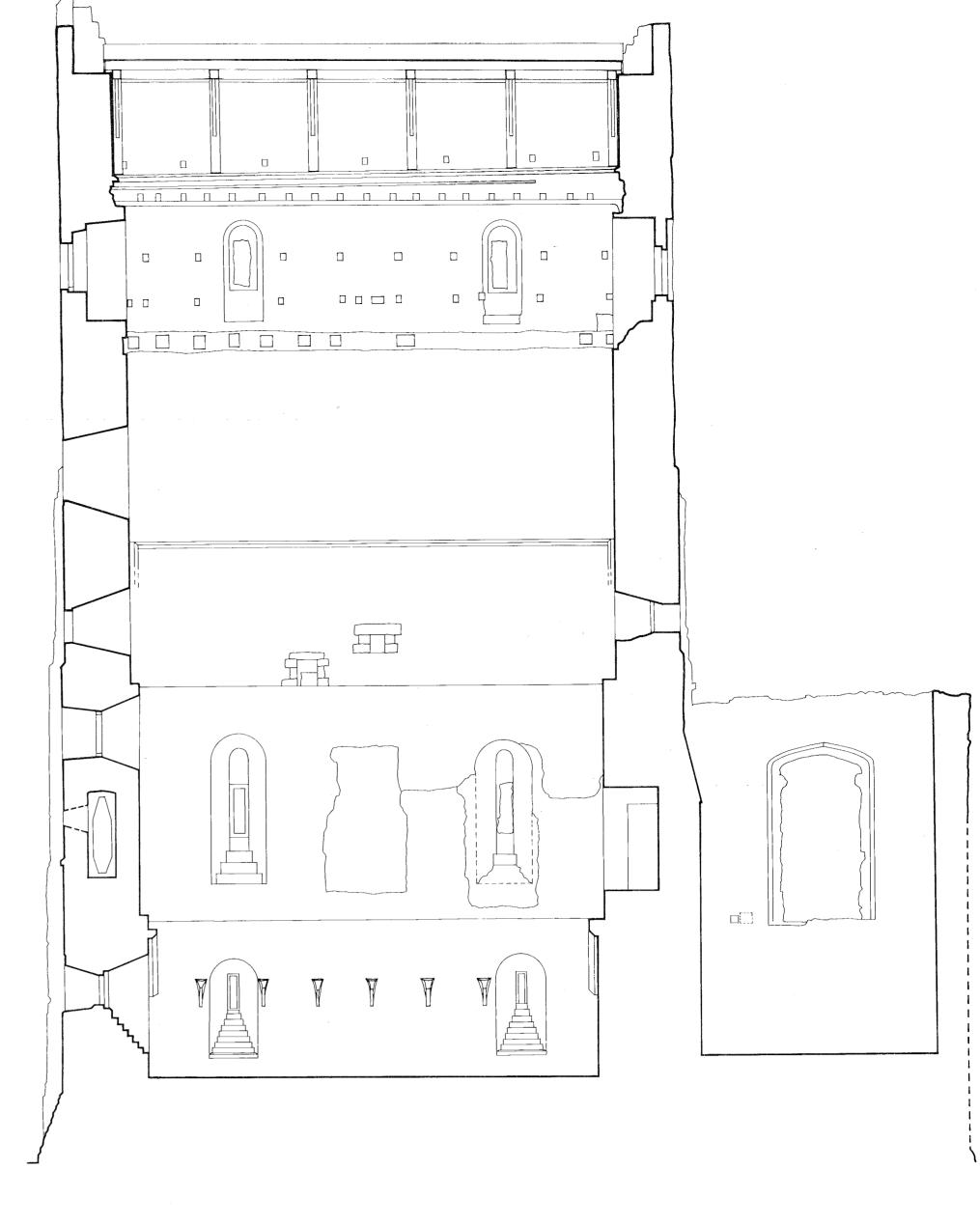


Fig. 99. The east and south-east ranges: early seventeenth century

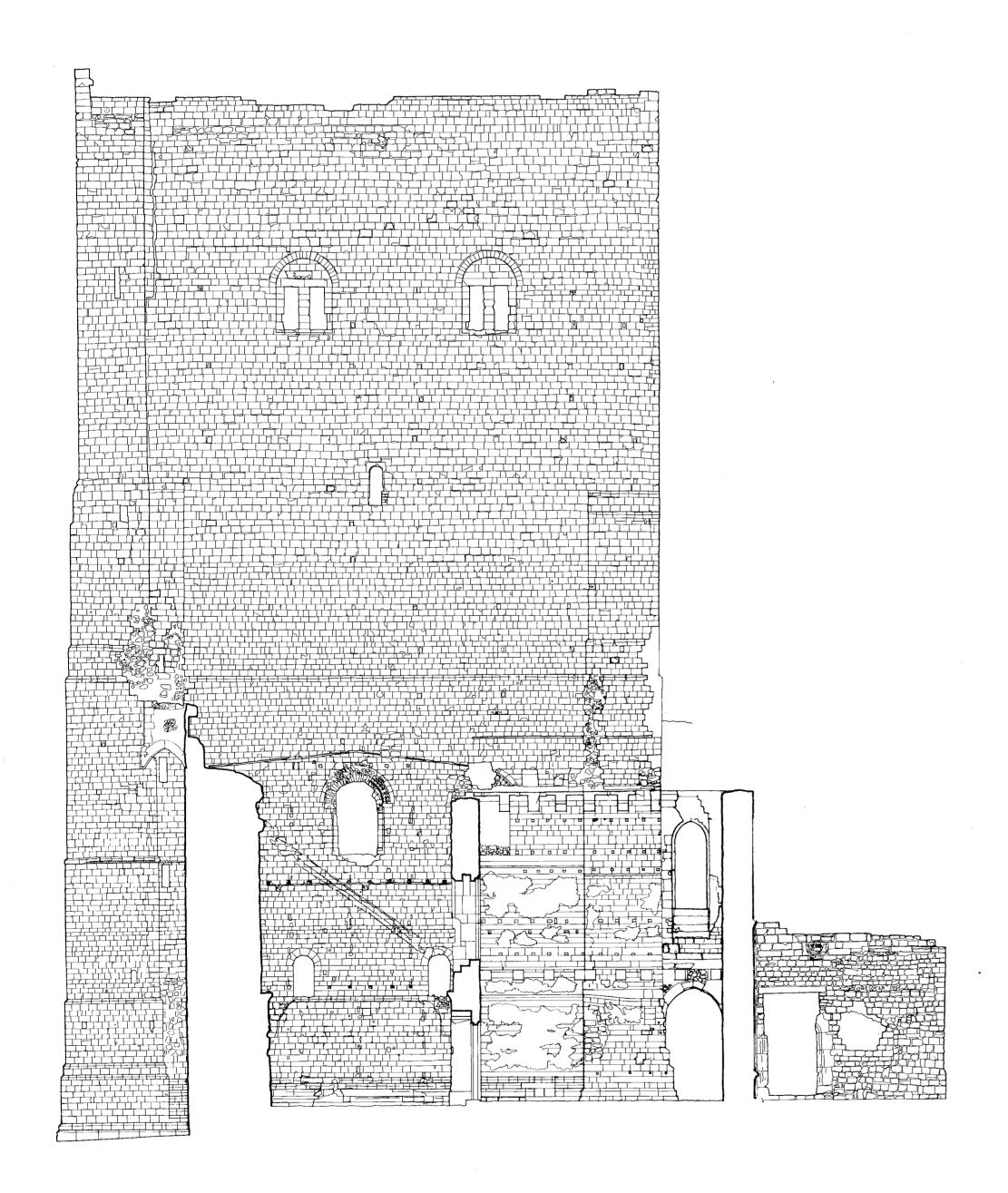
Cunliffe and Munby
Portchester Castle, IV
Fig. 100. Keep and forebuildings: key plan, elevations and sections



