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THREE MEDIEVAL TIMBER-FRAMED CHURCH PORCHES IN WEST KENT: FAWKHAM, KEMSING AND SHOREHAM

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The three timber-framed porches studied in this paper are of medieval date and are situated in west Kent, in or close to the Darent Valley. Each possesses intrinsically interesting features, and together they exhibit equally interesting contrasts in framing methods, and in roof construction in particular. To one man I owe the observation that timber porches, because of easy access and relatively small size, provide a useful means of examining the timber-framing of an area, and the recommendation that such buildings should be studied and published in (at least) pairs, so that differences may be more clearly discerned. My investigation of porches was much aided by his characteristic generosity and enthusiasm, and I should therefore like to dedicate this paper to the memory of Stuart Eborall Rigold (1919–1980).

INTRODUCTION

Timber-framed porches to churches occur with varying frequency in the counties of England.¹ Construction may be of cruck type,² of

¹ There is little in print on the subject: it was dealt with briefly in F.E. Howard and F.H. Crossley, *English Church Woodwork: a Study in Craftsmanship during the mediaeval Period A.D. 1250–1550*, 2nd ed., London, 1927, 60, and again in F.H. Crossley, *Timber Building in England from early Times to the End of the seventeenth Century*, London, 1951, 68, but neither of these is adequate. Essex porches are studied in C.A. Hewett, *Church Carpentry: a Study based on Essex Examples*, London and Chichester, 1974, 69–78 and *passim*. Bedfordshire examples are briefly considered in T.P. Smith, 'Bedfordshire Timber-Framed Buildings – II', *Bedfordshire Magazine*, 17, 133, Summer 1980, 202, and will be more fully studied in 'Timber-Framed Porches to Bedfordshire Churches', *Beds. Arch. Journ.*, forthcoming, and it is hoped to publish related work on the porches of Cambridgeshire and Hertfordshire in appropriate

box-frame type,³ or of the probably derivative post-and-truss type.⁴ The Kent examples are all, predictably, of box-frame construction, typically of small dimensions,⁵ though with some large-scale instances. There are two principal types: the *open type*, in which the side walls are pierced by a series of unglazed windows or openings, with or without arch-heads and/or tracery; and the *closed type*, in which the side walls are solid, pierced at most by one or two small (often glazed) windows and sometimes by none at all. It was plausibly suggested by Stuart Rigold that the open type were designed as 'marriage porches' to provide shelter for clergy and bride and groom – most notably, perhaps for the lord of the manor's daughter when she was married – during inclement weather.⁶ The open sides would ensure that the ceremony was at least partly visible from without. The medieval marriage ceremony did indeed take place partly at the church porch.⁷ The *Missale Sarum*, for example, includes the rubric: *In primis statuantor vir et mulier ante ostium ecclesiae coram Deo, sacerdote, et populo, vir a dextris mulieris, et mulier a sinistris viri.*⁸ John Myrc's *Instructions for Parish Priests* directs:

'Then lete hem [sc. the bride and groom] come and wytnes brynge
To stonde by at here weddyng;
So openlyche at the chyrche dore
Lete hem eyther wedde othere.'⁹

places. There is a brief discussion of Kent examples in K.W.E. Gravett, *Timber and Brick Building in Kent*, London and Chichester, 1971, 10. Stuart Rigold had been collecting material for many years.

² E.g. at Conwy (Conway), Caernarfon (personal observation).

³ As in most of the Essex, Bedfordshire, Cambridgeshire, and Hertfordshire examples (see n. 1).

⁴ Cf. T.P. Smith, 'Unusual Timber-Frame Construction in the Porch of Little Hadham Church, Hertfordshire', *Vernacular Archit.*, vi (1976), 30–3.

⁵ Cf. S.E. Rigold, 'The Fordwich Stone and the Church Porch', in (Ed.) K.H. McIntosh, *Fordwich, the Lost Port*, Fordwich, 1975, 132; S.E. Rigold, 'Timber-Framed Building in Kent', *Arch. Journ.*, cxxi (1969), 200.

⁶ S.E. Rigold, in a paper read before the Royal Archaeological Institute, 1968, and in personal correspondence and discussion. Cf. Gravett, 1971, 10, and Smith, 1980, 202.

⁷ Cf. D. Rock, *The Church of Our Fathers as seen in St. Osmund's Rite for the Cathedral of Salisbury . . .*, new ed., in four volumes, (Eds.) G.N. Hart and W.H. Frere, vol. 4, London 1905, 200. Also L.F. Salzman, *Building in England down to 1540: a documentary History*, 2nd ed., Oxford, 1967, 95; and Hewett, 1974, 69. The matter is considered in context in G.E. Howard, *A History of matrimonial Institutions*, vol. 1, Chicago, 1904, 291–363.

⁸ Available in W. Maskell, *Monumenta Ritualia Ecclesiae Anglicanae: the occasional Offices of the Church of England according to the old use of Salisbury, the Prymer in English, and other prayers and forms . . .*, vol. 1, 2nd ed., London, 1882, 50: *Ordo et faciendum Sponsalia*.

⁹ (Ed.) E. Peacock, *Instructions for Parish Priests, by John Myrc*, EETS, Old Series, 31, revised ed., 1902, 7, ll.204–7. In his instructions for the building of Eton

And we are told of Chaucer's Wife of Bath that:

'She was a worthy womman al hir lyve:
Housebondes at chirche dore she hadde fyve.'¹⁰

A late fourteenth- or early fifteenth-century French illustration shows the bride and groom with the priest outside the church door and apparently, though not certainly, outside a porch.¹¹ Presumably, the relevant part of the service took place *within* the porch only during bad weather (cf. *ante ostium* in the *Missale Sarum*, *supra*). A woodcut from *The arte or crafte to lyve well* shows a marriage ceremony taking place with, apparently, a building in the background.¹² According to a reference traced by Maskell, the doorway of the church was also used for other business connected with a marriage: 'Dower seems to have been made over to the bride, or settlement of it completed, at the door of the church before the marriage service began.'¹³

The closed or blind-sided porches, of course, could not serve a similar purpose. Rigold suggested¹⁴ that most, if not all, the blind-sided timber-framed porches are of post-Reformation date. This was borne out by a subsequent study of the timber porches of Bedfordshire, Cambridgeshire, and Hertfordshire;¹⁵ so, too, those Kent porches which have been examined would seem to support this contention: the western porch at St. Bartholomew's, Otford, for example, is of closed type, having only small windows and side-lights: it is firmly dated to the year 1637 by the carved date on the gable pendant.¹⁶ After the Reformation the *ante ostium ecclesiae* part of the

College, Henry VI directed that there should be 'in the south side of the bodie of the chirch a faire large dore with a porche ouer the same for christenyng of children and weddyngges.' R. Willis and J.W. Clark, *The architectural History of the University of Cambridge and of the Colleges of Cambridge and Eton*, Cambridge, 1886, vol. 1, 355; Salzman, 1967, 523.

¹⁰ (Ed.) F.N. Robinson, *The Works of Geoffrey Chaucer*, 2nd ed., Oxford, 1974, 'The Canterbury Tales: Fragment I (Group A): General Prologue', ll.459-60 (p. 21). For a rare exception, with the marriage taking place 'at the door of the chancel of the said church [viz. Knaresborough] within the said church' in 1472 *vide* Maskell, 1882, 50 and ref. therein.

¹¹ BM Nero Eii, part ii, f. 217. Reproduced in H.S. Kingsford, *Illustrations of the occasional Offices of the Church in the Middle Ages from contemporary Sources*, Alcuin Club Collections, 24, 1921, 35, with accompanying description at p. 34.

¹² f.xlvii; reproduced in Kingsford, 1921, 37, with accompanying description at p. 36.

¹³ Maskell, 1882, 50n. For other uses of church porches *vide* M.D. Anderson, *History and Imagery in British Churches*, London, 1971, chapter 7, 71-8; and H. Munro Cautley, *Suffolk Churches*, 5th ed., Woodbridge, 1982, 59.

¹⁴ Personal communication and discussion with S.E. Rigold.

¹⁵ See n. 1.

