

it was *c.* 40 ft. long. According to our previous informant an altar slab, now in the church, was found by the miners near the gatehouse.<sup>47a</sup> It is possible, therefore, that this building may have been a chapel.

5. The W. half of the segment between the two S. buttresses of the keep was excavated. The cylinder of the keep has a steep batter at its base terminating in a fine plinth course which was clearly the intended ground level (although now covered by soil). Below this is an offset of about 8 in. and then the face drops vertically 6 ft. 10 in. (PL. XXXIII, B). The offset course itself is rough, but of the seven courses below the top three are finely dressed and the bottom four rough. The basal course rests on the original ground surface and the artificial mound cast up against the masonry consists of hard beaten clay with horizontal streaks of soil in it. Except for sherds of 14th-century pottery in its upper part the mound was sterile. It is clearly analogous to the small mound or motte found by Professor E. M. Jope at Ascot Doilly.

6. The rise of ground level at the W. end (i.e. the upper end) of the hall, as well as the peculiar rising courses in the curtain at this point, indicate that an earthen bank preceded the curtain-wall in stone. Traces of it on the W. side have already been mentioned. A section was made behind the collapsed curtain on the S. side where, below the mortar floor level of the later buildings and above the old ground surface, there was a bed of clay 4 ft. deep. There was pottery in profusion in it and as the sherds cannot be earlier than about 1275, it seems clear that this make-up is later than the curtain-wall. (My guide-book dating is *c.* 1200.) The inference seems to be that when the later building was erected the area between the little motte and such bank as may have survived before the fall of the curtain was made level by making up the ground with clay. There is, then, a little evidence for an earlier earthen castle on this site, but we may suspect the royal burh (Conisbrough, Cuningesburg, in Domesday Book) probably enclosed the larger hill-top on which stands the parish church with its traces of pre-conquest work.

The major works of readjusting the levels (all to be done by hand) and the engineering operations at the gatehouse, to be carried out while 20,000 visitors annually want access to the keep, are tasks that are likely to tax the ingenuity and resources of the Ministry's charge-hand, Mr. R. Beardesley, and his team for some time to come.

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#### FURTHER WORK AT BOLINGBROKE CASTLE, LINCOLNSHIRE (PL. XXXIII, C-D)

In volume x (1966) of this Journal (pp. 152-8) the initial stages of the reclamation of Bolingbroke Castle by the Ministry of Public Building and Works were described; the work continues and is indeed not likely to be concluded for a few years. The main results as set out in the previous note still stand, but there are two or three points that have now to be amplified or modified.

The great talus of sand and fallen material that lay against the outer face of the curtain has now been cleared mechanically. The very soft sandstone of which the castle is constructed has proved a grave problem and the two main objectives in proceeding with this quickly were to allow the sodden stone to dry out and to prevent children scrambling over it and so breaking the hard crust on the stone. The most significant discovery was the exposure of the base of the octagonal SW. tower (tower C: fig. 62 in vol. x) which was found to be round like all the rest; above the lower courses of the original round tower its exterior had been reconstructed as an octagon with the same radius (PL. XXXIII, C). Inside, the tower retains its original horseshoe shape with a

<sup>47a</sup> The Rev. G. F. Braithwaite has confirmed that the rectangular slab with chamfered edge and bearing five consecration crosses, now in use as the altar in the N. aisle of Conisbrough Church, was found before the war in the bailey of the castle.

moulded mask-corbel for the first-floor beam still *in situ* in the curved face. This mask-corbel, together with two from the NW. tower and one from each gate-tower, constitute the only architectural details *in situ* in the castle and are one of the reasons for ascribing its foundation to c. 1225. The reconstruction of the outside of the tower can be reasonably identified with the 'new tower on the south side', work on which is recorded between 1444-56 in the receiver's accounts (*History of the King's Works*, II, 572); the absence of a 'new' tower had been difficult to reconcile with the records and this discovery has, therefore, removed that embarrassment.

In some places white, harder blocks of Ancaster-type stone have been inserted into the brown sandstone wall-face to form a kind of chequer pattern, although, as they penetrate deep into the core beyond, it is clear that they were functional in tying the face back into it. Both the size of the stones and the intervals between them vary, and as they are absent in some parts it is likely that they were inserted after the original construction.

The gatehouse has been the subject of intensive study since 1966, and has yielded most significant information about the castle. The two flanking towers of the gate much resemble the angle towers, D-shaped with flat backs containing a door and a window. A small guardroom in the E. tower had been enlarged to communicate with the lower room of the building, which had itself been converted into a prison by blocking its window and turning its door into one. The solid causeway bearing the cobbled roadway that led through the gate-passage into the castle proved to be a 16th-century alteration; the roadway covered the site of the medieval wooden tip-bridge at the entry to the gatehouse and a filled-in chamber below the gate-passage at the back (PL. XXXIII, D). The filling of the latter contained early Tudor sherds (tygs, etc.) and in the cobbles of the road was an unworn Henry VIII groat of one of the final debased issues. This work at the gateway may have been part of that recorded early in Edward VI's reign (information from typescript section on Bolingbroke Castle in the *King's Works* (forthcoming), kindly given to me by Mr. H. M. Colvin). The backs of the towers of the gatehouse extended across the gate-passage as a continuous foundation, both the towers and the passage having relieving arches (? for drainage) in their lower parts (PL. XXXIII, D). The foundation formed the back of the chamber under the gate-passage (which was carried on planks over it), the entry to which was by a doorway in the W. gate-tower down steps turning at right angles into the chamber. The purpose of the chamber is uncertain (?prison—it was too damp for storage), but as its floor was formed by the natural rock its height represented the depth to which the interior of the castle had been filled at the time of construction. Sherds of early 13th-century cooking-pots were found in this filling immediately behind the wall, which was 6 to 7 ft. deep here, but because of the slope of the original ground surface was deeper elsewhere within the castle.

Since this discovery our ideas about the castle have altered from those entertained when it was thought the filling was a Tudor one. Clearly any original buildings erected on this made-up surface must have been of timber, while a stone building erected on the original surface would have needed an undercroft. Trenches made in 1969 both on the W. and E. sides (the W. side is the longest stretch of straight curtain) were dug to natural rock and revealed no evidence of an undercroft, although there were traces of timber buildings on either side and later stone buildings on the E. side. It seems reasonably clear that the elaborate brick cobbling found on the S. side was partly for drainage (a drain had been knocked through the curtain) and partly to support the sleeper walls for timber-framed buildings, since the majority of buildings in the castle must have been timber-framed throughout its history.

The general appearance of Bolingbroke Castle at the time of its construction, with timber buildings clinging to its wall, may have resembled a great external shell keep, such as that at Berkeley (Glos.). The analogy with the castle at Boulogne-sur-mer, although worth making, should not be exaggerated. The layers are horizontal in the filling and there is no trace of an earlier motte; I see no reason to revise the date of 1220-30 which I gave for the foundation of the castle.

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