

PLATE XXIII



Purton Green Farm, Stansfield.

A THIRTEENTH CENTURY AISLED HOUSE

PURTON GREEN FARM, STANSFIELD, SUFFOLK

By GEORGE and SYLVIA COLMAN

The first aisled house known to exist in Suffolk—Edgar's Farm, Stowmarket—was recorded by Mr. J. T. Smith in 1958.¹ Since that date, two further examples of aisled buildings have come to light. One of these, Abbas Hall, Great Cornard, which bears many resemblances to Edgar's Farm, and is probably contemporary with it, the writers hope to deal with in detail at a later date. The other example is the subject of the present paper—Purton Green Farm, Stansfield, an aisled building which appears structurally to antedate Edgar's Farm and Abbas Hall considerably and has some features which are so far unique.

Purton Green Farm stands off the road between Denston and Hawkedon.² Examination of old maps shows that at one time a road ran past the house, and continued through the fields to join the main Horringer road near Depden. This road was already passing out of use by the early eighteenth century, and is recorded later as little more than a track.³ Even this track has now partially disappeared, though the right of way remains, and as the surrounding land has all been ploughed up, access to the building is not easy. The isolated position, which evidently served in the past to preserve many of the original features of the house, is now proving its downfall. It has been empty for some years, and is in an advanced state of disrepair and dilapidation. It is, however, far from being beyond preservation and well worth the effort such preservation would entail (Plate XXIII).

The building is timber-framed throughout, plastered outside, with hipped gables and a thatched roof. A convincing attempt at modernisation in the later sixteenth or early seventeenth century has turned it externally into a typical farmhouse of that period, with a lobby-entrance and internal chimney stack. Extensions have been made to both ends of the original house, terminating in jetties, and the front of the roof has been raised, to increase the height of the upstairs windows. Sections A-A and Z-Z (Figs. 15 and 16) best show the effect of this last alteration. An examination of the interior, however, soon reveals the original aisled structure.

¹ *Proc. Suff. Inst. Arch.*, xxviii, pt. 1 (1958), pp. 54-61.

² Map Ref. TL 784 532.

³ We should like to thank Mr. P. Statham, Archivist for West Suffolk, for showing us the collection of maps of Suffolk in the Record Office.

