building. The vessel (PL. XXXI, B-C) is ovoid in form, 35 cm. high, and made of the bluegrey ware in general use over a large part of the Netherlands and Flanders in medieval times. Above the shoulder is a single line of inscription with the repeated words AVE.MARI. AVE.MARIA in Gothic style, made by a roller stamp. 76 The stratigraphical position of the vessel shows that it was buried just before or when the wall of the house was built. Nothing was found inside it; there is one instance of a pot filled with ash and bones of ox and sheep, which is considered to be a kind of building sacrifice or ritual deposit, being buried in the 16th century on the inner side of the foundation trench of a house at Leeuwarden. In discussing the Amsterdam pot H. H. van Regteren Altena considered that it had a more direct liturgical use, since the first owner and occupant of the house was Ian Diers, a priest of the parish church near by.

Otherwise the only close parallels are in Czechoslovakia, localized in S. Bohemia. These are also large ovoid jars, dated early 15th century. Several have the single name MARIA stamped on the upper part, while another jar, 48 cm. high, has part of a

Hussite chorale, roller-stamped in three zones.77

Although any direct connexion between Bohemia and the Netherlands at this time is difficult to envisage, the identity of the Maria inscriptions on pottery in these countries is a striking fact. It is relevant to refer here to Italian and Netherlandish maiolica of the late 15th and 16th centuries, bearing the sacred monogram IHS. These pedestal vases were intended for flowers, and Bernard Rackham originally suggested their use on the altar. 78 Examples imported to England have been found in London and elsewhere. 79

In the case of the earlier and less overt jugs with lettering found in England, insofar as the inscriptions are legible they appear to be religious or magical in character. In that case it is possible to relate them to the wisespread practice of witchcraft, and the prevalence of superstitious belifs in Europe during the later middle ages and since.80 Even a papal bull was issued by Innocent VIII in 1484 against these cults and deploring the spread of witchcraft on the continent.

G. C. DUNNING

THE GREAT HALL AT BOLINGBROKE CASTLE, LINCOLNSHIRE (PL. XXXII;

In volumes x (1966) and xiii (1969) of this journal Dr. M. W. Thompson described the first five years' work at Bolingbroke undertaken as part of a scheme for the consolidation of the castle by the D.o.E. In 1965 Thompson located a stone structure parallel to the NE. wall, the substantial nature of which suggested that it represented the remains of a hall. 81 Documentary evidence also suggests this as the probable site of a hall in existence in the 15th century. Between 1404 and 1413 a tower "at the east end of the hall" was repaired at a cost of £350.82 Assuming the hall to be adjacent to the curtain wall this tower can only be tower Q or A.83 In 1518-19 the "south wall of the King's

76 Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek, XIX (1969), 242-4, fig. 5, II, no. 1

73, fig. 28, no. 2, and fig. 29, nos. 1 and 3.

78 Antiq. Jnl., xix (1939), 285–90. J. G. Hurst, Records of Bucks., xviii (1971), 362–4. The MS. Douce 219 in the Bodleian Library, illuminated c. 1485–90 by the 'Master of Mary of Burgundy', depicts flower

vases and also dishes with the sacred monogram.

79 The sacred mongram also occurs on the bases of bowls, as at Basing House, Hampshire: Post-Med. Archaeol., IV (1970), 83-5, fig. 24, no. 296.

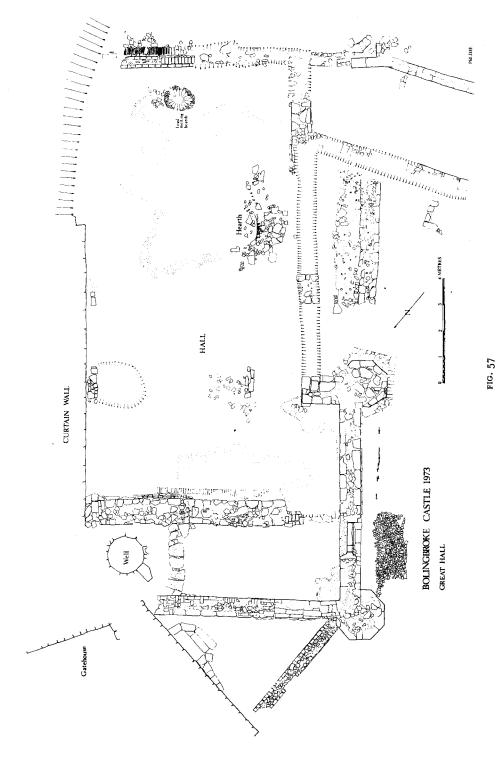
80 H. R. Trevor-Roper, The European Witch-craze of the 16th and 17th Centuries (Pelican Book, 1969),

passim, especially 24-54.

