

On historical grounds these vessels must date from before the Reformation, when the practice of adding water to wine in the chalice was discontinued. Their small size, which they share with surviving cruets in other materials, reflects the fact that the laity did not receive the chalice, so that large quantities of wine and water were not required. The fabric and glaze of the Eglwys Cymin and Dunstable vessels suggest a 13th- or 14th-century date, and the same seems true of the Hardwick vessel. From the accounts of the find-spots it is not possible to make any inferences about when they went out of use. They would almost certainly have a longer life than domestic vessels of the same material, and even after they became unusable it is possible that as dedicated vessels they would not be thrown out of the church.

J. M. LEWIS

AN END-BLOWN FLUTE FROM MEDIEVAL CANTERBURY (PL. XXIII, C, D; FIG. 39)

In the 5th volume of this journal I published a brief study of the bone flute found in the moat of White Castle, Monmouthshire,¹⁰ which on the evidence of associated pottery,¹¹ dates from the 2nd half of the 13th century. Now, through the courtesy of

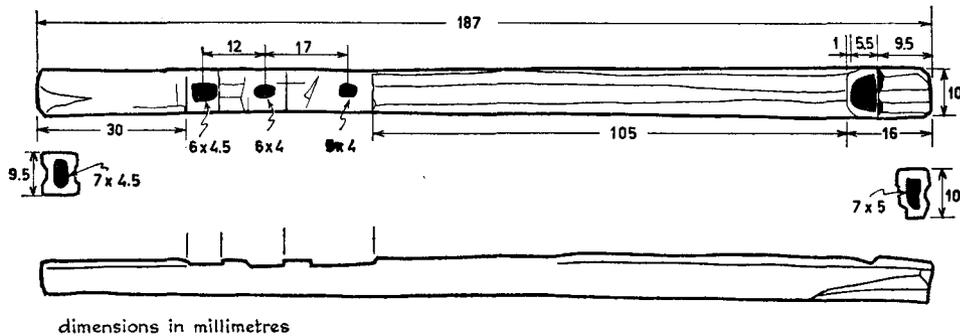


FIG. 39

END-BLOWN BONE FLUTE FROM CANTERBURY, 12TH OR 13TH CENTURY (p. 149 f.). *Sc. c.* 2
Schematic plan of front and side views, from a drawing by A. S. M. Bartlett

Professor S. S. Frere, I am able to offer a note on a contemporary flute from medieval Canterbury (PL. XXIII, C; FIG. 39).¹² The pipe, 18.7 cm. long, was found during the 1953 excavations in Rose Lane in a thick black occupation-layer sealed below a floor; it is considered to date from the 12th or the 13th century. Well-preserved with its three finger-holes and voicing lip intact, the pipe is cut from the long bone of a crane or other large bird and in this resembles closely the 9th-century pipe from a Saxon pit at Thetford in Norfolk (PL. XXIII, D).¹³ The careful recessing of the area around the finger-holes of the Canterbury pipe is, however, a refinement paralleled in Britain only by the form of the fragmentary wooden reed pipe discovered in Anglo-Norman levels of the 10th

¹⁰ *Med. Archaeol.*, v (1961), 176-80. For an expanded version of this paper see Megaw in *Galpin Soc. J.*, xvi (1963), 85-94; for further notes on the precise find-spot of the pipe on the W. side of the moat see *Galpin Soc. J.*, xvii (1964), 116.

¹¹ J. G. Hurst in *Med. Archaeol.*, vi-vii (1962-3), 149-55.

¹² Inv. no. CXX B III 5.