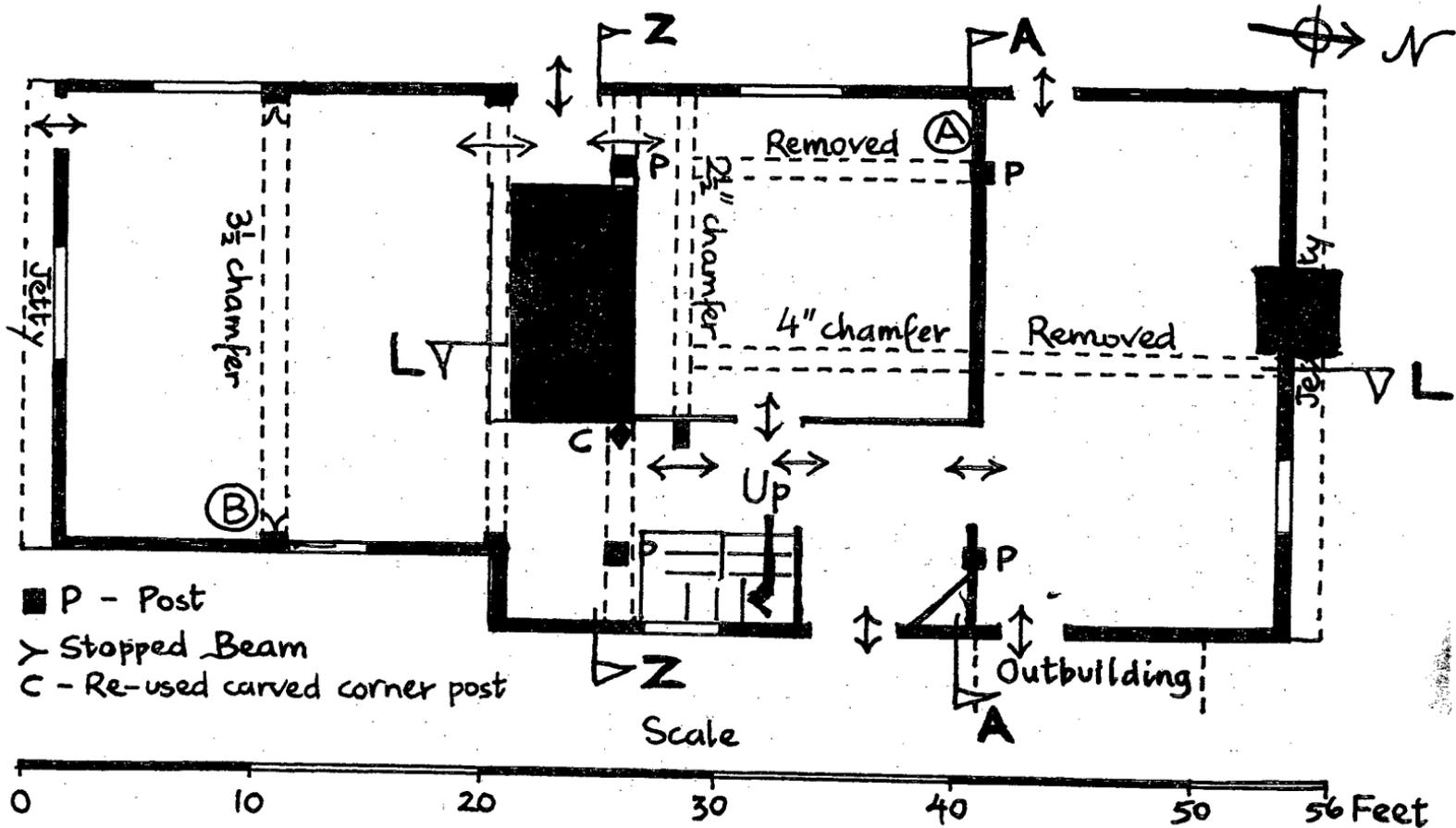


FIG. 13.—Purton Green Farm, Ground Plan.

On the first floor four arcade posts are visible, standing some three feet from the outer walls, two at the front (west) and two at the back of the building. The position of these posts can be seen most clearly by reference to the plan (Fig. 13), where they are marked 'P'. Those at the north end of the house bear double braces supporting an arcade plate, and it is interesting to note a combination of types here—those pointing inwards are straight, while those pointing outwards are arched. At the south end all braces have been removed, but there remain mortises in the arcade posts, which, together with the extension of the eastern arcade plate several feet beyond truss Z-Z, show that the original house extended further southwards. All the arcade posts bear decorated capitals (Fig. 14).

The arcade posts are joined together by straight tie-beams, and straight braces were mortised diagonally across the right angle formed by the tie-beams and arcade plates. This would help to prevent the arcade plates buckling inwards under strain. One of these diagonal braces remains in position at the north-west corner of the aisled part of the building; the mortises for that on the north-east side remain, though the brace itself is missing. There is also an additional tie-beam, unrelated to posts or rafters, some three feet in front of truss A-A (see lengthwise section, Fig. 18). The purpose of this beam is difficult to establish. While it suggests an attempt at reinforcement, it seems rather to be placing an added strain on the arcade plates.

All the timbers over the central part of the roof are heavily smoke-blackened from the open hearth. They consist of pairs of rafters, 5 in. square, spaced 1 ft. 9 in. apart, halved-in at the apex, and joined by collars notched and pegged into them. There is no crown post or form of overall lengthwise stiffening. This is a most important point in assessing the age of the house and in postulating that it ante-dates Edgar's Farm and Abbas Hall, which have crown posts and collar purlins.

The roof trusses consist of a scissor arrangement of long braces and are best understood by reference to the sections A-A and Z-Z (Figs. 15 and 16). Dotted lines mark those parts of each truss which have been removed but where clear structural evidence of their former existence remains. The differences in the two trusses seem to date from the original building of the house; there is no sign, for example, that the outer pair of long braces in section A-A (Fig. 15) ever continued upwards further than the tie-beam. More detailed reference to these differences will be made later.

Of the many features which make Purton Green Farm such an outstanding building none is more remarkable than the evidence that the house was originally built with a storeyed north end.