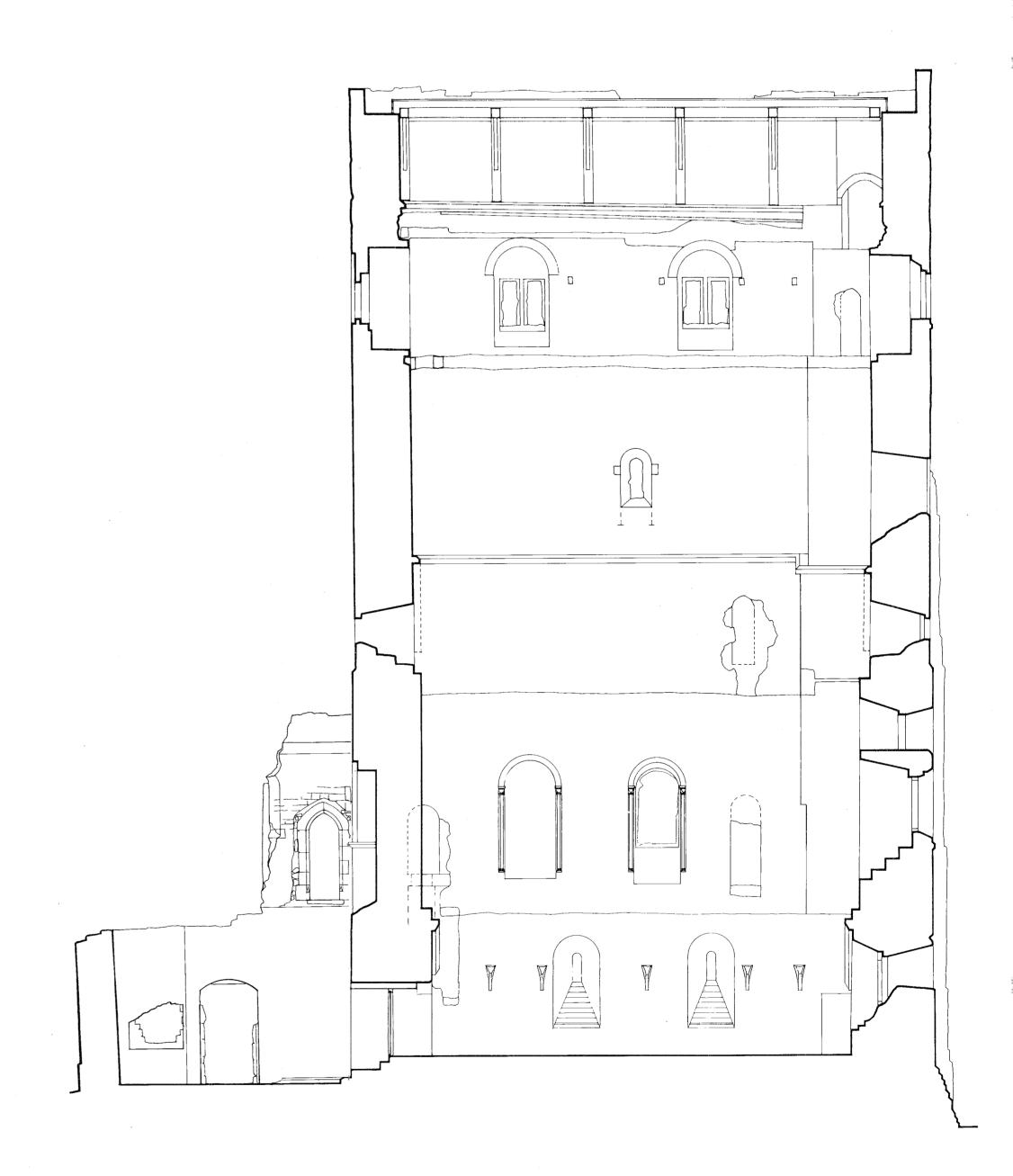
**ELEVATION A-A** 



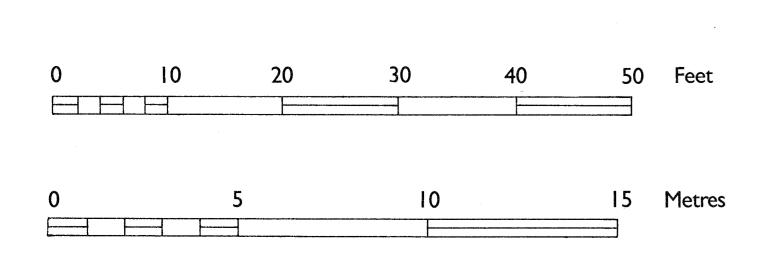
SECTION F-F

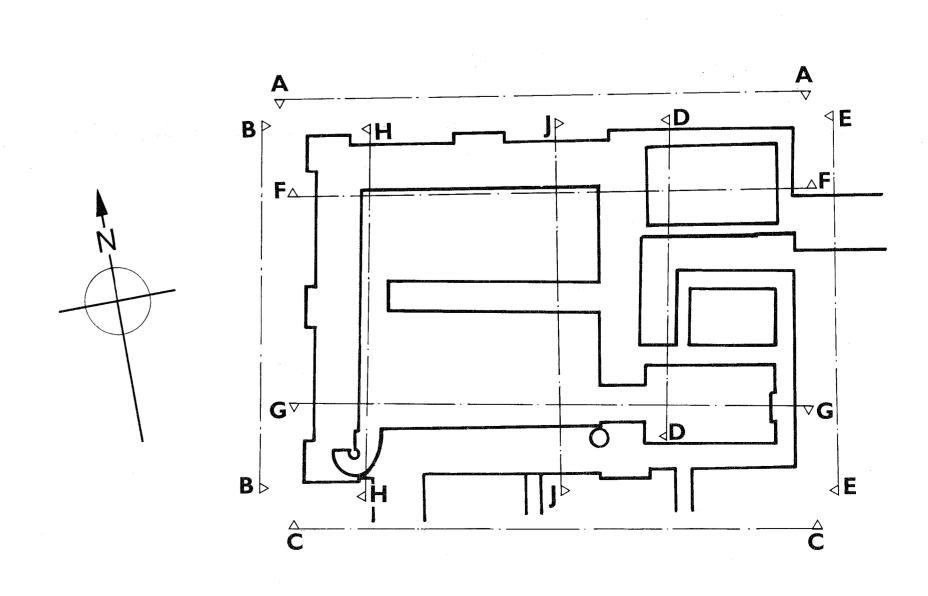


**ELEVATION C-C** 



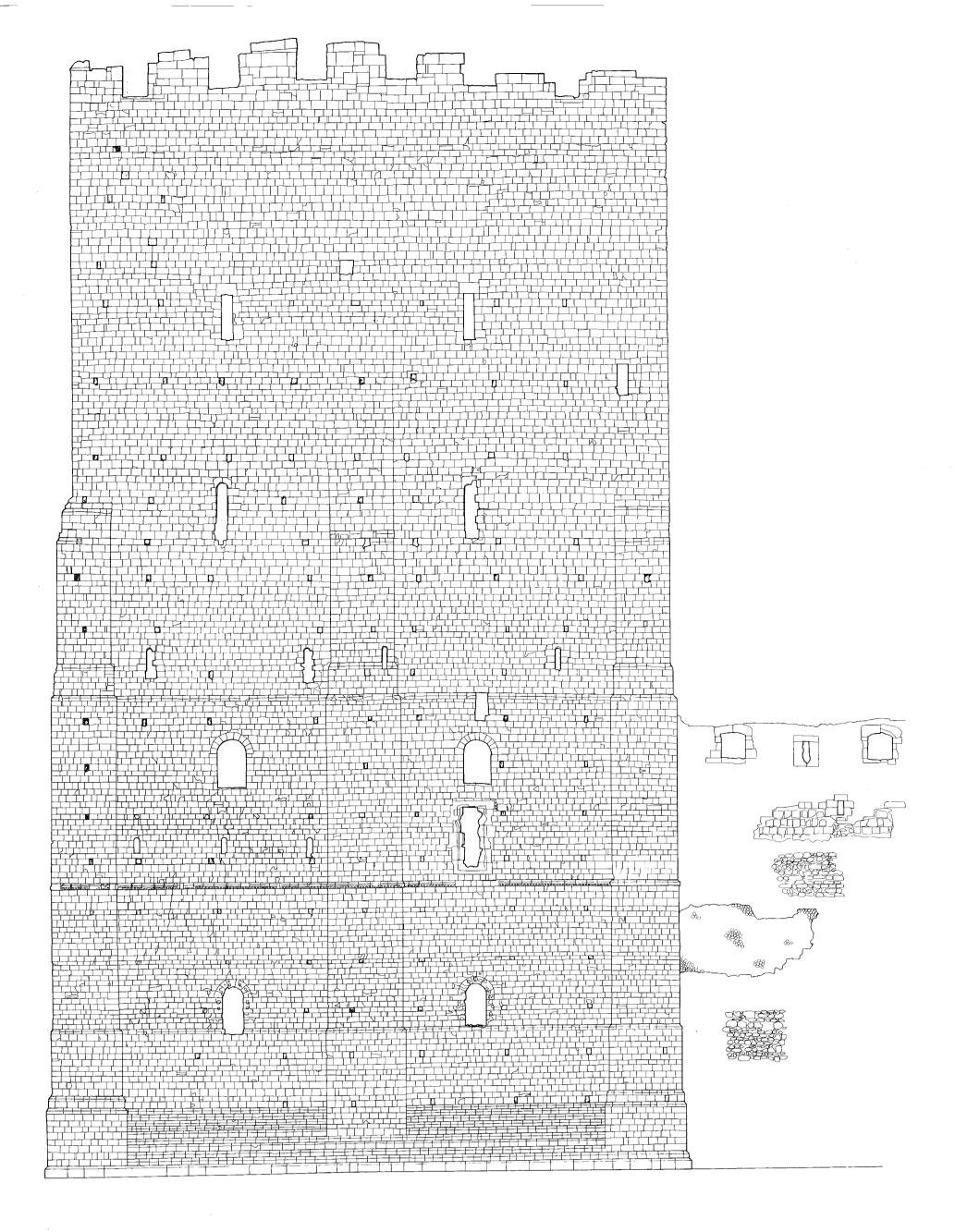