¹⁶ J. Newman, *The Buildings of England: West Kent and the Weald*, Harmondsworth, 1969, 427; D. Clarke and A. Stoyel, *Otford in Kent: a History*, Otford, 1975, 150-1; there is a good illustration in H.R. Pratt Boorman and V.J. Torr, *Kent Churches*, Maidstone, 1954, 47.

marriage service was discontinued, and the First Prayer Book of Edward VI (1549) pointedly directs that 'At the daye appointed for Solemnizacion of Matrimonie, the persones to be married shal come *into the bodie of ye churche*, with theyr frendes and neighbours. *And there* the priest shal thus saye./Deerely beloved frendes, we are gathered together here in the syght of God . . .', etc.¹⁷

DISCUSSION

The three porches here discussed are of the open type, clearly pre-Reformation in date, and of box-frame construction. But there are important differences, both in constructional details and in size, although all are larger than the 'standard' size of about 8 ft. sq.;¹⁸ Fawkham (Fig. 3) and Kemsing (Fig. 4) measure approximately 10 ft. by 11 ft., whilst Shoreham (Fig. 5) measures approximately 12 ft. sq. and belongs – both in this matter of size and in its carpentry – with the grander porches of High Halden and Hastingleigh or with Boxford, Suffolk,¹⁹ or Little Hadham, Herts.²⁰ Surprisingly, perhaps, the largest porch, at Shoreham, is of only one bay, whilst the smaller structure at Kemsing is of two unequal bays; Fawkham is a one-bay structure.

The side walls at Kemsing have been over-restored, but the present arrangement probably reflects, in a general way at least, the original design. Those at Shoreham are better preserved. Both have a mid-rail, but whereas Kemsing was apparently divided into quite wide openings above the rail, Shoreham has much narrower openings. At Kemsing, too, they are quite plain with no evidence of original arch-heads, whilst at Shoreham head-boards with arches cut from them are employed, these, together with chamfered mullions, making up rectangular four-light 'Perpendicular' windows (Fig. 6). The sub-arcs and the top-light heads are all cusped. The side walls at

¹⁷ Available in (Ed.) D. Harrison, *The first and second Prayer Books of Edward VI*, London, 1968 (replacing ed. by E.C.S. Gibson, 1910, with same pagination), 252: 'The Forme of Soleminizacion of Matrimonie', third rubric; the Second Prayer Book (1552) keeps these words, with slight variations of spelling; Harrison, 1968, 410; and they also occur with some addition and modification of spelling in the present *Book of Common Prayer*.

¹⁸ Rigold, 1975, 132. In the discussion which follows only the more significant differences between the porches will be noted. Minor differences will be apparent from the individual descriptions (*infra*) and from the illustrations.

¹⁹ Munro Cautley, 1982, 59 and Pl. 42; the porch is distinguished by its wooden vaulting.

²⁰ Smith, 1976, 30–3.

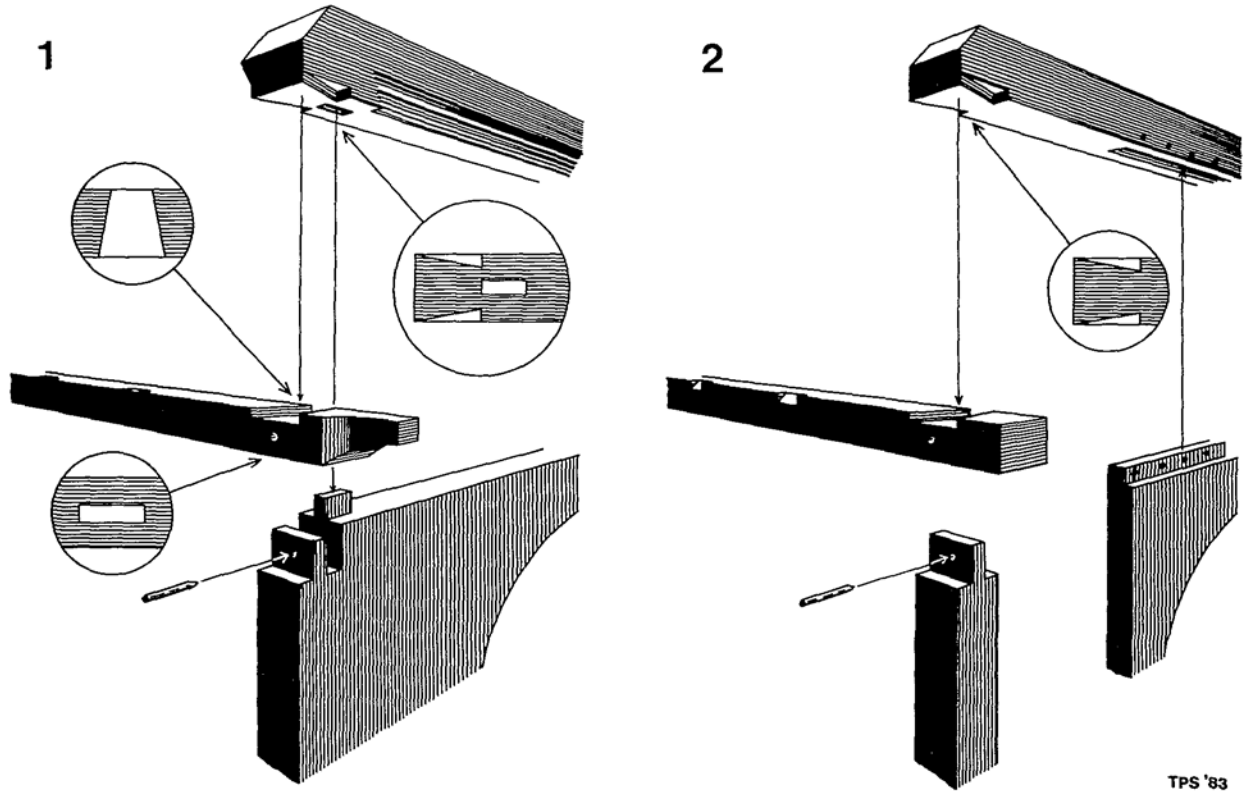


Fig. 1 Construction at front Face; (i) Shoreham, (2) Kemsing.

Fawkham are entirely renewed, but the similarity of the arch-heads to the original arch-head in the front face suggests that the renewal follows, at least in general form, the original design. If so, then the walls were divided into equal panels by five studs. The lowest third of each panel was infilled with boarding topped by a rail. The heads were formed of single boards – not continuous ‘through-boards’ as at Shoreham – with trefoils cut from them.

The front faces at Kemsing and Shoreham both use durns, but at Kemsing they are narrow and separate from the corner-posts, whilst at Shoreham they are massive monoxylic timbers which serve also as corner-posts. The Kemsing corner-posts are of a ‘primitive’ type in which there is no jowl and the wall-plate simply sits over the tenon on the post-head (Fig. 1.2): the type has been noted elsewhere in the county, for example at Fordwich.²¹ At Shoreham the durns/posts clasp the wall-plates in the manner associated with post-head jowls, thus giving a much better integrated conjunction (Fig. 1.1). Strangely, the other two ‘trusses’ at Kemsing (the northern one completely renewed) *do* have jowls; presumably, it was felt that the front face was sufficiently sturdy (and indeed it probably is so) to do without them. And equally strangely, the rear (north) ‘truss’ at Shoreham reverts to the more ‘primitive’ construction without a jowl. The front face at Fawkham is largely renewed, though sufficient primary timbers remain to judge of its construction. Durns were not used, but instead a pair of cusped arch-head boards was tenoned into the jowled door-posts. The corner-posts, too, were jowled, though it appears that the tie-beam was trenched over the wall-plates rather than fixed with the usual lap-dovetails. Between the eastern door-post and the eastern corner-post is a small head-board with a trefoiled arch-head cut from it; this is primary, and is the only instance amongst the three porches being considered: Kemsing has infilled panels between door-posts and corner-posts, whilst at Shoreham the heavy durns fill the entire front face, and are decorated with carved ornament.

Above the durns Kemsing has a relatively slight, straight tie-beam (excessively pegged to the durn-head tenons), whilst Shoreham has a composite tie-beam, the lowest member straight and heavily moulded, the topmost member markedly cambered. Fawkham has a slighter, but still markedly cambered tie-beam.

A further difference is seen in the arch-bracing of the ‘trusses’: the intermediate and north (renewed) ‘trusses’ at Kemsing (Fig. 4) and the north ‘truss’ at Fawkham (Fig. 3) have true arch-braces with open

²¹ Rigold, 1975, 132.

spandrels, whilst the north 'truss' at Shoreham (Fig. 5) has solid knee-pieces, forming a remarkably flat arch-head.