Approximately five and seven feet from the floor level, on the north face of the arcade posts of truss A-A, are upward-inclined mortises for the tenons of braces which, we suggest, supported a ceiling at wall-plate level.⁴ On this assumption, there would have been a downstairs room partitioned-off from the hall, and the hall itself would have extended from truss A-A southwards.

The north end of the house is highly complex, and various other features must be mentioned before a composite picture can be attempted.

It seems most probable that the original roof was a hipped one, the hip—incorporating a smoke outlet—extending from the first pair of rafters beyond truss A-A, supported by a tie-beam joining the ends of the arcade plates and terminating at wall-plate level. Notches at the end of the arcade plates indicate the former presence of such a tie. Only this first pair of rafters form, by their construction and overall heavy blackening, part of the original roof. Two other pairs of rafters leading up to the present hip are sporadically blackened, as are the rafters of the hip itself. These two pairs of rafters are also more widely spaced than those in the central part of the roof, and their collars are placed higher.

Perhaps the first pair of rafters showed signs of weakening under the pressure of roof and wind, for a horizontal lengthwise timber, resembling a side-purlin, was inserted on both sides, linking truss A-A with the first pair of rafters on each side of it. To insert these timbers in the angle formed by rafters and collars, the extensions of the long braces above the collar of the truss had to be cut away. The notches remain. There are also notches and peg-holes at the north end of these horizontal members for a strut linking them together. If the pitch of the roof was originally as shown in the suggested reconstruction (Fig. 17), the northern end of the inserted timbers would have supported it at this point. This strengthening must be of an early date because of the heavy smoke-blackening.

The north end would therefore have been made up initially as follows: a downstairs room, partitioned-off from the hall, unheated, with a ceiling at wall-plate level.⁵ Above, within the roof space, an area for storage, not partitioned-off from the hall below—as witness the smoke-blackening—and either accessible by a stair-trap or from the hall.

The extension of this end of the house must have been under-

⁴ The use of double braces to support a tie-beam is found in other aisled buildings, e.g. St. Mary's Hospital, Chichester, and aisled barns at Great Coxwell, Berks., and Dover, cited in J. T. Smith, 'Mediaeval Roofs—a Classification', *Arch. Journ.*, cxv.

⁵ This level, though high, is suggested by reconstructing the angle and extent of the braces.