SECTION G-G



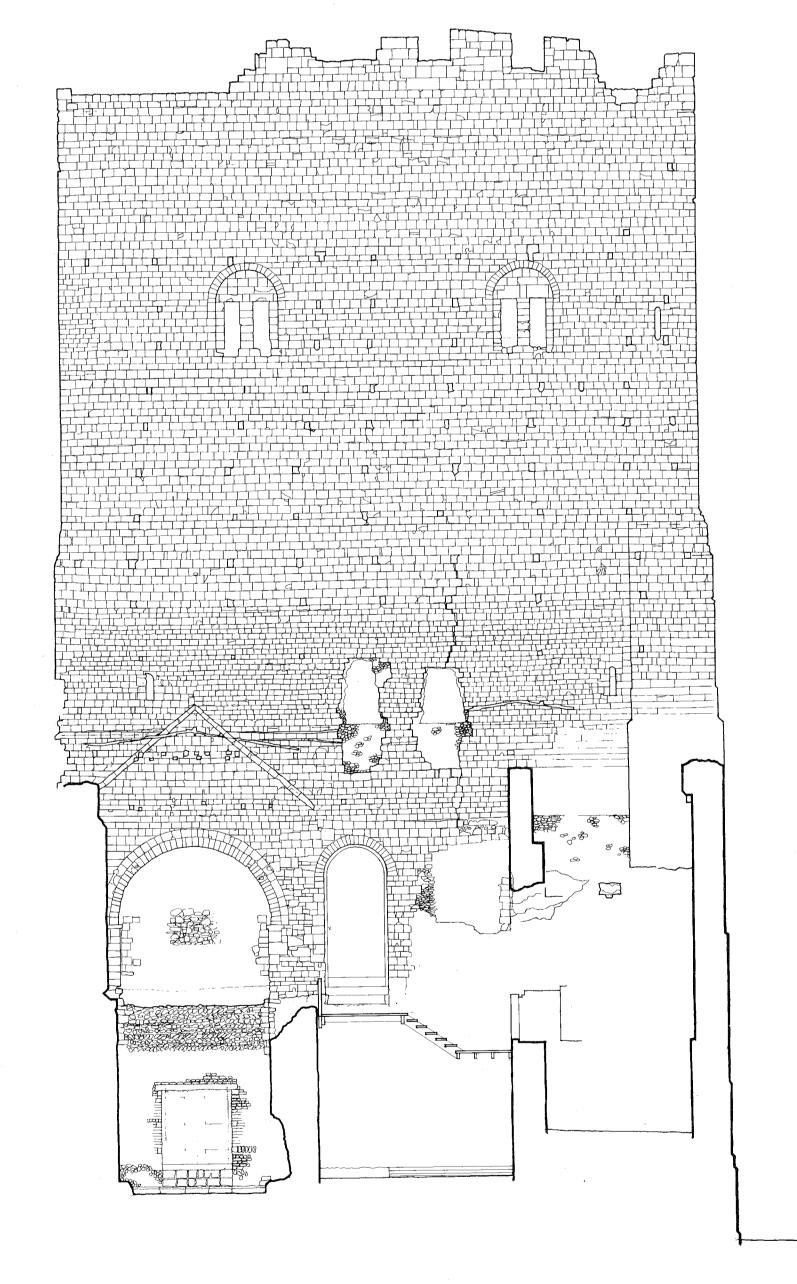


KEY PLAN

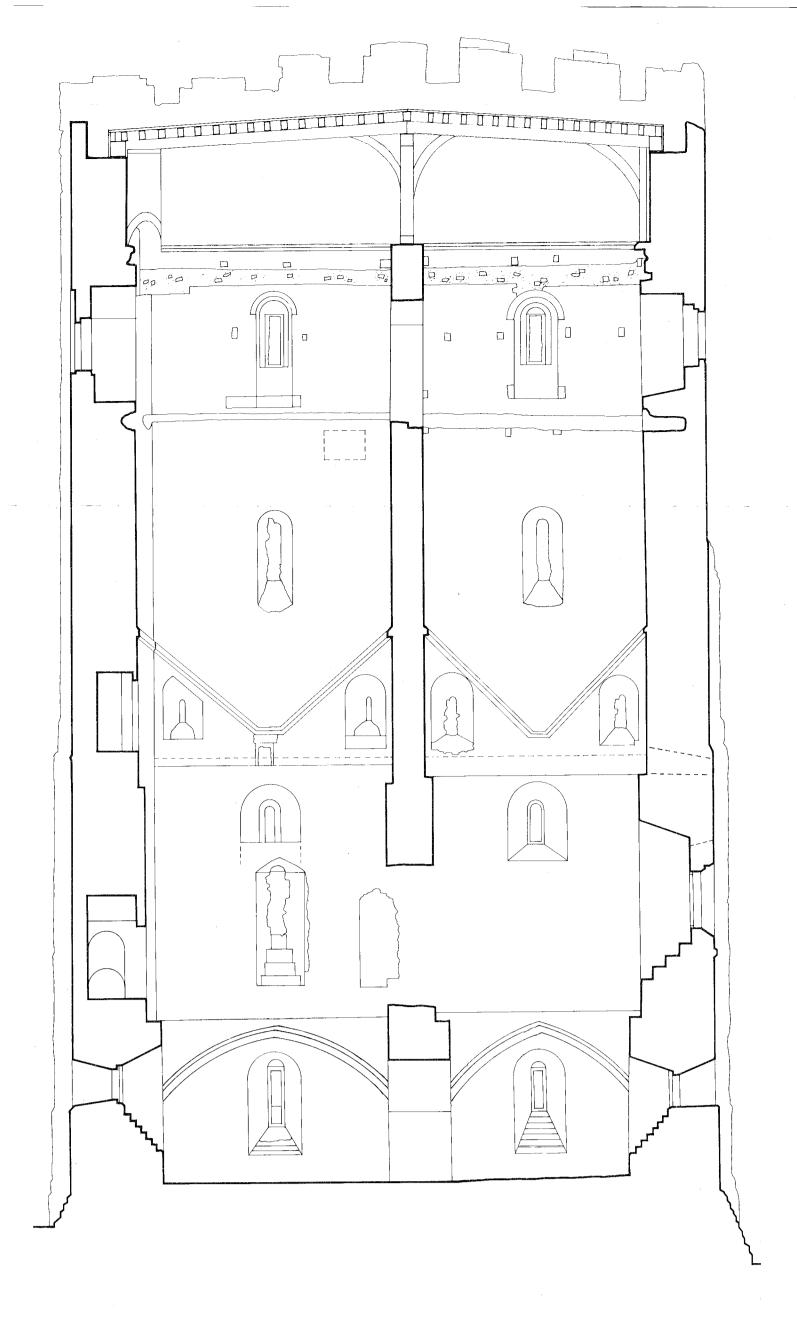
Cunliffe and Munby
Portchester Castle, IV
Fig. 101. Keep and forebuildings: elevations and sections