The roof structures vary, too. Kemsing and Fawkham are single-framed with no longitudinal strengthening at all. Each rafter-pair at Kemsing is collared, but the pairs bear no direct relationship to the structure beneath. This is especially notable at the intermediate 'truss', where the rafter couple lies *next to*, not on top of, the ends of the tie-beam (Fig. 4, section). There could be no clearer manifestation of the fact that in roofs of this type the framing is quite independent of that of the walls below. At Fawkham, on the other hand, the end-frame rafters rest on the ends of the tie-beams, into which they are tenoned. The other rafters are directly above the recent studs, and it seems likely that this follows the original arrangement. At Shoreham the roof is longitudinally strengthened by the addition of crown-posts and collar-purlin. In a not uncommon way,²² the collar-purlin is tenoned into the front face crown-post, though in the rear (north) 'truss' it rests on its head in the more regular manner.

The Shoreham and Fawkham roofs also have soulaces between rafter and collar²³ and ashlar. This is a quite sophisticated roof form, with its distinguished seven-canted appearance, less unexpected in the large porch at Shoreham than in the simpler structure at Fawkham. In fact, the same form of construction is echoed in the roofs of Shoreham church, and is, indeed, the commonest type in Kent churches; the same type of roof is also found in domestic buildings, both monastic and secular, for example at the Poor Priests' Hospital, Canterbury,²⁴ and at Milton Chantry, Gravesend.²⁵ These are masonry buildings, and indeed the roof type is better suited to

²² At a gable-end this form of construction avoids the (unsightly?) projection of the collar-purlin from the wall-face. It is simply the timber-frame equivalent of embedding the collar-purlin's end in a masonry wall, e.g. at the gable-end of a church.

²³ The useful term 'soulace' is introduced (like so many more!) by C.A. Hewett, *English historic Carpentry*, London and Chichester, 1980, p. xi and *passim*; the term, variously spelled, is a medieval one: *vide* Salzman, 1967, 211, 450, 480, 528, 530. Hewett has convincingly argued that the use of soulaces is *not* a development of scissor-bracing, with the scissor-braces, so to speak, cut off above the collars, but rather an independent development in roof construction, deriving perhaps from France: Hewett, 1974, 31-2.

²⁴ T. Tatton-Brown, P. Bennett, and M. Sparks, 'The Hospital of St. Mary of the Poor Priests, Canterbury', in (Ed.) A. Detsicas, *Collectanea Historica: Essays in Memory of Stuart Rigold*, Maidstone, 1981, 173-86.

²⁵ Personal observation; the building is briefly described in Newman, 1969, 291. The wall-plate here is interesting in that the tenons of the ashlar are housed *not* in individual mortises but in a continuous groove or chase along the full length of the plate.

masonry walls, since it requires a fairly wide base to accommodate both the rafters' feet and the ashlar's feet. One solution, not adopted at Fawkham or Shoreham, was to cant the ashlar's inwards.²⁶ In the two porches, however, they are vertical, and to give increased width at the base two plates are provided – a wall-plate proper at the head of the wall and, above the wall-plate and partly overlapping it, a separate ashlar's plate (Figs. 3, 5 detail at A). At Shoreham the combined width of the two plates is sufficient, but at the smaller Fawkham porch yet further width has been obtained by mortising short sole-pieces into the backs of the ashlar's plates (Fig. 2); the sole-pieces are also housed in trenches cut from the top faces of the wall-plates; they are cantilevered out about 5 in., and the rafters' feet are extended about 5 in. and receive the rafters in similar fashion. The result is a complex, and decidedly fiddling, piece of carpentry, and one cannot help wondering whether the game was really worth the candle.

At Kemsing the rafters' ends are slightly thickened in lieu of sprockets, though at Shoreham there is a full complement of top sprockets. At Fawkham there are none at all, presumably because of the wide eaves resulting from the use of extended tie-beams and sole-pieces. The methods of fixing the rafters at their lower ends differ, too: at Shoreham they are notched and housed in V-notches cut from the upper faces of the wall-plates (Fig. 5, detail at A); at Kemsing they are simply housed in through-trenches cut diagonally across the upper and outer arrises of the wall-plates; here, too, they are pegged from *within* the porch (Fig. 4, sketch section at A); at Fawkham they are chase-tenoned into the upper faces of the sole-pieces or, in the two end 'trusses', into the upper faces of the extended tie-beam (Figs. 2, 3).

Both Kemsing and Shoreham have rafter-holes close to the feet of the rafters, though Fawkham has none. The purpose of these has been disputed.²⁷ In some cases they were used for fixing side-sprockets,²⁸ but as a general explanation this is unconvincing, and does not apply to the buildings considered here: Shoreham has top sprockets which are surely primary, whilst Kemsing has terminal thickenings of the rafters' feet rendering any form of sprockets unnecessary. Recently, John McCann has convincingly argued that

²⁶ Cf., e.g., Hewett, 1974, fig. 45, 64: church porch at South Benfleet, Essex.

²⁷ R.T. Mason, *Framed Buildings of England*, Horsham, n.d. but 1973, 56–7; F.W.B. Charles, 'Scotches, Lever Sockets and Rafter Holes', *Vernacular Archit.*, v (1974), 21–4.

²⁸ Cf. K.W.E. Gravett, 'Rafter Holes', Letter to the Editor, *Vernacular Archit.*, vii (1977), 840.

on many occasions they were 'part of a gauging system by which a perfectly aligned roof could be built on a pair of imperfectly aligned wall-plates.'²⁹ McCann posits a method, using a special gauge something like a medieval mason's level,³⁰ for achieving this end. At Shoreham the rafters bear carpenter's numbers close to the holes, but at Kemsing these are absent. Probably this reflects slightly different sequences of construction. At Shoreham, so it would seem, it was found convenient to do all the measuring first, thus necessitating the numbering of the timbers before they were set aside for use in the (very near) future; the rafter-pairs then had their notches cut and were *then* all assembled on the wall-plates in a single operation. At Kemsing, on the other hand, each rafter-pair was, it seems, measured and *immediately* fixed in position, before the next pair was dealt with.³¹

Connected with this issue is the matter of the different methods of housing the rafters. The essential difference is that at Shoreham – as indeed in most timber-framed buildings – not only are notches cut from the wall-plates but they also need to be cut from the feet of the rafters, so that in final preparation the rafter-pairs would need to be erected temporarily in the way suggested by McCann,³² measured and then taken down for the notches to be cut, before being fixed permanently in position. It was doubtless convenient, therefore, to do all the measuring before cutting and final assembly of the complete set of rafters. It would, therefore, be necessary to number the individual units to ensure correct replacing during final assembly. The Kemsing method of housing, however, in which the rafters are unnotched passing-timbers, required *no* cutting of the rafters' feet. Once erected for the 'dress fitting' there was no need to dismantle them again. So each pair could be adjusted, using a McCann-type gauge, the blocks beneath the gauge removed, and the rafters *immediately* pegged into final position. The peg-holes in the wall-plates would already be drilled by this stage – probably from within the notches, which would be easier than drilling at an angle from the opposite side, and almost certainly before erection. Once the rafters

²⁹ J. McCann, 'The Purpose of Rafter Holes', *Vernacular Archit.*, ix (1978), 26–31; this ref.: 28. The ideas of this paper are pursued further in J. McCann, 'A Gauge used for the Alignment of Medieval Roofs', in (Ed.) S. McGrail, *Woodworking Techniques before A.D. 1500*, BAR, International Series, 129, 1982, 357–65.

³⁰ This is the kind of level illustrated in, e.g., Salzman, 1967, Pl. 4, and J.H. Harvey, *Mediaeval Craftsmen*, London, 1975, Pl. 14 and 18.

³¹ Cf. McCann, 1978, 28, section (8); McCann, 1982, 361–2. Some of the Kemsing holes still retain wooden peg-like plugs of the kind noted by McCann in a number of church porches though rarely in larger buildings: McCann, 1982, 364.