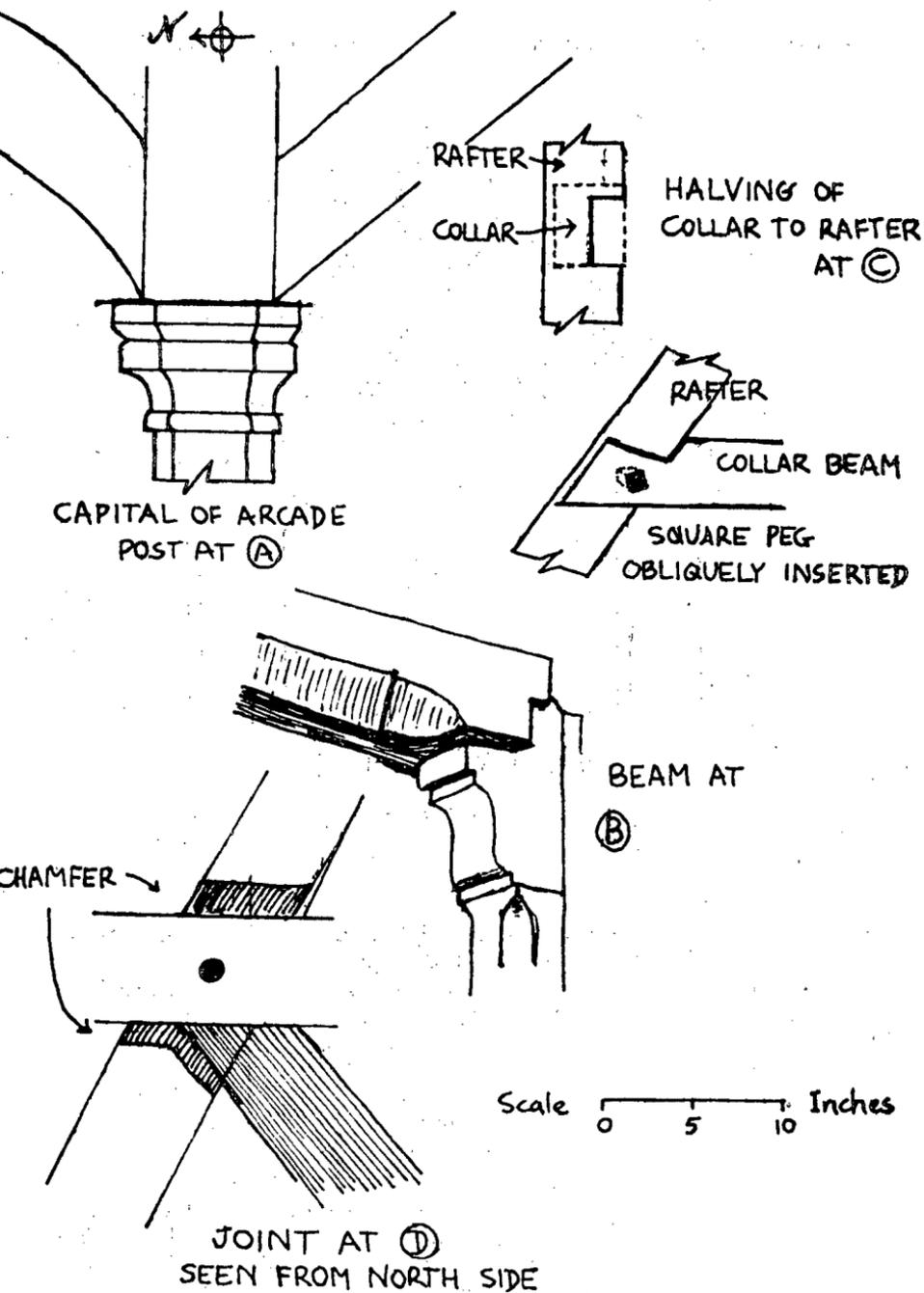
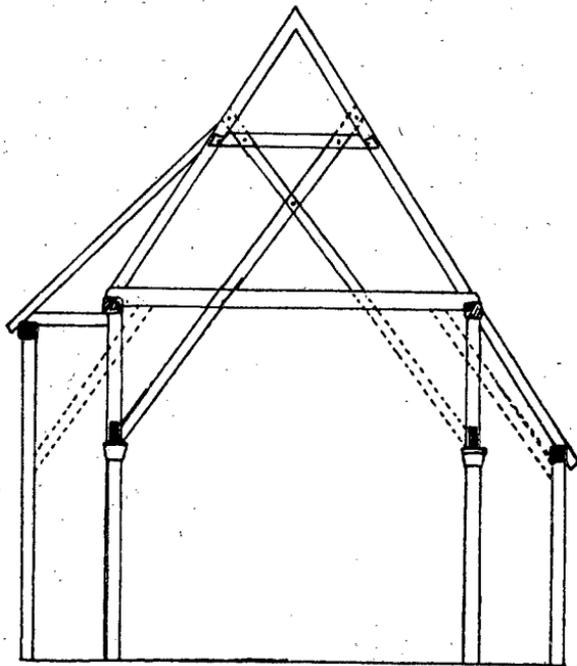


FIG. 14.—Some details lettered in Figs. 13 and 16.



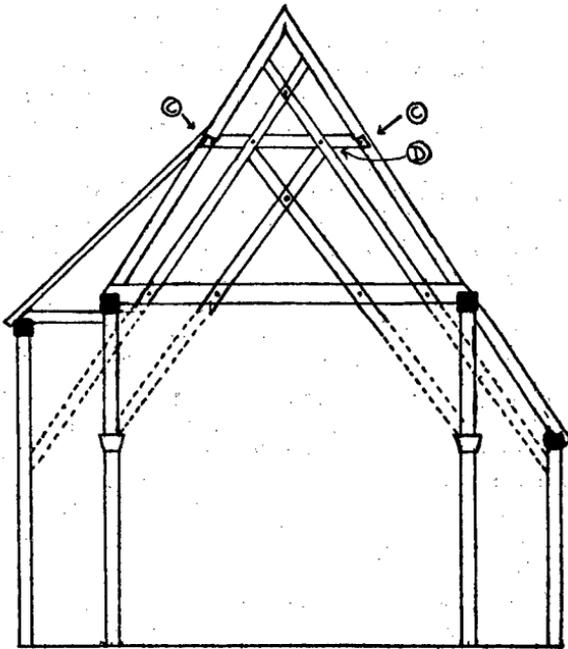
OPEN TRUSS SECTION A-A

Scale 0 5 10 Feet

FIG. 15.