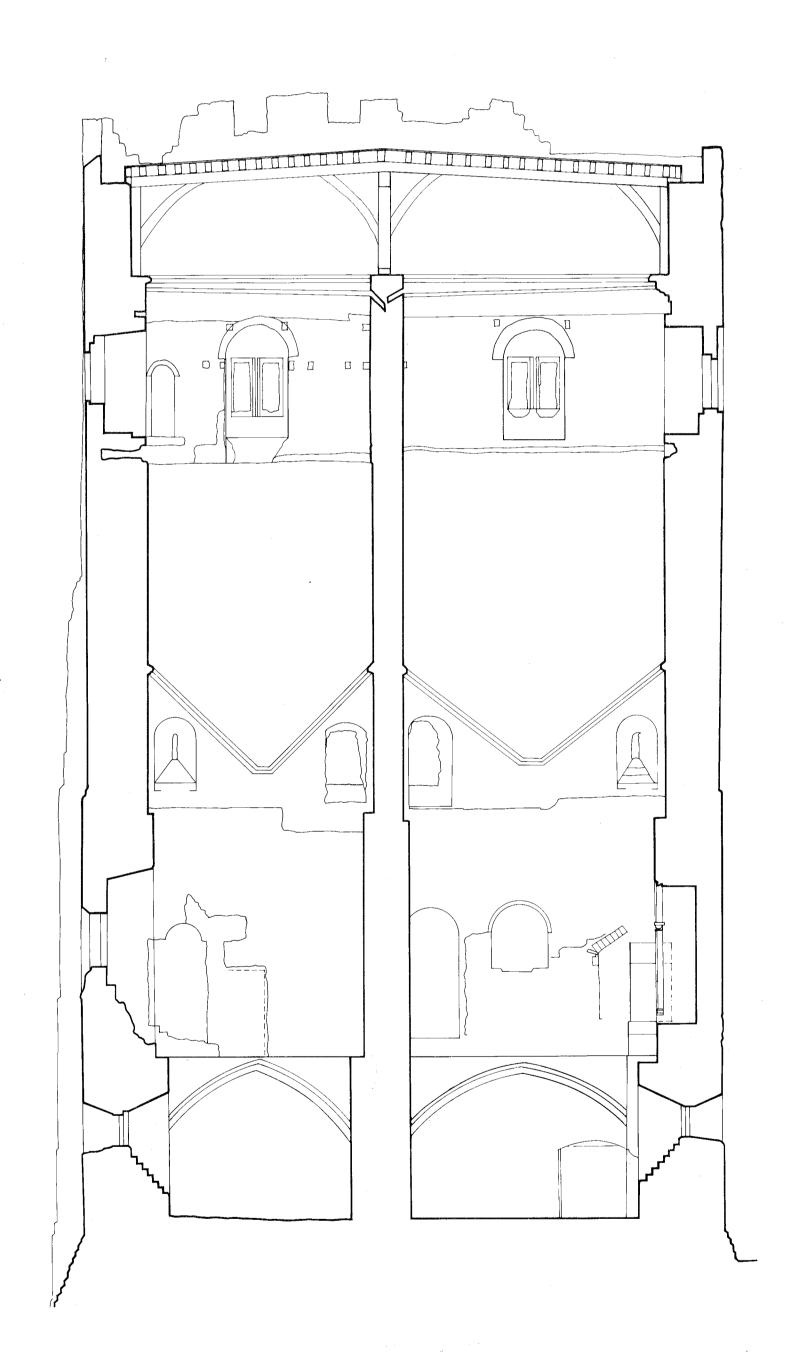
**ELEVATION B-B** 



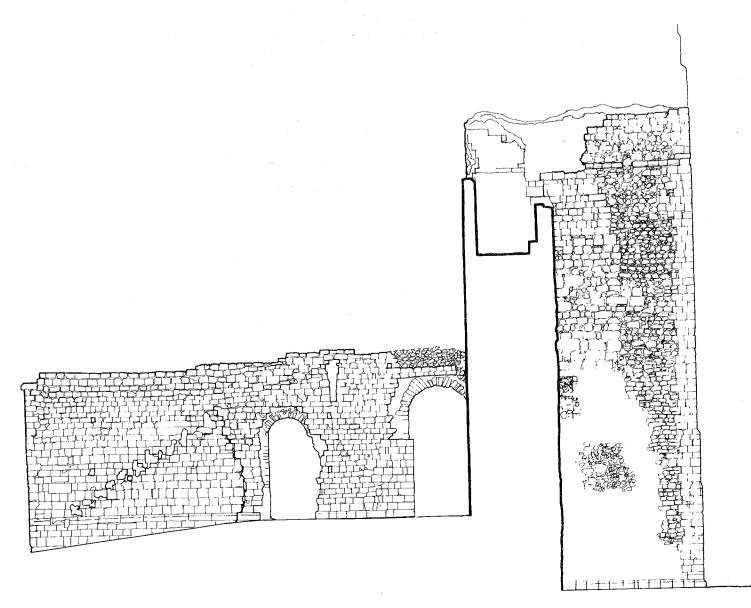
ELEVATION D-D



SECTION H-H

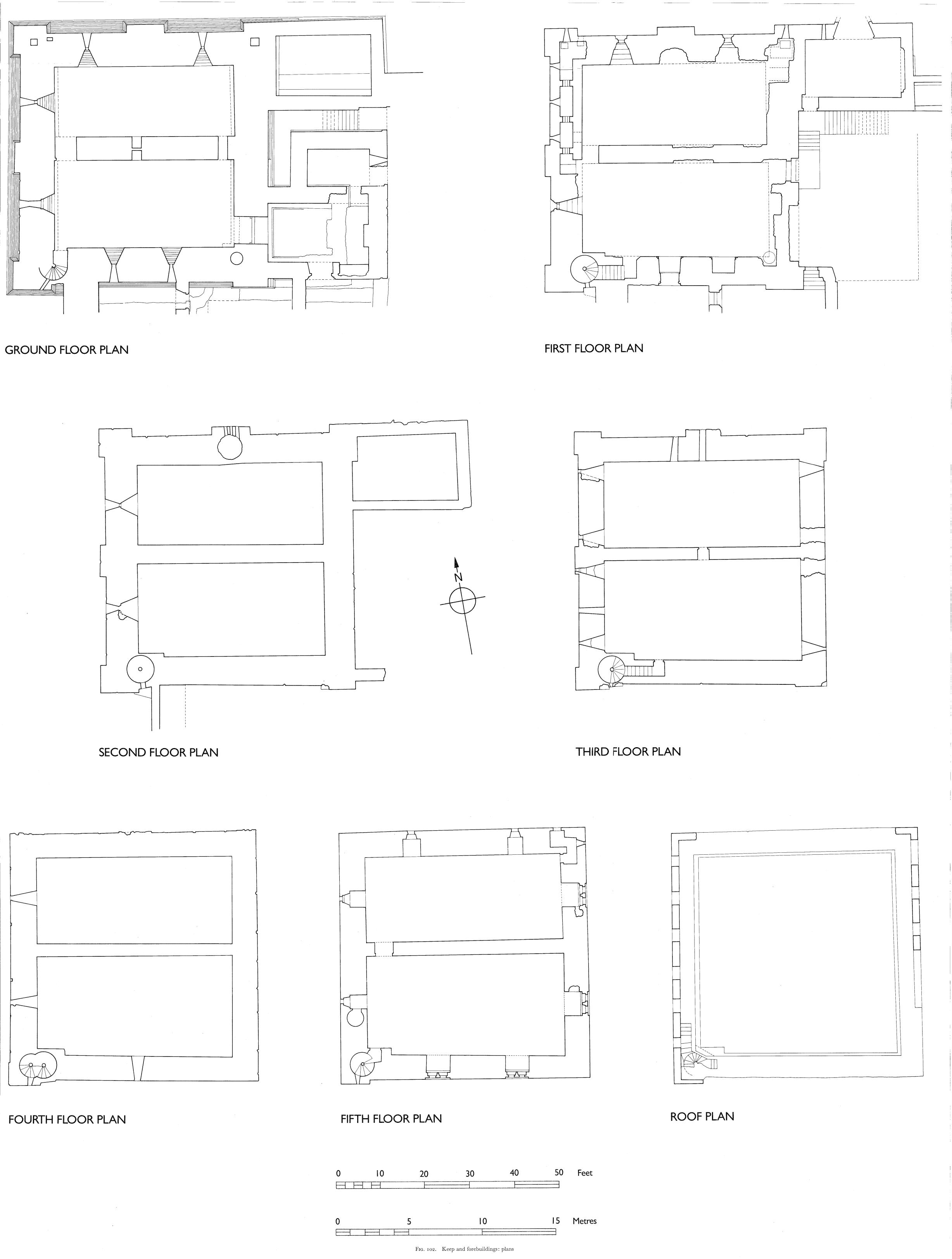