³² McCann, 1978, 28–9.

were correctly aligned, the peg-holes would be continued into the rafters themselves by placing the drill-bit into the wall-plate holes and continuing drilling. Necessarily this would have been done from within the porch, thus explaining why the wall-plate holes pass *right through* the plates. Once this was done the pegging could be done either from within or from without the porch, but by doing it from the inside – as was the case at Kemsing – the fatter blunt ends of the pegs, not the pointed ends, would protrude within the porch; these could then be sawn off flush with the plate faces (as, again, was done at Kemsing), giving a neater appearance than if the peg *points* protruded – even if they were sawn flush. Since the angle at the apex of the rafter-pairs would have to be adjusted slightly during ‘dress fitting’, the collars obviously could not be in place at this stage – since their triangulating function would prevent the necessary movement. This may explain why lap-joints were used to fix the collars to the rafters: it would be impossible to fit mortise-and-tenon joints once the couples were firmly pegged to the wall-plate. Probably, then, the lap-housings were cut from the rafters before erection; it would then be a simpler matter to measure and fit the collars *in situ*. The sequence at Kemsing was, then, essentially simple, but was no longer a live option once a more satisfactory seating of the rafters – such as the Shoreham notches – was introduced. For all its simplicity, the Kemsing method was weak, since the roof thrust is resisted only by the pegs, whose resistance to shearing is not great. (Equally the use of unnotched laps was a weak form of construction – once again the tying function of the joint was dependent solely on the strength of the pegs.)

Kemsing and Shoreham, therefore, illustrate an interesting improvement in roof construction which at the same time probably involved revision of the constructional sequence to be followed in erecting the roof.

Fawkham, however, represents a different approach, since there are neither rafter-holes nor carpenter’s numbers on the rafters. Now, the relevant difference is that at Fawkham the rafters’ feet are housed in the projecting sole-pieces, not in the wall-plate. It is possible that the rafter-couple, loosely held at the apex with a hook-pin, could be lodged in the mortises of the sole-pieces, and the latter rested *on top of* the ashlar’s plate. By slight lateral adjustment (east–west) of the sole-pieces, the apex could be brought to its proper position, using, perhaps, a plumb-line from the hook-pin with a knot or mark to give a fixed height above datum. The sole-piece tenons could then be scribed, the assembly dismantled, and the tenons sawn. (The collar would also have to be scribed, together with its position on the rafters, during the temporary erection). The rafter-couple could then

be finally assembled, before passing onto the next couple.

All this is frankly speculative, but it does at least provide an explanation, in terms of actually observed features, for the presence of rafter-holes in two and their absence in one of the porches. The essential difference is that a wall-plate allowed of no lateral adjustment, whereas sole-pieces, by being capable of having slightly different lengths, did so allow.

All three roofs are now covered with tiles, and probably always were. Certainly, so far as Kemsing and Shoreham are concerned, 'there would have been no point in aligning the roof to fine limits of accuracy if it was then to be smothered with thatch . . .'.³³

Both Kemsing and Fawkham employ lap-dovetails to affix the tie-beams to the wall-plates (Fig. 1). At Kemsing these are full – not bare-faced – but at Shoreham it has not been possible to ascertain this. At Fawkham a proper examination is not possible, though it *appears* that the tie-beams are simply trenched over the wall-plates: this would not affect their tying function. Most other joints at Shoreham and Fawkham are of mortise-and-tenon type, including chase-tenons where the context requires them – for example in fixing the soulaces to rafters and collars. At Kemsing, on the other hand, 'primitive' lap-joints – not notched to resist withdrawal – are used to join collars to rafters.

The front faces at Kemsing and Shoreham are finished with cusped barge-boards, those at Kemsing being very simple: this is indeed the commonest type, occurring on a number of porches throughout the country.³⁴ At Shoreham the barge-boards are more elaborately cusped, forming an ogee at the head and with a tri-lobed projection halfway up; there are also trefoil and quatrefoil piercings. Its affinities are clearly more with the elaborate barge-boards of the sixteenth-century than with those at Kemsing, despite a comparison which has been made between the two.³⁵ The plain, uncusped barge-boards at Fawkham are entirely recent.

Both in general form and in decorative elaboration the magnificent porch at Shoreham stands apart from the humbler structures at

³³ McCann, 1978, 30.

³⁴ E.g. White Notely, Essex, illustrated in Hewett, 1974, fig. 41, 56, with text at p. 71; cf. the lychgate at Boughton Monchelsea: Gravett, 1971, Pl. 20. Several examples in Bedfordshire, Cambridgeshire, and Hertfordshire have been recorded; see n. 1.

³⁵ Pratt Boorman and Taylor, 1954, caption to frontispiece. For some discussion of Kent barge-boards *vide* W. Galsworthy Davie and E. Guy Dawber, *Old Cottages and Farmhouses in Kent and Sussex*, London, 1900, reissued Rochester, 1981, 13–5; excellent illustrations *passim*. Later, Jacobean, barge-boards were generally uncusped: cf. Gravett, 1971, 17–18 and illustrations Pl. 68–70.

Kemsing and Fawkham. Despite its fairly complex form, and the use of ashlar and soulaces, the Fawkham roof is still a single-framed structure as, too, is Kemsing. Shoreham is the only one to possess a longitudinally stiffened crown-post roof. Again, although Fawkham may well have had trefoiled openings to the lights in the side walls (unlike Kemsing, which had none), these – to judge from the single front-face survivor, were far simpler than the well executed 'Perpendicular' tracery at Shoreham. Moreover, Shoreham possesses a number of moulded beams – the front-face tie-beam, the wall-plates, and the ashlar's plates – where the two other porches make do, at most, with plain chamfers. The cusped arch-head in the front face at Fawkham is certainly decorative, though it is only Shoreham which has three-dimensional carving in the form of encircled quatrefoils plus mouchettes in the durn spandrels – unfortunately, now badly weathered. Added to all this is the sheer size of the Shoreham porch.

DATING

The date of the Shoreham porch clearly lies within the 'Perpendicular' period, to which the window tracery of the side walls belongs. The mouldings – especially the casement containing a roll on the wall-plates and ashlar's plates – similarly indicate such a dating. The flat arch-head formed by the knee-pieces of the north 'truss' also fits the period – unless, indeed, its shape is merely fortuitous. So, too, the barge-boards are well developed, probably of the sixteenth century. Rigold described the porch as built 'against an aisle which looks 16th century,'³⁶ with the clear implication that it belongs to a like date. This seems probable. In Kent the presence of a crown-post roof does not preclude such a late attribution, for the type was remarkably persistent within the county.³⁷

Kemsing, on the other hand, displays a number of 'primitive' features – the unnotched lap-joints between collars and rafters, the single-framed roof with no attempt at longitudinal stabilising, the unintegrated head-joint on the front-face corner-posts, the rafter-end thickenings (rather than sprockets), the pegging of the rafters right through the wall-plates *from inside* the building, the simple trenched rafter housings, the simple cusped barge-boards, and perhaps the

³⁶ Rigold, 1969, 200.

³⁷ For late crown-posts in Kent *vide* S.E. Rigold, 'The Distribution of the Wealden House', in E.M. Jope, 'The Regional Cultures of Medieval Britain', in (Ed.) I.L.I. Foster, *Culture and Environment*, London, 1963, 351–4; Rigold, 1969, 200; Gravett, 1971, 10–1; R.T. Mason, *Framed Buildings of the Weald*, 2nd ed., Horsham, 1969, 61.