taken while there was still an open hall and central hearth. Mention has already been made of the sporadic blackening in the present hip. There is also the evidence of a carefully constructed plaster partition which adheres to truss A-A. At present this reaches from the tie-beam to the collar, but when first put up it most probably extended lower. This partition is heavily blackened on the side adjoining the hall, but completely free of soot on the other side. That it is not an original feature is amply borne out by the blackened pair of rafters behind it.

Let us say, then, that at a not-very-easily datable time in the long mediaeval history of the house the north end was altered to its present length and shape. The hip was pushed outwards by the insertion of two other pairs of rafters and the tie-beam joining the ends of the arcade plates removed. The two inserted lengthwise supports for the original hip were left in place, and still remain



OPEN TRUSS SECTION Z-Z

Scale 0 5 10 Feet

FIG. 16.

today, serving no function. Nevertheless, they act as evidence of what has been done.

A further alteration was the removal of the wall plate beyond truss A-A, and the heightening and lengthening of the outer wall at this end. The new wall-plates are correspondingly higher and longer (Fig. 18). From this time the eaves-line was irregular, a discrepancy only put right by the next series of major alterations to the house, which involved inserting a chimney stack, ceiling-over the hall, raising the remainder of the front-wall level, and extending the house further southwards. Removal of the wall-plates also had the effect of taking off the ceiling of the ground-floor room. The north-end wall was extended and jettied, and the room achieved its present ceiling-level.

If, as was suggested, the plaster partition attached to truss A-A extended further downwards from the tie-beam, it would have had

the effect of creating a separate upstairs room in the north end, now larger and higher than the former roof space. That no partition covered the truss above the collar is proved by the sporadic blackening of the newer rafters; smoke still seeped through from the hall below, and the hip, though now further away, must have contained a louvre.

That this enlarged upper room was used at first only for storage, and later brought into use as living-accommodation proper, is suggested by another unusual feature in the north end of the roof. A curious plaster flue curves upwards from the tie-beam of truss A-A towards the collar of the hip itself. Broken-off lumps of wattle and plaster, obviously part of the same structure, show that it once stretched to the collar of the hip, as shown in Fig. 18.

Seepage of smoke into a room used simply for storage would not have caused much inconvenience; but in a bed-room or living-room it would create a most unpleasant atmosphere. A simpler preventive method would have been to extend the plaster partition from the collar to the apex of truss A-A; but, bent on preserving a smoke outlet, the occupants of Purton Green Farm preferred this other solution.

The flue has very little blackening on its upper side; none, obviously, underneath. While its upward tilt might prevent smuts and soot settling on it to any high degree, its relative cleanliness suggests that it was not in use for long. In the next stage, the open hearth was superseded.

We can now revert to truss Z-Z (Fig. 16), and deal with it in greater detail. If, from the outset, truss A-A was never a true 'open' truss, its simpler bracing may represent all that the builders considered structurally desirable. In this case, the complex double-bracing of truss Z-Z must be largely a decorative feature. This truss was fully on view, and it is not surprising to find some such ornamental form.

It also seems highly probable that the apex of the truss incorporates a smoke-hole, though there is no remaining evidence that a flue was placed here. What must be recorded are the partial remains of very rough plastering with thick wattles, the plaster seemingly thrown into the interstices of the truss above tie-beam level. The highly irregular surface of this plaster is uniformly encrusted with soot. This partition was evidently inserted at a very early date, perhaps to help direct the smoke through the louvre. Parts of a further plaster partition have been laid over the back, i.e. south side of the truss. This partition is far more carefully constructed than the other and suggests most strongly that it is contemporary with the one placed behind truss A-A. It is sporad-