83 Loc. cit. in note 81.

⁷⁷ Medieval Ceramics in Czechoslovakia (Guide to Exhibition in the National Museum, Prague, 1962), 29, pl. 12; Květa Reichertová, Středověká Keramika ze Seximova Ústí, Tábora a Kozího Hrádku (Archeologické Studijní Materiály, III, Institut d'Archéologie de l'Académie Tchecoslovaque des Sciences, Prague, 1965),

⁸² H. M. Colvin, The History of the King's Works, III (H.M.S.O., forthcoming).



BOLINGBROKE CASTLE, LINCOLNSHIRE, 1973 Plan of the great hall as excavated (p. 165)

Hall" collapsed; 84 if the tower repaired in 1404–13 had been tower A the 'south wall' of the hall would have been the curtain wall, which would have been called such and which anyway shows no sign of rebuilding at this point. This leaves tower Q as the only candidate for the tower 'at the east end of the hall', putting the hall in the position of the excavated remains.

Excavation of this site was undertaken under the direction of P. L. Drewett and D. J. Freke during 1973. An area approximately 30 by 15 m. was cleared of post-demolition debris to reveal the heavily robbed footings of the hall (PL. XXXII, A; FIG. 57). Although excavations were restricted to the latest levels, several previous building phases were recognized; they were not examined in detail because this would have entailed destruction of the most complete building, which was considered suitable for public display.

In 1965 a well was excavated by Thompson adjacent to the gatehouse. This was found to be in the N. corner of the hall excavated in 1973. This peculiar position suggests that the well was in existence prior to the building of this hall, and that the original 13th-century hall, with the kitchens, may have been elsewhere on the site. There is evidence for an earlier stone structure on a different alignment from the excavated hall, but this could not be investigated further. The excavated hall appears to date from the 15th century but it has many later modifications, which may indicate occupation up to the 17th century.

It its earliest form the hall utilized the curtain wall and was unaisled; its upper end was 9.70 m. wide with octagonal corner buttresses, its lower end 8.1 m. wide. Although heavily robbed, the remains of an open hearth were located at the upper end of the hall, but this was apparently removed when a tile-backed fireplace subsequently was built against the SW. wall in the lower part of the hall. In the S. corner a range of buildings extended towards the S. curtain wall where it is suggested the kitchens stood. The SE. wall of the hall had been rebuilt in brick and this may be, perhaps, the rebuilding of 1518–19 referred to above. Successive layers of mortar in the hall suggest flagstones or tiles rather than floor boards. There is a brick bench 30 cm. high and 40 cm. deep against the inside of the NW. partition wall.

Footings of a possible lean-to were located 1.60 m. from the SW. wall of the lower end of the hall. Early in the 17th century the lower end of the hall appears to have been demolished, and a hearth for melting lead window cames was found near the SE. corner. The upper end was modified, perhaps for occasional use by the auditors of the duchy of Lancaster. A doorway was cut through the SW. wall between the buttresses and a window sill was reused as a doorstep (PL. XXXII, B). The remains of a cobbled path was found, which perhaps originally ran between this new door and the gatehouse. Possibly associated with this modification is a flimsy brick wall, which was built from the W. buttress of the hall to the gatehouse, thus creating a small triangular room. The absence of 18th-century pottery suggests that all occupation of the castle ceased sometime in the latter part of the 17th century. A considerable amount of pottery associated with the demolition period is being studied by G. Coppack.

No further excavations are planned at present, but consolidation work will present considerable problems for many years to come.

P. L. DREWETT, D. J. FREKE

DENDROCHRONOLOGICAL DATING OF OAK FROM OLD WINDSOR, BERKSHIRE, c. a.d. 650-906

INTRODUCTION

The floating tree-ring chronology, based on oak from a watermill at Old Windsor, has been discussed previously in this journal.⁸⁵ The pattern of the ring-sequences

⁸⁴ Op. cit. in note 82.

⁸⁵ D. J. Schove, 'Cross-dating of Anglo-Saxon Timbers at Old Windsor and Southampton', Med. Archaeol., III (1959), 288-90.