TIMBER-FRAMED CHURCH PORCHES

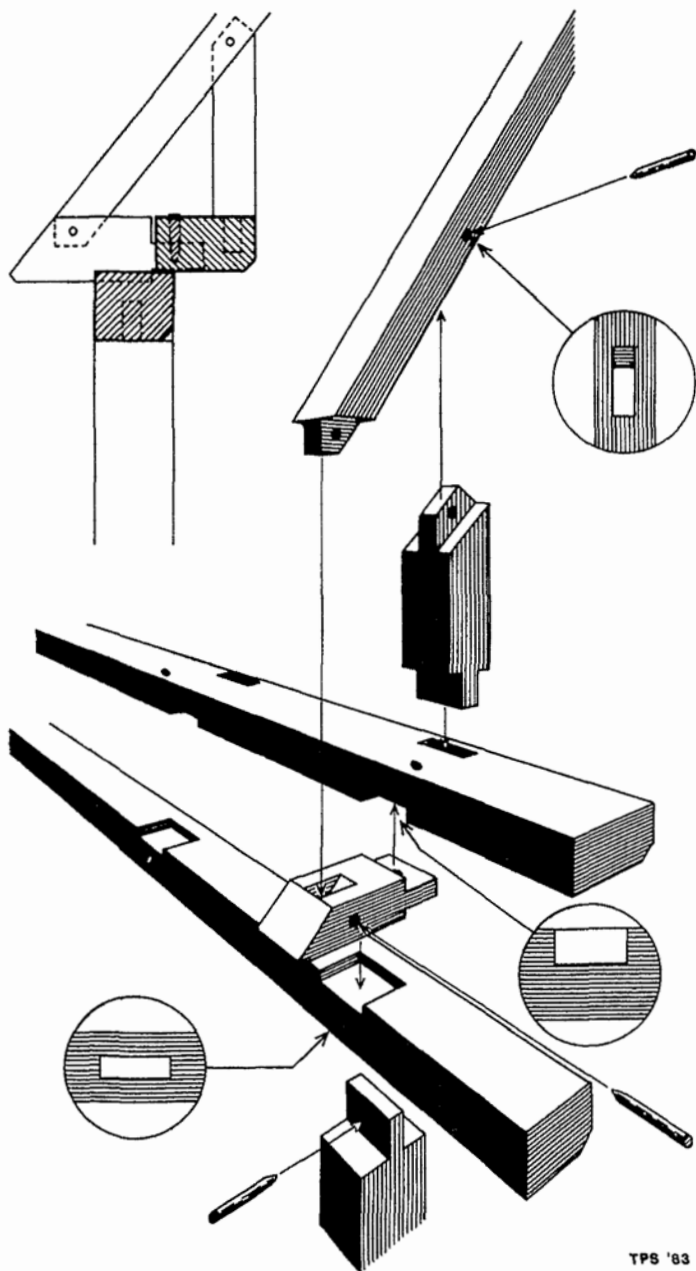


Fig. 2. Double Plates and associated Timbers, Fawkham.

Shoreham, Kent: South Porch

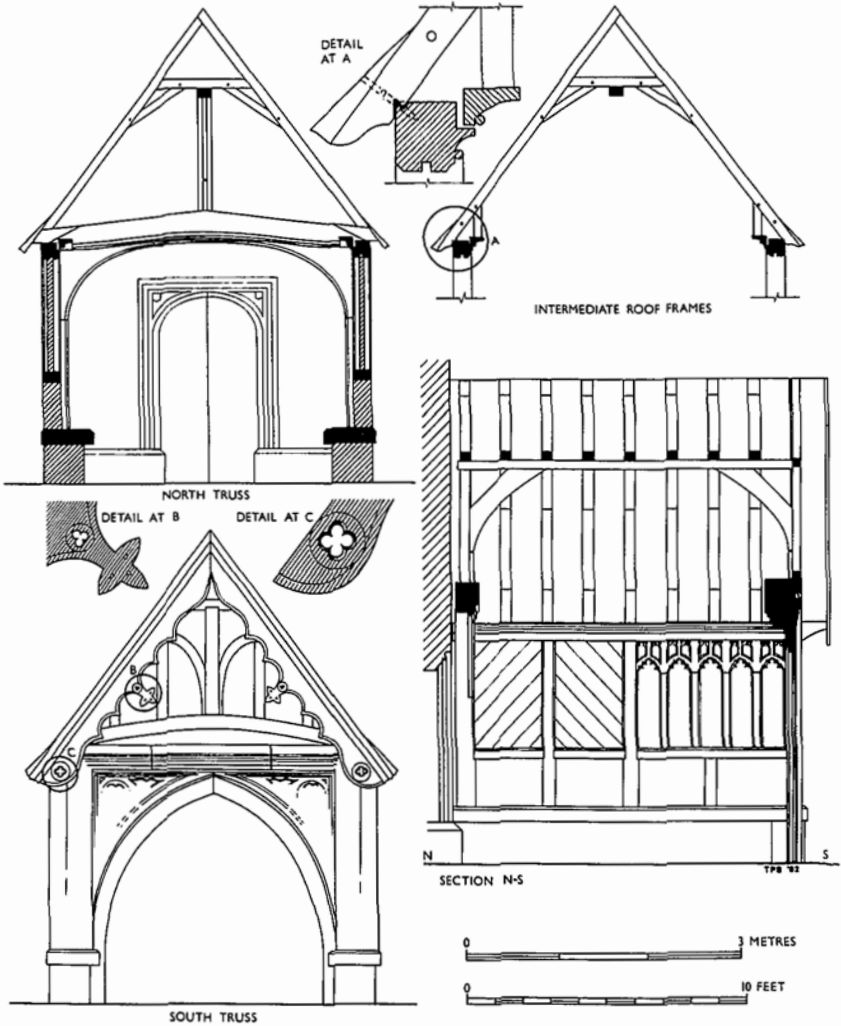


Fig. 3. South Porch, Fawkham Church.

non-confident over-pegging of the durn tenons to the tie-beam. Cumulatively, these features suggest an earlier date than Shoreham, perhaps some time in the early fourteenth century. There is nothing in the ironwork of the door – though this is admittedly fragmentary – to preclude such a dating.

Fawkham has little in the way of dating evidence: it is built against a Norman wall, though the doorway, with its scroll-moulded hood-mould, is of the thirteenth century. The use of ashlar and soulaces is reminiscent of Shoreham, but the important difference is the lack of a crown-post structure at Fawkham, and the seven-canted roof has been in use from a much earlier date.³⁸ The use of sole-pieces cantilevered out from the wall-plates and ashlar's plates is ambitious but unnecessarily complex and uneconomical: the Shoreham solution of the same problem – that of housing both rafters *and* ashlar's on a relatively narrow base – is far better. The Shoreham arrangement may be regarded as an improvement on the Fawkham arrangement, which indeed seems to have had very little in the way of a future. A fourteenth-century date is here suggested, with which the cusped arch-head in the front face is also consistent.

DESCRIPTIONS

(i) *St. Mary, Fawkham* (N.G.R. TQ 597681) (Figs. 2, 3)

The south porch at Fawkham is fairly small, though larger than that at Kemsing. It measures 10 ft. 8 in. north—south by 10 ft. east—west. It stands on flint and ashlar footings which support the sill-beams. There has been much renewal and the side walls are entirely recent. So, too, is most of the front face, although some of the members on the eastern half are primary, and it is these that are illustrated in Fig. 3; the tie-beam survives behind later planking. The north 'truss', against the church door, is original, and the roof is substantially intact. Presumably, it was replaced at the time of the rebuilding of the side walls. The building is of normal-assembly box-frame construction and is of one bay.

The front face has one original door-post, plain-chamfered on all four angles. Let into its jowled head is one half of a cusped arch-head. The corner-post on this side also appears to be original, as is the small trefoiled arch-head-board in the narrow light between corner- and door-post. The panelling of the lower third, though new, probably reflects the original arrangement. The ends of the wall-plates project slightly, unpared, and the cambered tie-beam is still in place, though there are recent planks attached to both front and rear. All the timbers above this are renewed, as are the plain barge-boards.

³⁸ Cf. Hewett, 1980, 35 (a Romanesque example), and *passim*; also C.A. Hewett, *English Cathedral Carpentry*, London, 1974, 14.

At some stage this porch has proved weak, and curvilinear timber buttresses have been added, one in each direction, at the two front corners. All recent features are omitted from Fig. 3.

The rear (north) frame is substantially intact. The corner-posts have fairly angular jowls, beneath which the inner angles are plain-chamfered. As at Shoreham, the posts support two plates – the wall-plate proper and, above and partly overlapping the latter, a separate ashlar's plate. The wall-plates are mortised over the heads of the posts in the normal way, although the tie-beams *appear* to be trenched over the top faces of the wall-plates, not fixed with the normal lap-dovetails. The ashlar's plates are tenoned into the edges of the tie-beams. Both plates have plain chamfers along their lower arrises. The tie-beam is not large but is quite markedly cambered; it, too, has a plain chamfer along the lower arris. Well-curved arch-braces are tenoned into posts and tie-beam and held at each joint by only a single peg.

The side walls, as has been remarked, are entirely new, though the arrangement of five studs and the panelling of the lower third may well follow the original arrangement, in general form if not in detail. Likewise, the similarity of the renewed cusped arch-heads to the original one in the front face gives one some confidence that these, too, follow the original design. Each light has its own small board, with the cusped head cut from it – that is, there are not the *continuous* boards found at Shoreham and elsewhere. The benches along the insides of the walls are also renewed.