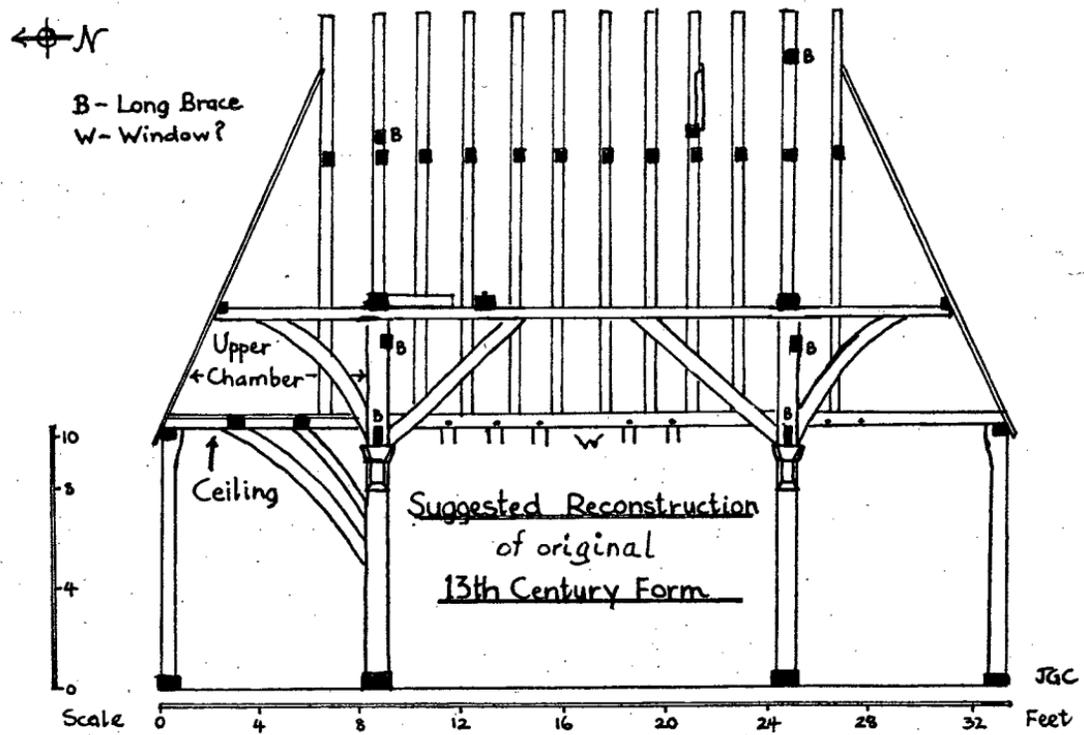


FIG. 17.—Suggested reconstruction of original thirteenth century form.

ically blackened, and was possibly added to repair defects in the older partition.⁶

The collar of the pair of rafters immediately before truss Z-Z has been removed, and the next pair bear a double collar with two vertical struts. Although this alteration is uniformly blackened, the struts are attached by metal nails, and suggest a re-use of timber.

It has been suggested that the roof at the north end of the house was at the outset a steep hip extending to the level of the wall-plates. It seems reasonable to assume from the remaining evidence that the same type of steep hipped roof terminated the south end also. If the truss Z-Z did incorporate a smoke outlet, the end of the roof could lie only a short distance behind it. As already mentioned, the arcade posts in the south-east and south-west corners show mortises for braces extending southwards, so that the arcade-plates at this end must have extended as far as those on the north end of the building. A hipped construction would be the only possible means of joining these two points.

There would thus be originally an open hall of one full bay of 16 feet, continuing for approximately another 11 feet beyond the south truss. Beyond the north truss an extension of similar length was partitioned off. The overall width of the house is 24 feet. On this assumption the hall would have had an overall length of some 27 feet, width of 24 feet, and height of the roof at the apex of 26 feet; it was thus of very substantial proportions. The lengthwise section (Fig. 17), best illustrates the most probable initial lay-out of the building.

The way in which the stack was inserted and the hall floored over is interesting and unusual. For some reason which is not clear it was decided to cut away the shafts of the south arcade posts a little below the base of their decorated columns, i.e. at inserted floor level. They now rest on two transverse beams inserted at one end into the brickwork of the stack and at the other mortised into the posts of the outer walls. The brickwork of the stack must first have been built up to support these beams before the arcade posts were cut. The whole operation required considerable dexterity and was infinitely more complicated than leaving the arcade posts in situ.

