trees when alive, but it is more likely that the tentative Hamwih dates, the 'maximum' dates, were too late by about a century.

The precise dating of these timbers cannot be determined satisfactorily at this period from meteorological evidence alone. The famous three-year drought of St. Wilfrid, *c.* 678-81, despite the contemporary authority of Bede (*c.* 730), may be legend, for certainly there is no indication of a drought of such severity in either the Hamwih or the Old Windsor curves.

Overlap with precisely-dated timber, both earlier and later, is now necessary. The only dated earlier timbers known are the fragments of St. Cuthbert's coffin at Durham Cathedral, dated *c.* 698, and the possibilities that these may help are being investigated by B. Colgrave and Rosemary Cramp. Later timber spanning the 9th and 10th century may soon be found, and a single specimen of Saxon timber covering 200 rings might well provide the absolute dates required. Such timber, if found wet, should be cut diagonally—to 'magnify' the rings—and left to dry slowly in polythene bags.

The tree-ring evidence, in the meantime, can only prove that the Old Windsor trees were cut about 120 years after those on the Hamwih site. The absolute dates of *c.* 960 and *c.* 840 initially put forward for the two sets of timbers must now be abandoned. The stages, described above, which have led to this view may be summarized as follows:

(1) The excavator pointed out that the archaeological evidence at Old Windsor was not consistent with a 10th-century date.

(2) No satisfactory correspondence could be found between the tree-rings at Old Windsor and those known to be 10th-century at Westminster.

(3) The basis on which the provisional Hamwih dating was constructed (i.e. the 764 tree-ring and a coin of about the 840's) was found to be insecure.

The procedure must now be reversed; the archaeological evidence at Old Windsor must determine the dating of the Hamwih timber. The relative dating is established by the tree-ring method and the provisional archaeological dating of the Old Windsor material therefore implies that the Hamwih timbers were felled in the early 8th or late 7th century.

D. J. SCHOVE

NOTTINGHAM MEDIEVAL TOWN WALL, CHAPEL BAR

(PL. XXVII, FIG. 100)

In the autumn of 1958 the Corporation of Nottingham, while demolishing old properties in the angle between Park Row and Chapel Bar, encountered what must be part of the medieval town wall. It was decided to preserve it and ultimately to make it accessible to visitors.

The site is about $\frac{1}{4}$-mile N. of the Castle, and 30 ft. E. of the front of the houses in Park Row. It was already known that Park Row and Parliament Street represented this line of the wall, which had been seen on several occasions in Parliament Street, and at least once (but not recorded) in Park Row. The gate known as Chapel Bar, 40 ft. to the N., survived until 1743, and was sketched by Nicholas Hawksmoor in 1680 and by Paul Sandby in 1742.[13]

The property under which the discovery was made had not (fortunately) had cellars immediately below ground level, though there were, here as everywhere in the centre of the city, cellars of unknown date at a lower level, cut out of the soft sandstone. The wall was found after a bulldozer had removed part of it, in making new cellars, its lowest course more than 11 ft. below present ground level. The surviving portion

[13] A print of Sandby's sketch was published in Deering's *Nottingham* (1751), sect. 1, p. 3; Nicholas Hawksmoor's book of sketches is in the library of the Royal Institute of British Architects. Thoroton's *Nottinghamshire* (1677) also includes a view of the gate in the 'prospect of Nottingham from Derby Road' on p. 49. The opening was flanked by drum towers.

(PL. XXVII, FIG. 100) of unknown length since it runs into the adjacent property to the S., stands nine courses high and 5 ft. 4 in. thick. It was made of local sandstone, soft, but quite unweathered, for the surviving courses had been covered on both sides since