The roof is of single-frame construction with no longitudinal stiffening. Each rafter-pair has a collar, set quite high, and soulaces. At the rafters' feet are ashlar's tenoned into the top of the tie-beam in the end-frames, and otherwise into the top face of the ashlar's plate. To take the ends of the projecting rafters the tie-beams themselves project a good 5 in. beyond the side walls. The ends of the intermediate rafters are similarly supported on short sole-pieces (something like the end portions of tie-beams), which rest in trenches cut from the upper faces of the wall-plates and are tenoned into the backs of the ashlar's plates. The rafters themselves are chase-tenoned into the tie-beams or sole-pieces. From each of the tie-beams a curved brace rises to the collar of the third rafter-couple (counted from the relevant 'truss'): these braces are notched over tie-beams and collars, not tenoned into them, and may be interpreted as secondary features. Presumably, they were added to counter longitudinal movement in the roof, which, as noted, had no long-wise stiffening in its primary build. There are seven rafter-couples, including those over the tie-beams. All joints between ashlar's and rafters, between collars and rafters, and between soulaces and the

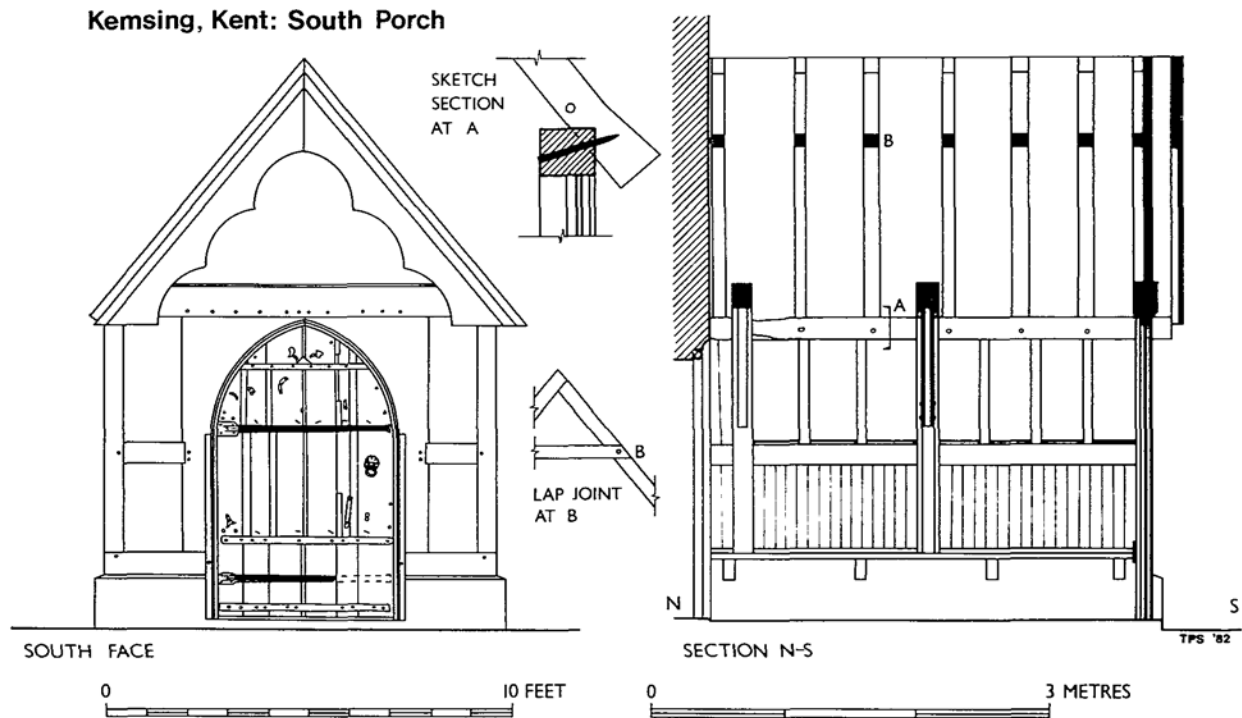


Fig. 4. South Porch, Kemsing Church.

collars and rafters are chase-tenons. The rafters are also tenoned at their heads.

The roof covering is of red tiles.³⁹

(ii) *St. Mary, Kemsing* (N.G.R. TQ 556588) (Figs. 1.2, 4)

The porch at Kemsing is the smallest of the three, although it is of two bays; it measures 10 ft. 10 in. north–south by 9 ft. 8 in. east–west. It is of normal-assembly box-frame construction, on dwarf walls of clunch and flint. These support the sill-beams and, internally, wide wooden benches running the full length of the porch.

The front (south) face has narrow corner-posts with the wall-plates ‘sitting’ on top; there are no jowls and hence the three-way joint at this point of the structure is less than fully integrated. The tie-beam is fairly deep, straight, and unmoulded; it is fixed over the wall-plates with the usual lap-dovetails – full, not bare-faced. The wall-plates project beyond the face in the normal manner, though they are not pared as at Shoreham. The door-frame is formed by a pair of durns, far less massive than those at Shoreham. At their heads they are tenoned into the tie-beam and fixed with no fewer than eleven pegs, asymmetrically disposed; a recent fillet runs round the intrados of the arch formed by the durns. A short mid-rail runs between each corner-post and its corresponding durn, the rails, too, being tenoned and pegged into the uprights. The door itself, in one leaf, is an ancient feature, probably contemporary with the porch itself, and is described in more detail below. Above the tie-beam the front face of the porch has been pebble-dashed, whilst the rear face is covered with vertical planking; no features are visible, therefore, though it may be presumed to possess collar and, perhaps, queen-posts or studs.

The north and intermediate ‘trusses’ are similar to each other in construction, although the former has been so heavily reconstructed that it is virtually recent work. The principal posts support a straight, plain-chamfered tie-beam with no further timbers (e.g. crown-post) above it. Unlike the front-face posts, these are jowled, so that a fully integrated conjunction is achieved between post, wall-plate, and tie-beam. There are arch-braces in the angle, tenoned and pegged into both posts and tie-beam. The upper faces of the braces are straight whilst the lower faces are gently curved and with a plain

³⁹ The door into the church is also of medieval date. It is of six V-edged boards fixed to a grid-frame at the rear. It is probably contemporary with the doorway in which it is set, that is to say of the thirteenth century.

chamfer matching that of the tie-beam. Here again the tie-beams are fixed to the wall-plates with full lap-dovetails.

The side walls have been much interfered with, being rendered externally with the stud positions (presumably) marked out; internally, they are covered with vertical planking. The bays are of unequal size, so that there are two studs to the south (front) bay but only one to the north bay. They stop at the mid-rail, which is tenoned and pegged into the posts. Above the rail the porch has windows, now glazed with diamond leading. There are three mullions to the south bay and two to the north bay, each side, but these are all renewed. The number and disposition probably reflect the original arrangement, though it is likely that there was no glazing, which would be unexpected in a timber porch of pre-Reformation date.

The roof is of single-framed type with collared rafter-pairs, the collars being half-lapped (but without notches) to the rafters. There are seven rafter-pairs in all, without correspondence to the intermediate posts. There are no soulaces or wind-braces, and no longitudinal strengthening of any sort. The rafters are housed in diagonally-cut trenches across the upper outer arrises of the wall-plates and are pegged through from the inner faces of the plates. There are rafter-holes close to the bottoms of the rafters, some with snapped-off pegs still in them; but there are no carpenter's numbers associated with them.

The wall-plate ends and the rafters are masked by barge-boards, although they are of much plainer form than those at Shoreham. Each comprises three simple cusps, forming an almost semi-circular archlet at the head, and otherwise unelaborated.

The door itself is of a single leaf, composed of six planks set flush, but there has been much renewal, especially in the bottom quarter of the door. The three plain, parallel-sided bands strengthening the door at various points are certainly not primary, though they may yet be quite old. The hinges, on the other hand, are probably primary. They are of strap type, tapering slightly from the pintle-end though with a slight flare at the far end.⁴⁰ At the pintle-end the hinges have flat, rectangular plates with cut-off corners. These are fixed to the

⁴⁰ In fact, the flared end of the lower strap has been broken off but may be safely assumed. For somewhat similar ironwork to that at Kemsing *vide* Hewett, 1974, fig. 78, 109, illustrating a door at Great Sampford, Essex, dated at p. 106 to the last years of the thirteenth century, 'c. 1300'. Similar incised strap-hinges occur at, e.g. Lynsted and Norton in east Kent (personal observation). The bits and pieces at Kemsing hint at something rather better, but probably nothing like the fine thirteenth-century door at Erith, where the scrolls are part of the hinges: illustrated in Pratt Boorman and Taylor, 1954, 48; at Kemsing any scroll-work was independent of the hinge-straps.

woodwork with four corner and one central nails or rivets, and further nails are regularly spaced along the straps. The straps are decorated with three incised lines and incised zig-zags. Various other pieces of ironwork are fixed to the door. Apart from a manifestly later repair-bar close to the key-hole, these are curved straps and small leaf-like plates. But they are insufficiently preserved for any coherent design to be reconstructed. The door-handle ('knocker') has a star-like plate.