¹³ Megaw in *Antiquity*, xxxiv (1960), 10-11, pl. ii, 11 = Castle Museum, Norwich, inv. no. 12.950 (1030). Miss Barbara Green, Keeper of Archaeology at the Museum, informs me of a second bone pipe in the Norwich collection, probably 12th-century in date and with three finger-holes, excavated from Calthorpe House, Norwich; see (briefly) *Med. Archaeol.*, viii (1964), 267.

or 11th century at Hungate, York.¹⁴ The Canterbury flute with only three finger-holes falls into the large class of bone pipes of all periods with this number, occasionally augmented by a thumb-hole on the reverse side. I have previously commented on this prevalence of three holes on pipes as being the maximum number which may be utilized while holding the instrument in one hand.¹⁵

As was done for the White Castle pipe, the missing block or fipple was reconstructed in plasticine and the potential range of the pipe estimated by calibration against tuning forks. The following notes were obtained:

b'', d''', e''', f#''''¹⁶

This, in contrast with the diatonic range of White Castle (b♭''', c''', e♭''', f''', g''', b♭'''' and—with an alternative fingering—f''', g''', a''', b♭''', c''', d'''), appears to follow a pentatonic pattern considered by some authorities to be universal in primitive musical systems.¹⁷ Most recently a fragmentary bone-pipe made like White Castle from a deer metatarsal and probably also of the late 13th century has been published from the site of Keynsham Abbey, Somerset.¹⁸ The Somerset pipe, again like White Castle, has five finger-holes, but only one rear thumb-hole. With skilful reconstruction and use of cross-fingering a range of an octave and a half can be obtained, although there is considerable distortion at the upper limit. The scale is diatonic, the lowest note being d♭'''. Examination, however, of the tonal range of the largest series of early bone pipes in Europe—those from the *terpen* sites of the northern Netherlands, usually assumed to date from the 5th or 6th to the 12th century—has failed to prove the priority of one system over the other.¹⁹ Although, as noted in discussing the music of the White Castle pipe,²⁰ the 12th and 13th centuries in Britain were times of comparative musical sophistication and continental influence, sophistication should not be expected amongst such simple and, in the true sense, 'folk' instruments as the Canterbury pipe.

J. V. S. MEGAW

THE FARMHOUSE, THORPEACRE, LOUGHBOROUGH, LEICS. (PL. XXIII, A, B; FIG. 40)

During 1964 a search for cruck-framed structures in north Leicestershire led to an examination of a group of derelict farm-buildings known as 19, Thorpeacre, Loughborough (SK 516282). A small cruck cow-shed adjoined the W. end-wall of the red-bricked farmhouse (PL. XXIII, A). In this end-wall could be seen a post, 11 by 10 in. in section, resting on a stone slab. The wood appeared much more weathered than that in the cow-shed; it stood 14¼ ft. high and supported what appeared to be the wall-plate of the farmhouse. Two braces from its upper portion, secured with notched lap-joints, rose to tie-beam level. During the next three years the farmhouse was examined in detail, revealing extensive remains of a timber frame, which comparison with similar structures recorded elsewhere showed to have belonged to a much earlier building than the cruck cow-shed. A drawing (FIG. 40) made in 1967 incorporates all the details of this fragmentary frame that were noted.

The remaining timbers suggested that it was an aisled building of three bays, lying east-west, about 42 ft. long and 32 ft. wide. Between the W. and the central bays was a

¹⁴ K. M. Richardson in *Archaeol. J.*, cxvi (1959), 63, fig. 19, no. 20.

¹⁵ Megaw, 1960 (*op. cit.* in note 13), p. 12, and *id.*, 1963 (*op. cit.* in note 10), p. 87.

¹⁶ a' = 440 c.p.s.: the notes for which values are given here were obtained by covering all finger-holes and progressively exposing them; no account, of course, has been taken of variations in pitch obtainable by partial covering and over-blowing.

¹⁷ E.g., B. Nettl, *Music in Primitive Culture* (Cambridge, Mass., 1956), p. 48.

¹⁸ J. H. Barrett in *Galpin Soc. J.*, xxii (1969), 47-50.

¹⁹ Megaw in J. M. Coles and D. D. A. Simpson (ed.), *Studies in Ancient Europe: Essays presented to Stuart Piggott* (Leicester, 1968), pp. 335-9.

²⁰ Megaw, 1961 (*op. cit.* in note 10), p. 180.