SECTION J-J

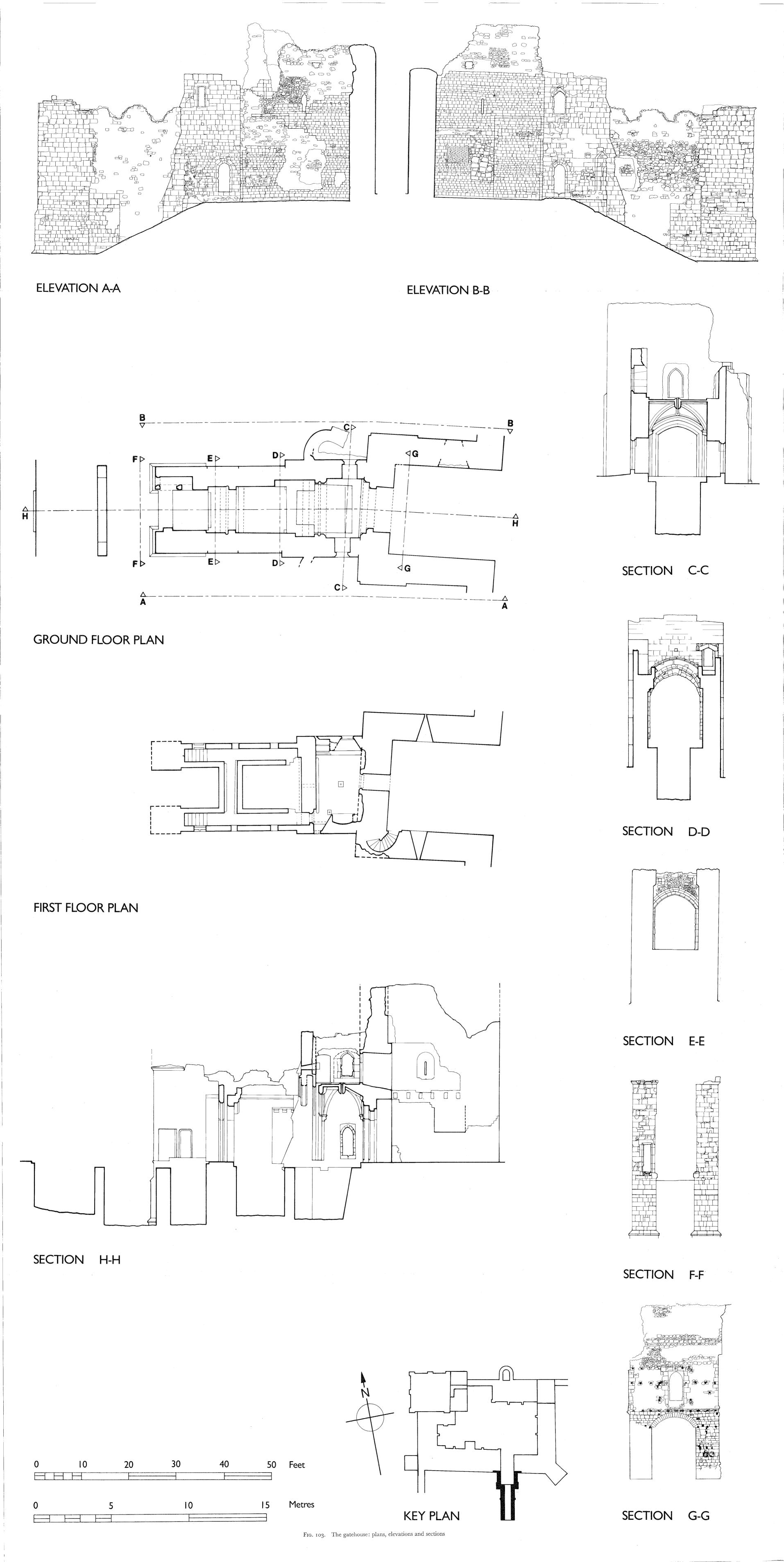


**ELEVATION E-E** 

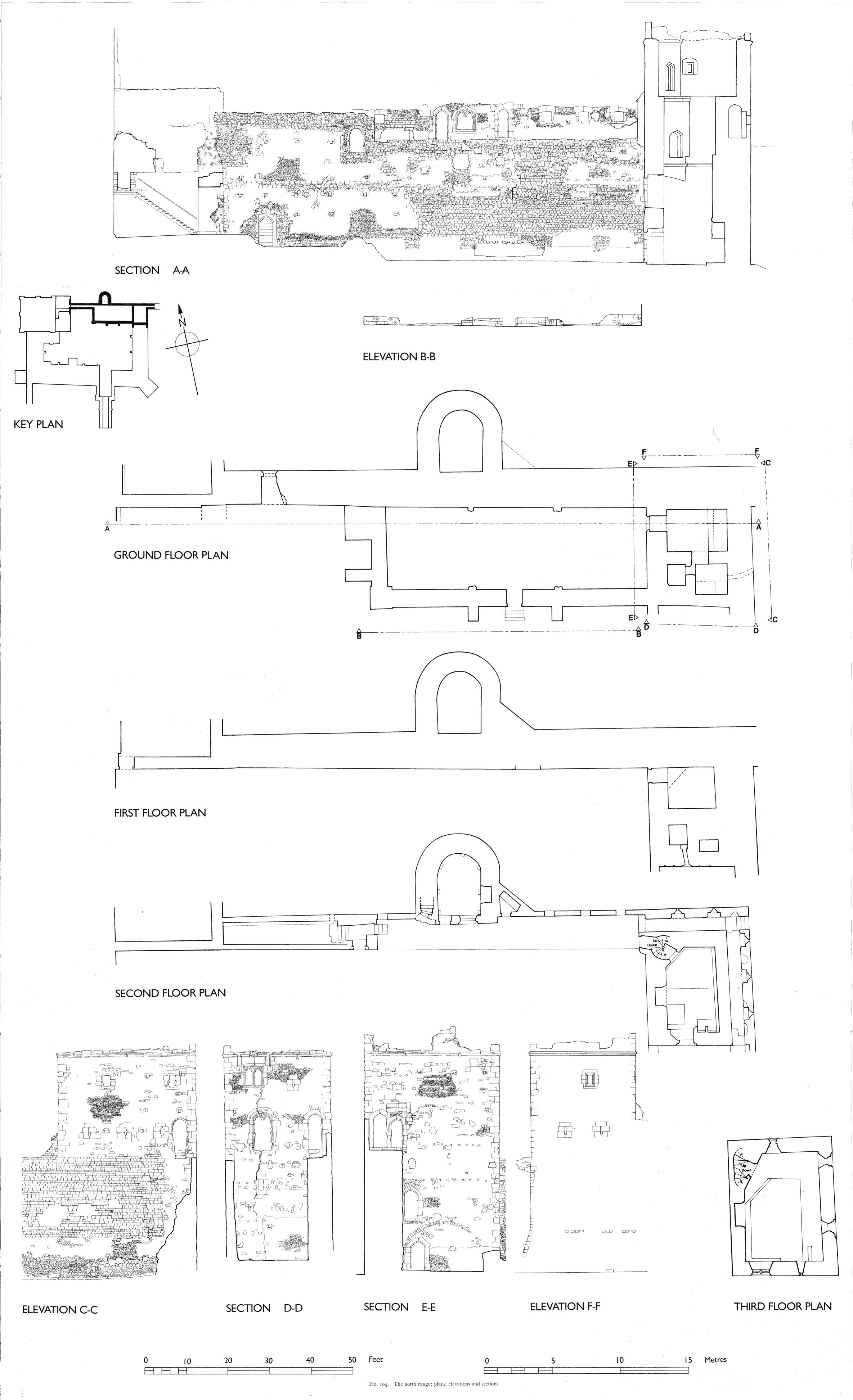
Cunliffe and Munby
Portchester Castle, IV