The roof-covering is of red tiles.

(iii) *St. Peter and St. Paul, Shoreham* (N.G.R. TQ 522616) (Figs. 1.1, 5, 6)

The south porch at Shoreham is large, of normal assembly box-frame construction, and is of one bay.⁴¹ It stands on dwarf walls of flint with large ashlar through-stones at the front (south) ends. These walls support large flat sills which also run along the inside walls to form the benches frequently provided in timber porches. It measures 12 ft. 3 in. north-south by 11 ft. 9 in. east-west.

The front face is composed of a pair of massive durns, so large indeed that each corner-post with its adjoining arch-jamb and spandrel is cut from a single baulk of timber. Together these form a wide two-centred arch of entry with a plain chamfer. The spandrels are badly weathered, but enough survives to indicate a slight sinking containing an encircled quatrefoil and a pointed trefoil or mouchette in the upper angle; although nothing survives in the lower angle it is hard to doubt that a similar trefoil or mouchette was placed there.⁴² Above the arch is a massive straight tie-beam with fairly flat mouldings on its front face. An uncommon feature for church porches is the moulding also executed on the rear face of the tie-beam; this is of different character and includes a three-quarter-round roll giving a 'deeper' appearance than the front-face moulding. At its ends the tie-beam is affixed to the wall-plates with the usual lap-dovetails, although it is not possible to see whether these are full or bare-faced (in Fig. 1.1 they are shown full). The tie-beam soffit also receives a tenon from the tops of the 'corner-posts', which themselves are tenoned into the wall-plates, all in a way now

⁴¹ The full-height studs in the centre of the side walls give, perhaps, the impression of two bays: but these are *not* posts and there is no tie-beam at this point.

⁴² The form is fairly standard in masonry, e.g. at Minster-in-Sheppey, west doorway, illustrated in Pratt Boorman and Taylor, 1954, 45; there is a somewhat similar version in timber, but more deeply cut and probably a century earlier in date, at Brookland, east Kent, illustrated in Pratt Boorman and Taylor, 1954, 42.

Fawkham, Kent: South Porch

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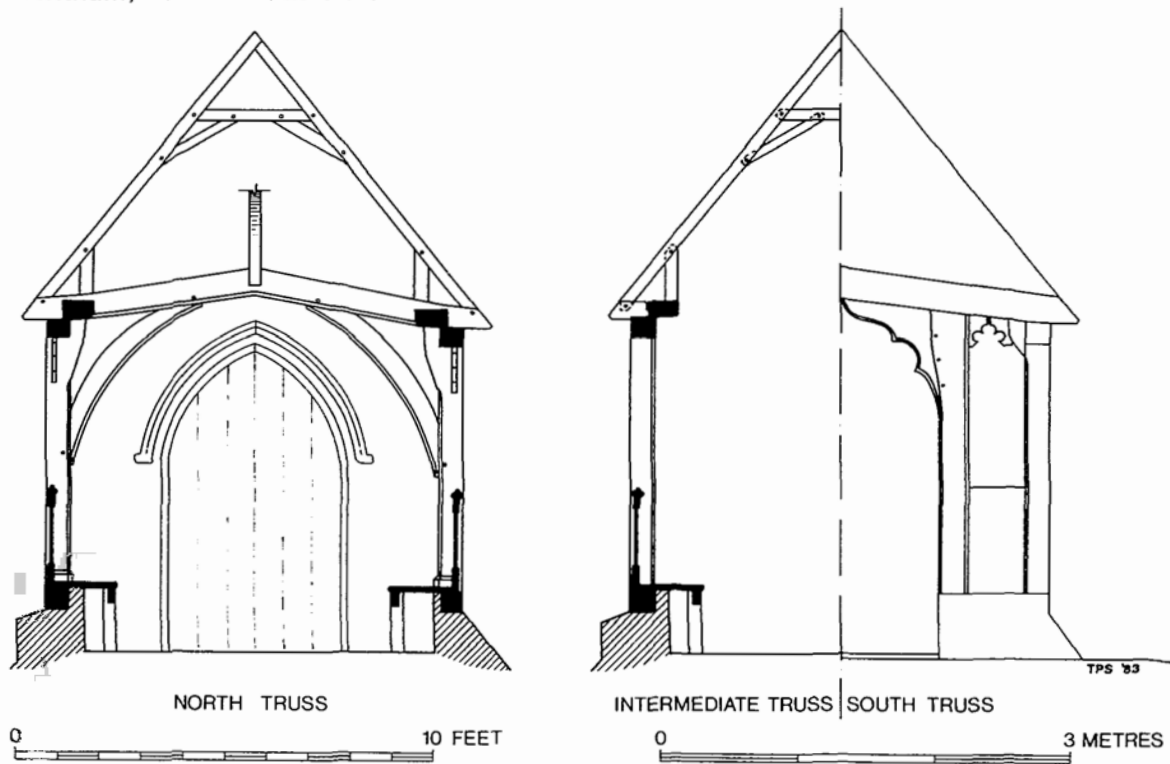


Fig. 5. South Porch, Shoreham Church.

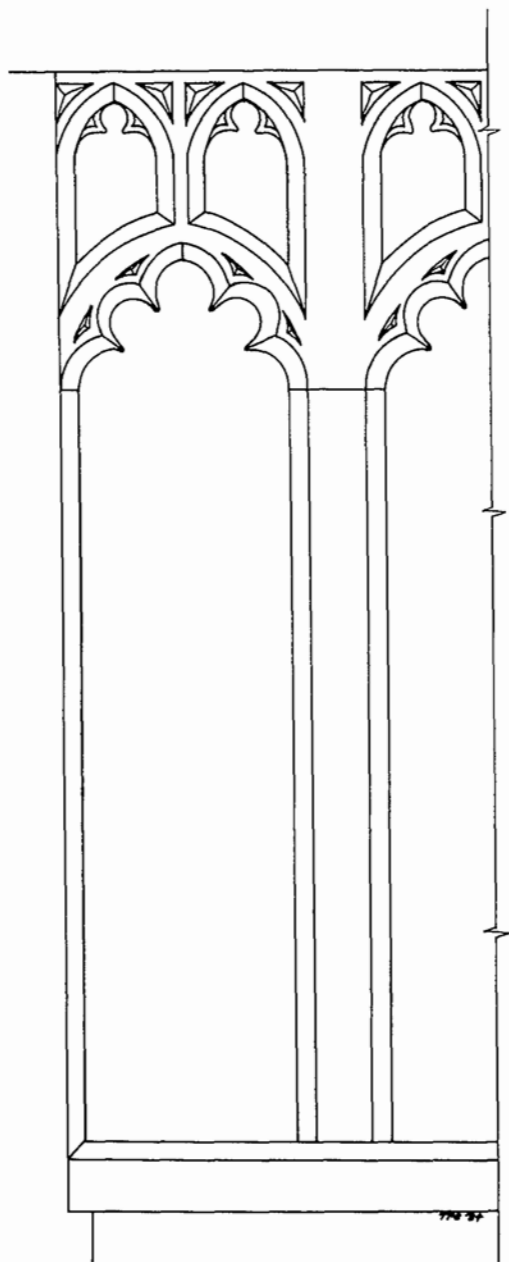


Fig. 6. Window Tracery at Shoreham, south Porch.

recognised as standard medieval carpentry – once it was achieved. The use of single timbers for corner-posts and durns obviates the need for jowling of the posts' heads – or, what amounts to the same thing, the archway durns are the enlarged equivalents of the more usual jowls. Above the main tie-beam and in contact with it is a further 'built' tie-beam with a marked camber. This supports a central plain crown-post butted into a high-set collar which in its turn supports a king-strut rising to the apex. Each side of the crown-post are two vertical struts, rising to the rafter, and a curved brace; the braces are necessarily cut across the grain of the timber in part and are consequently weak; the builders probably thought of them as decorative rather than functional – certainly the structure is sound enough here not to require bracing.