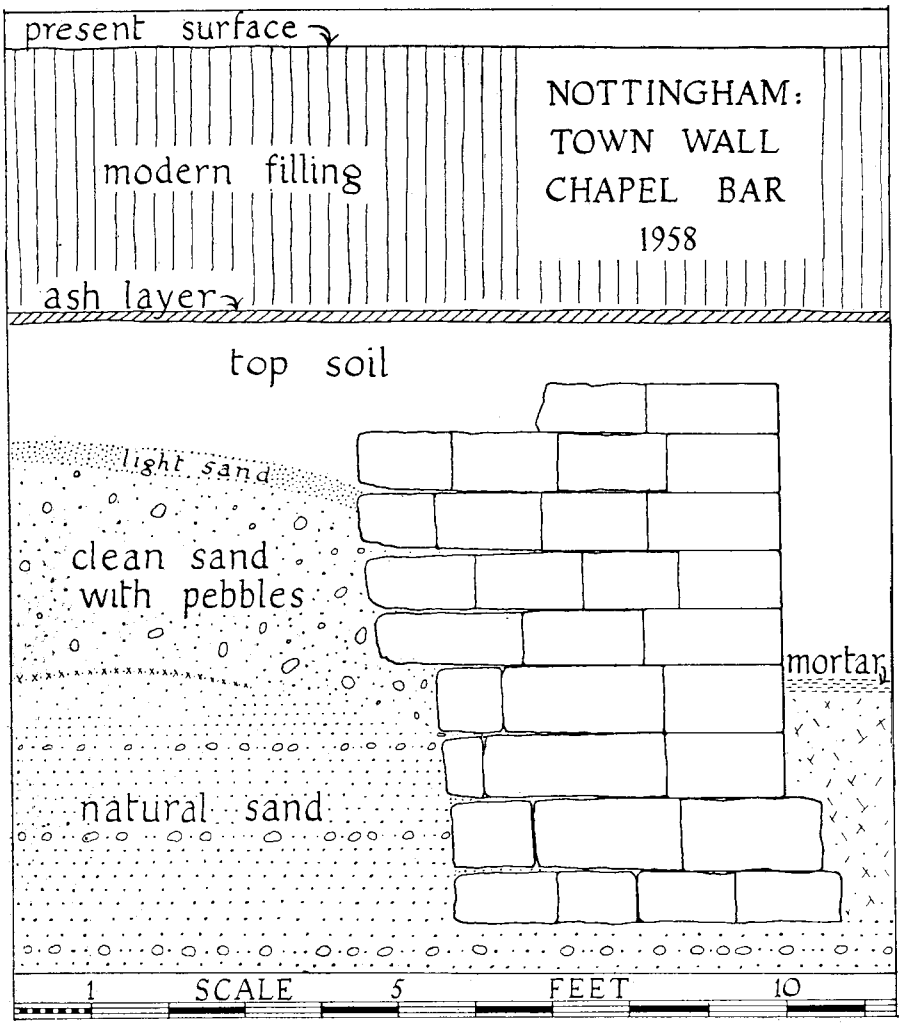

FIG. 100

CHAPEL BAR, NOTTINGHAM

Section of medieval town wall, showing method of construction.

building or soon afterwards. Its building involved cutting the natural sand down to a level and a vertical face and throwing the material so moved behind the proposed line. Only the bottom three courses are built against undisturbed sand, but the bank behind is of perfectly clean material to the level of the seventh course. The courses are very finely cut and laid at the front, and irregularities towards the rear are filled with sand.

The first and second courses, which are foundation, are off-set 3 in. and 6 in. respectively, and the new ground level in front of the wall occurs at the fourth course, indicated by a slight spread of mortar. Nothing is known about the ditch on the Park Row line; if, as seems likely, material piled up fairly rapidly against this face (so preserving the finish and the tooling of the masonry), this was in part because the ground rises steadily on this side of the town for $\frac{1}{4}$-mile outside the wall, and the light soil would readily move down the slope.

This section of town wall is different in construction from those pieces E. of Chapel Bar seen in the last century. There the wall was 7 ft. 4 in. thick in its foundations, rising to 6 ft. above two chamfered plinth courses.[14] A photograph of a section at the end of Market Street (near Cow Lane Bar) shows one chamfered plinth course and a plain off-set below. The town wall is therefore a construction of various dates.

The most significant feature of the Chapel Bar fragment in that the face has diagonal, not vertical, tooling. This can scarcely be later than *c.* 1200,[15] and the stepped plinth is in itself suggestive of a 12th- rather than a 13th-century date. In any case this length of town wall cannot have been erected with whatever income the town got from the murage grants of 1267 onwards. Many problems remain to be solved in connexion with the walls, but we can at least be certain that they began to be built in the 12th century.

This conclusion raises two further questions; first, whether the French borough, to which this length of the town wall belongs, had any defences prior to its building, and, second, under what circumstances was the work done? If the French borough had earthen defences, there was no evidence of them in the small area revealed on this occasion. The bank of earth behind the stone wall had none of the appearance of an earlier rampart, and it remains likely that the French borough, unlike the pre-conquest borough on St. Mary's Hill, was an open settlement, which is one reason why the stone wall was begun at this comparatively early date. The only clue to the circumstances of building is that between 1170 and 1188. Henry II spent £1,816 on Nottingham Castle, and a further £453 or more was spent by John between 1198 and 1207.[16] Whether or not the Crown contributed to the beginnings of a stone wall for the town, the opening of quarries to provide material for transforming the castle from an earth-and-timber to a stone fortress and the presence of large numbers of masons in the town for two periods of 18 and 9-10 years must indicate the occasion. M. W. BARLEY

THE SOUTHAMPTON CONFERENCE, 1959

The Second Annual Conference of the Society was held at Southampton from Friday, 17, to Sunday, 19 April, 1959. The theme of the conference was 'The Growth of the Medieval Town'. After a tour of medieval Southampton led by Miss E. M. Sandell, Mr. R. Douch, and Mr. Norman Cook, the session opened with an introduction to the region in the form of three short papers. Professor H. Rothwell spoke on the hinterland of medieval Southampton, Mr. M. R. Maitland Muller on Hamwih, and Mr. J. S. Wacher on medieval Southampton. This was followed by a Civic Reception given by the Mayor of Southampton in the Art Gallery.

On 18 April Professor M. W. Beresford spoke on 'Medieval Town Plantation in Southern England'; Mr. G. C. Dunning on 'Some aspects of the South Coast Trade in the Anglo-Saxon and Medieval Periods'; and Sir Frank Stenton on 'The Anglo-Saxon Town'. There was also a symposium in which Professor E. M. Carus-Wilson, Mr. R. H. M. Dolley and Dr. A. R. Bridbury took part.

On Sunday, 19 April, the conference visited Corfe Castle, Wareham, Lymington and Christchurch. On Monday, after the main conference was over, some members

[14] J. Shipman, *The Old Town Wall of Nottingham* (1899), pp. 3, 9.

[15] I am indebted to Dr. E. A. Gee for guidance on this question.

[16] R. A. Brown, 'Royal castle building in England', *Engl. Historical Rev.*, LXX (1955), pp. 380-5.