Fig. 102. Keep and forebuildings: plans



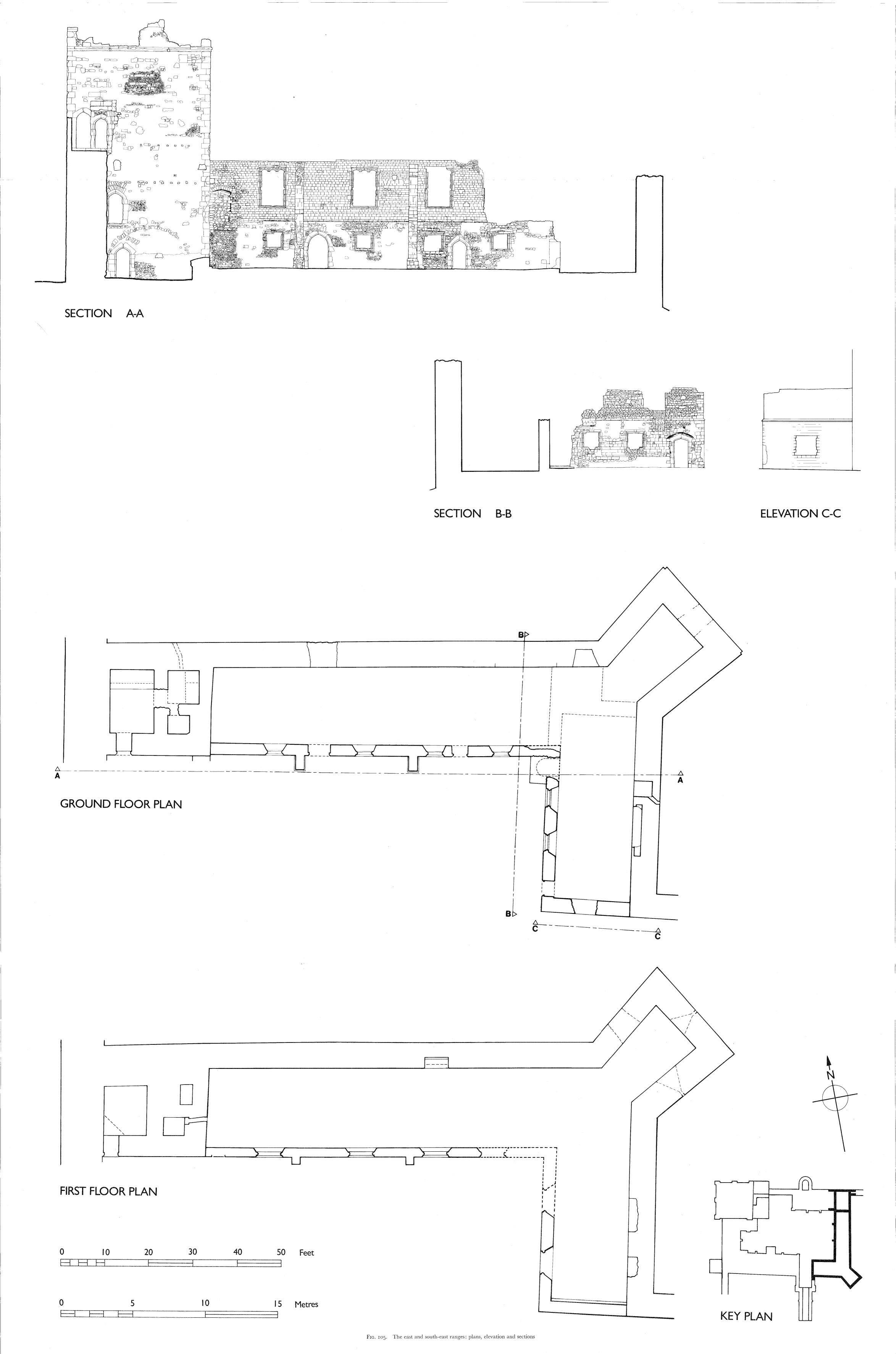
Cunliffe and Munby
Portchester Castle, IV
Fig. 103. The gatehouse: plans, elevations and sections