The rear (north) frame provides a notable contrast to the sturdy construction at the front face. The corner-posts are unjowled, so that each of the timbers at the head – post, tie-beam, and wall-plate – is jointed into only *one* of the others, an archaic mode of construction which fails to integrate the timbers at this important junction. Additional strengthening is, however, provided by the solid knee-pieces which form a quite shallow basket-arch. The central portion of this arch, which is hollow-chamfered, is integral with the tie-beam, whilst fillets projecting forward from the corner-posts continue the moulding down to sill level. The tie-beam is moulded on its southern lower angle, in a manner similar to, though somewhat simpler than, the rear of the front-face tie-beam.

The side walls have been renewed and altered at their northern ends, where a full-height stud has been provided and the top panels, above a chamfered rail, filled with cross-wise planking. Presumably, the original arrangement echoed that of the southern half.⁴³ Here, the central stud rises only to rail level. The whole of the top portion, above the rail, is occupied by a five-light 'Perpendicular' window. The tops of the main lights are cinquefoiled, above which are two top-lights, each trefoiled at the head. The construction is in the common manner – that is to say, the mullions are cut separately and tenoned into a horizontal board, which crosses the full width between post and main stud, and from which the window-heads are cut. This board is housed in grooves in the post, stud, and wall-plate. (Contrast Fawkham, *supra*.) Also in the wall-plate, on each side of the porch, is a series of five small mortises, their positions not corresponding to the

⁴³ Yet contrast the south porch at Bradwell-juxta-Mare, Essex, which 'is open and traceried only at its entrance bay and weatherproofed at the bay nearest the South Door of the church . . .': Hewett, 1974, 72, with illustration fig. 43, 59. This, however, is not normal practice.

existing mullions. It seems likely, therefore, either that these beams are re-used from another building – not necessarily a porch on the same site – or that there has been some alteration of the structure here – a change in the forms of the openings perhaps. The lower panels, beneath the rails, are filled with flint, an unusual though not unknown panel filling. It is possible that this is a primary feature, but at least equally likely that it replaces original planking; this could have been housed in grooves (like the window-head boards) and hence impossible to replace without dismantling the whole porch; examples are known in timber porches and in barns.⁴⁴ The construction at the top of each side wall includes *two* plates (as at Fawkham): the wall-plate proper, whose end-jointing has already been described, and an ashlar's plate, which is held in a rebate cut from the upper arris of the wall-plate and tenoned into the tie-beams at the ends. (The northern junctions have been renewed). The wall-plate is moulded with a three-quarter-round roll within a casement; the ashlar's plate moulding is somewhat similar (Fig. 5, detail at A).

The roof is of crown-post construction, the crown-posts being square-sectioned and plain, apart from a fillet on each, towards the interior of the porch. These fillets continue the line of the flat, only slightly curved arch-braces which run from the crown-posts up to the collar-purlin. The latter is tenoned into the back of the front-face crown-post, not supported on it. The rafters of the main 'trusses' are tenoned into the tops of the tie-beams, and sprockets fixed onto their tops continue the line downwards. The intermediate rafters, on the other hand are set in notches in the wall-plate, which they then oversail for a short distance; in consequence, they require smaller sprockets. On the interior, the ashlar's plate supports short ashlar's, one to each of the intermediate rafters. At collar-purlin level a collar is provided for each rafter-pair; further strengthening is provided by the pair of struts or soulaces to each collar. The rafters are halved together at their heads, whilst mortise-and-tenon joints are otherwise used in the roof construction; these are chased where the context demands it. A feature of some interest is the series of rafter-holes a short distance above the feet of the intermediate rafters; there are original carpenter's numbers (in Roman numerals) cut into these rafters, close to the holes.

The porch is finished at the front face with a pair of carved barge-boards, masking the wall-plate projections and the front-face

⁴⁴ E.g. the timber-framed porch at Stanstead Abbots, Herts. (personal observation). For Kent barns *vide* S.E. Rigold, 'Some major Kentish Timber Barns', *Arch. Cant.* lxxxi, (1966), 1–30.

TIMBER-FRAMED CHURCH PORCHES

rafters. Each barge-board has an ogee at top and bottom, followed by two cusps meeting in the centre at a pierced tri-lobed projection. At the 'root' of this projection is a pierced trefoil within a scribed circle, whilst at the foot of each barge-board is a pierced quatrefoil, within a larger scribed circle (Fig. 5, detail at B and detail at C). There is also a scribed margin to the wavy outline of the boards. Behind the barge-boards the projecting ends of the wall-plate, necessary because of the jointing at the post/durn heads, are pared in the common manner.

The roof-covering of the porch is of red tiles.

CONCLUSION

The three porches studied here probably lie in the chronological sequence: Kemsing, Fawkham, Shoreham; certainly the last named is the latest. All, expectedly, are in the box-frame tradition, but with differences of detail, as indicated above. It is interesting to note the co-presence, both at Kemsing and at Shoreham, of the normal post-head joint and the more 'primitive' post-head joint in which the three timbers – post, tie-beam, and wall-plate – are not fully integrated. In buildings of this size there was probably little anxiety about the strength of the structure – individual timbers are, for the most part, of greater scantling than is strictly necessary – and this fact probably accounts for the willingness to admit the weaker form of jointing. The roof structures, on the other hand, do seem to show an increasing concern with the problem of racking, since it is only the latest of the series – Shoreham – which has longitudinal stiffening in the form of a collar-purlin and crown-posts; the two older roofs are both single-framed,⁴⁵ though at Fawkham curved braces were later added to provide lengthwise strengthening. This is combined with the use of ashlar and soulaces to give an impressive roof. Ashlars and soulaces are also employed at Fawkham, and their combination there with sole-pieces (as well as the presence there and at Shoreham of *two* plates) probably shows influence from roof erection over masonry walls. Indeed, it is likely that the Shoreham porch is by the same carpenters who constructed the church roofs, and is indication enough that timber-frame building and the roofing of masonry structures were part of a single tradition of craftsmanship.

Improvements in rafter-housings have been observed above. The

⁴⁵ For the early dating of 'primitive' single-framed roof structures cf., e.g., Mason, 1969, 57–8.

least sound method is that at Kemsing where, apart from minimal friction, it is only the pegs which support the intermediate rafters and their load – and in a roof of uniform-scantling, single-framed type each rafter does bear its share of the roof load. The method of pegging from the *inside* of the building also seems ‘primitive’ and was to be superseded in subsequent roofs, in the porches and elsewhere. At Fawkham a more satisfactory method of housing the rafters was devised, but one which – because of the need to locate both rafters and ashlar on a relatively narrow space, albeit using two plates – was both complex and uneconomic. At Shoreham a better solution has been employed.

At some stage of timber-framed building, perhaps during the fifteenth century, side-sprockets were superseded by top-sprockets,⁴⁶ and a move in this direction seems to be exhibited at Kemsing, where in lieu of sprockets there are slight thickenings of the rafters’ feet, serving the same purpose as top-sprockets. Fawkham, with widely overhanging eaves, has none at all, whilst Shoreham has a full set of top-sprockets.

A further feature of some interest is the use of monoxylic durns at so late a date as Shoreham. In Suffolk, Munro Cautley urges, these were superseded by the door-post and separate arch-head construction c. 1400.⁴⁷ The latter construction, so far as west Kent is concerned, was already in existence at Fawkham by the fourteenth century (if the suggested dating be correct), whilst the former (monoxylic durns) persisted at Shoreham down to the sixteenth century. And in no mean structure. Shoreham is the finest of the series, and a magnificent piece of carpentry. Its roof with ashlar and soulaces, its moulded wall-plates and ashlar plates, and its ‘Perpendicular’-tracery window-heads are all marks of some sophistication. To call such a piece ‘vernacular’ seems inappropriate, and would beg too many questions – but they are questions that may not be considered here.

ACKNOWLEDGEMENTS

I am grateful to the (then) incumbent of St. Mary’s Kemsing, Rev. Kenneth Daniels, for access to the porch, which is normally kept locked; to the voluntary church workers at Shoreham who, far from

⁴⁶ Gravett, 1977, 840; K. W. E. Gravett, ‘Whitehall, Cheam’, *Surrey Arch. Col.*, lxiii, (1966), 140.

⁴⁷ Munro Cautley, 1982, 60.

objecting to my presence at a time when they were very busy, showed great interest in my work; to the staff of the Divinity School Library, Cambridge, for help with works on the history of the marriage ceremony, and to Mr. Graham Walder, for help with measuring at Kensing and for genial companionship. The debt I owe to the late Stuart Rigold is expressed, however inadequately, in the dedication at the head of this paper and, by implication, in the number of notes and references which include his name. Sadly, the paper has not been able to benefit from the criticisms which he would have offered.