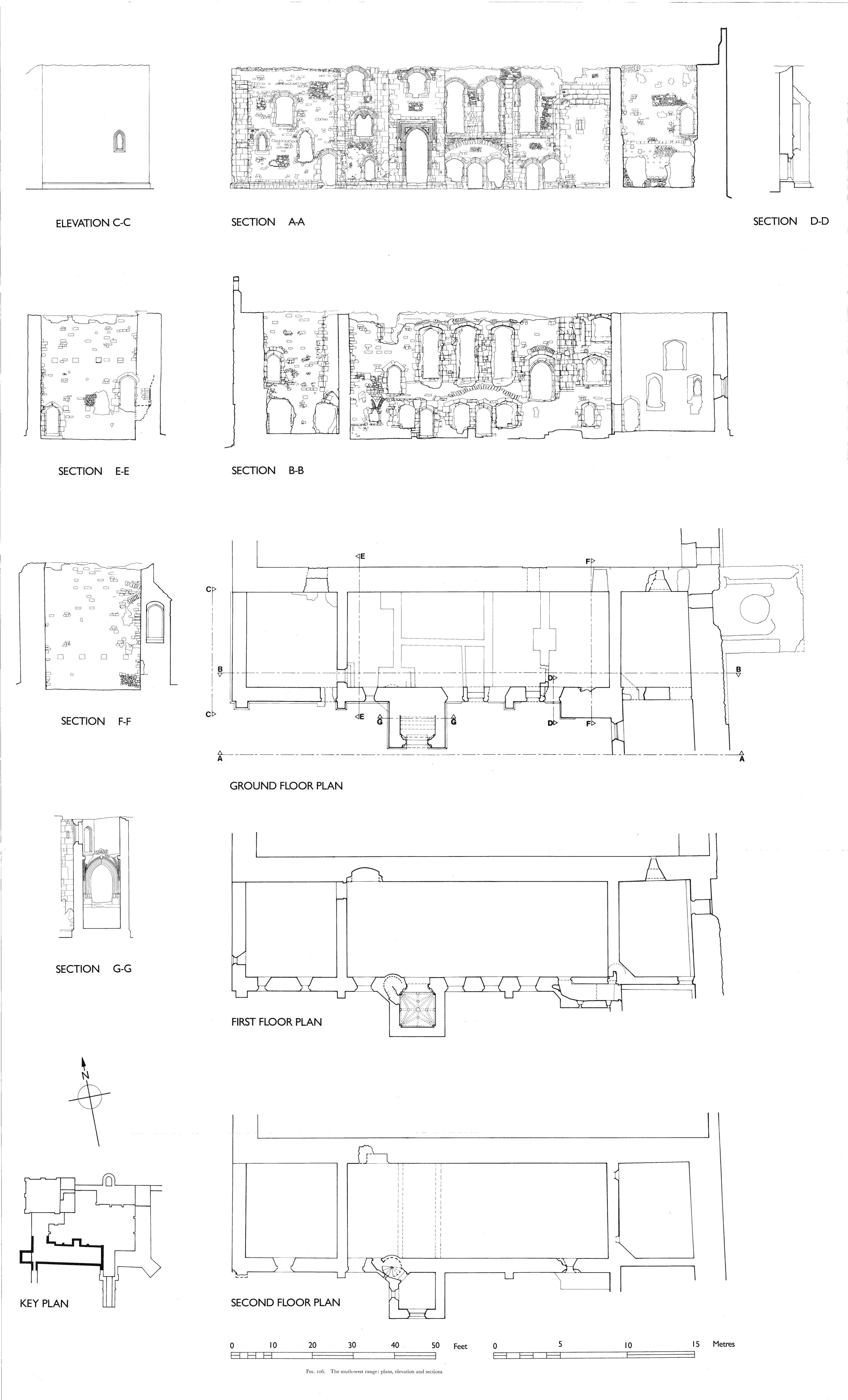
Cunliffe and Munby
Portchester Castle, IV
Fig. 104. The north range: plans, elevations and sections



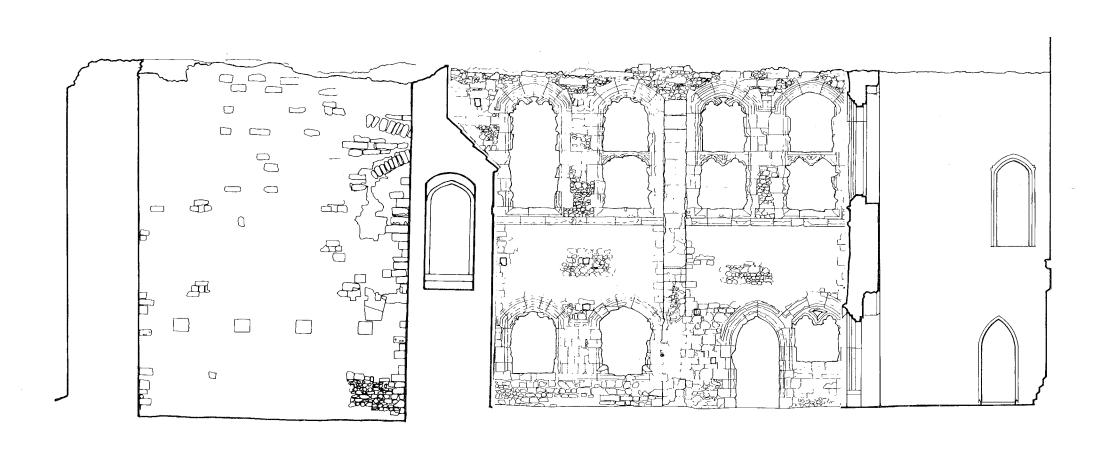
Cunliffe and Munby
Portchester Castle, IV
Fig. 105. The east and south-east ranges: plans, elevation and sections



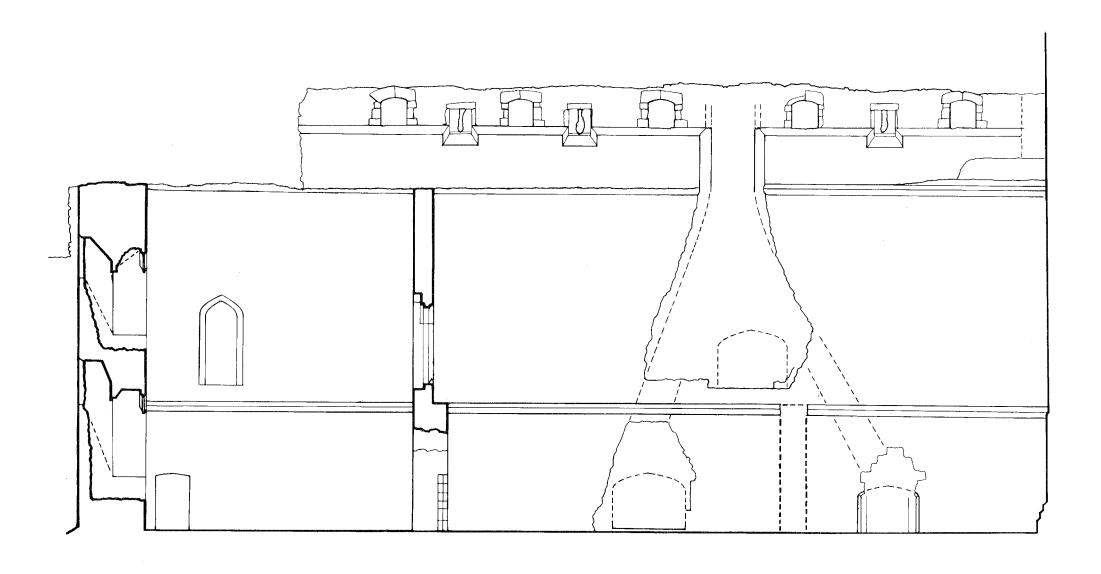
Cunliffe and Munby
Portchester Castle, IV
Fig. 106. The south-west range: plans, elevation and sections



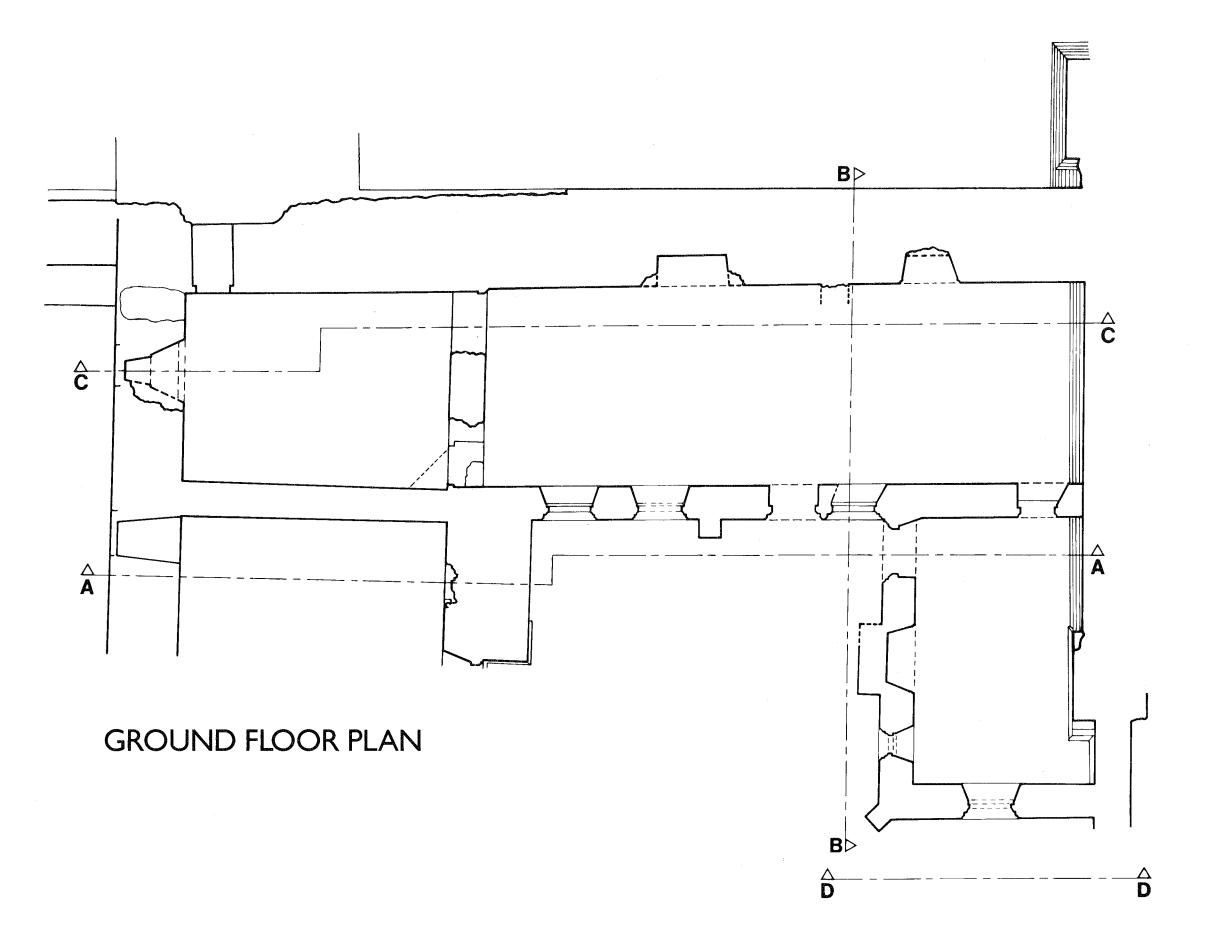
Cunliffe and Munby
Portchester Castle, IV
Fig. 107. The west and north-west ranges: plans, elevation and sections

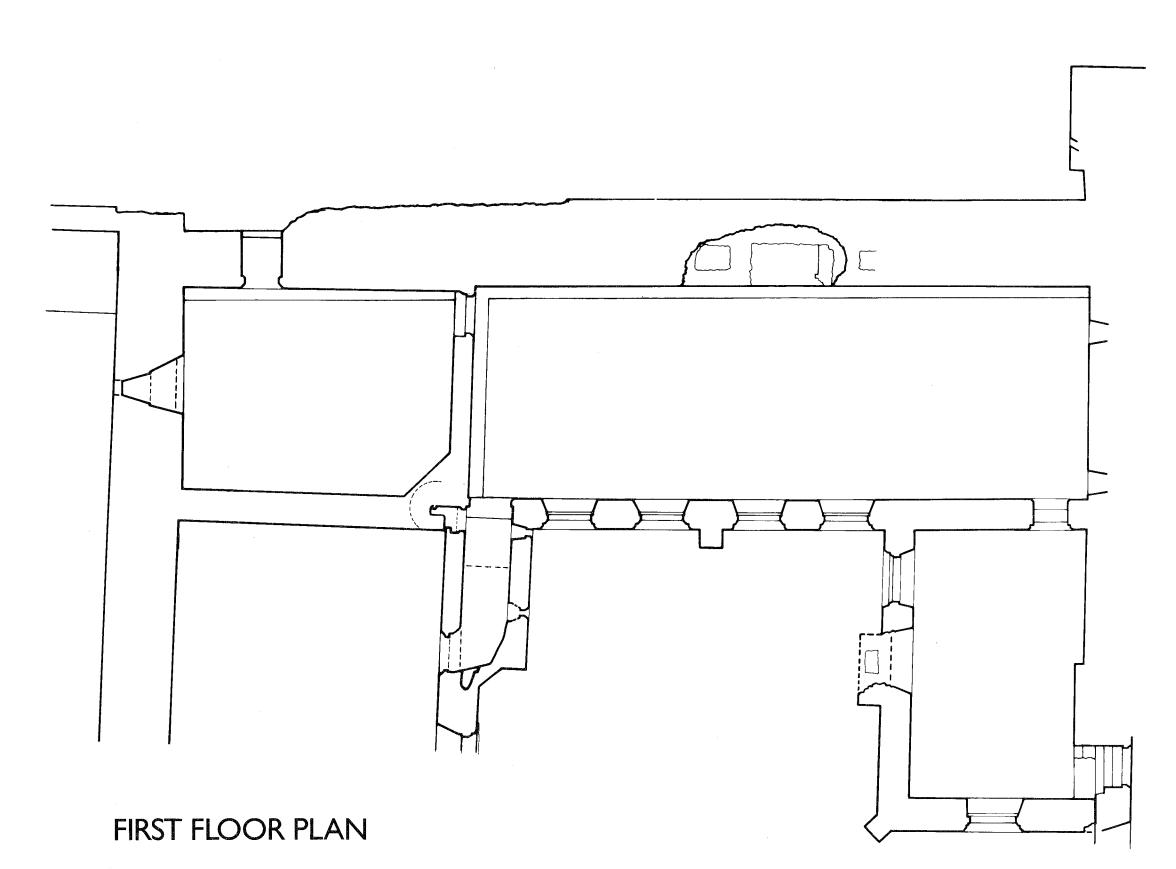


SECTION A-A

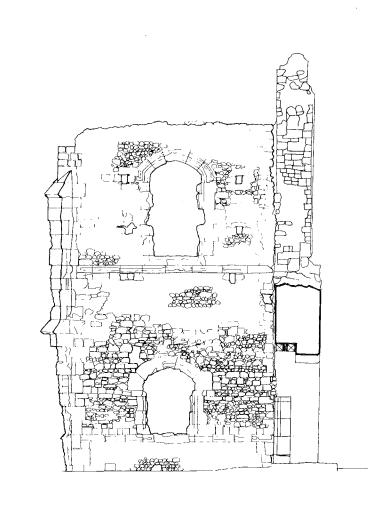


SECTION C-C

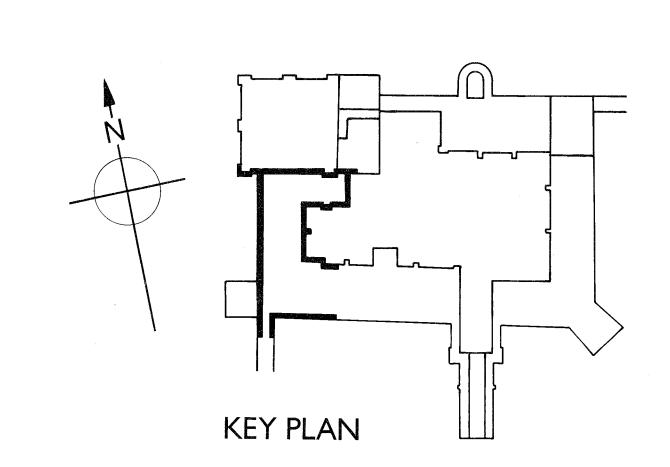




SECTION B-B



ELEVATION D-D



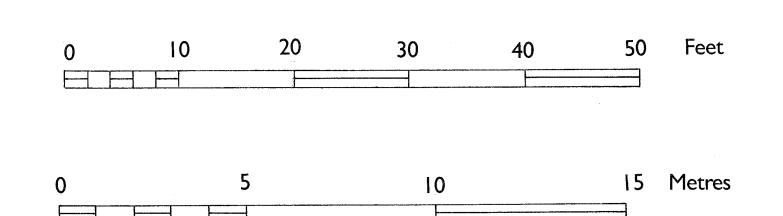


Fig. 107. The west and north-west ranges: plans, elevation and sections