A further transverse beam in front of the stack, with two horizontal beams mortised into it, and into the north arcade posts,

⁶ Purton Green Farm certainly abounds in plaster partitions. Here again, its isolated and relatively untouched state may have helped to preserve features otherwise very easily destroyed without trace. In this connection, J. T. Smith, *Proc. Suff. Inst. Arch.*, *loc cit.* seems relevant. Note 5 of the article on Edgar's Farm refers to a large lump of plaster, seeming to show signs of smoke-encrustation adhering to the joint of the long braces in the roof-space. Perhaps this is comparable with Purton Green Farm.

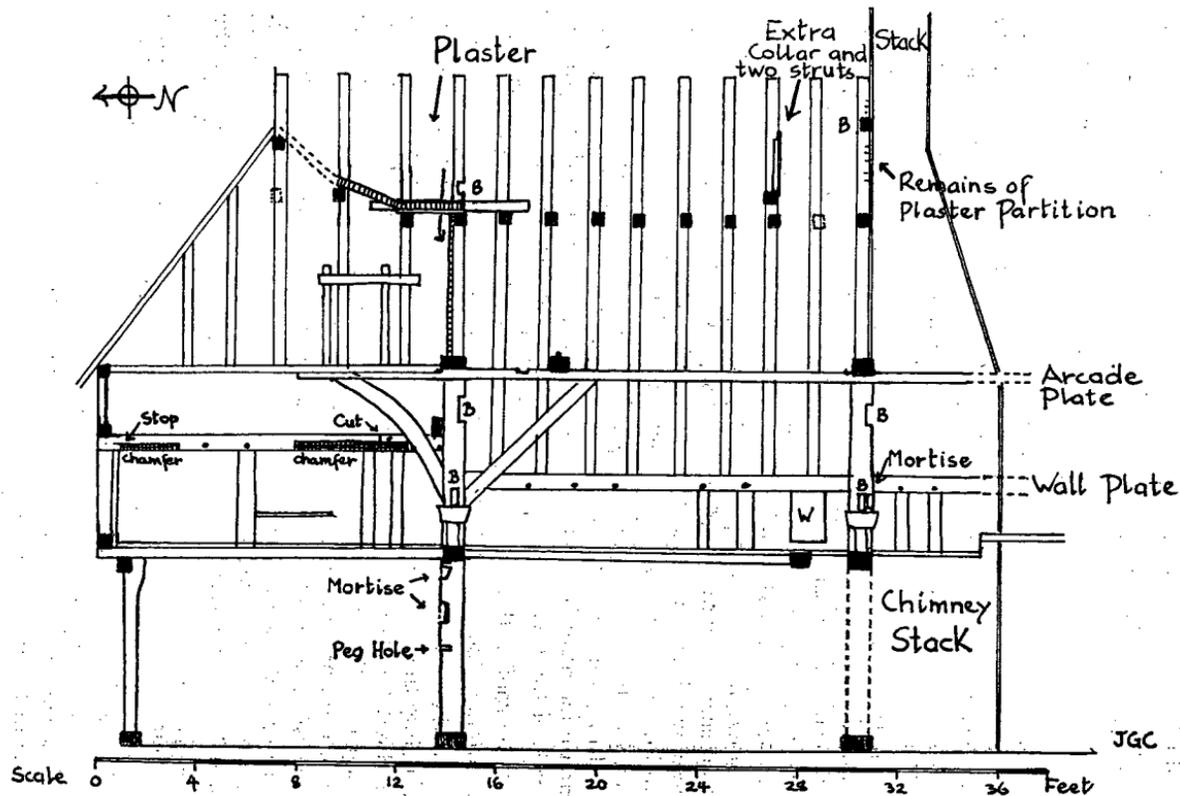


FIG. 18.—Lengthwise section of north end of building.

supports the inserted ceiling (see plan, Fig. 13). Structurally it would have been extremely complicated to anchor the horizontal beams into the beam in the chimney stack in the orthodox way, while truss Z-Z was being so considerably modified.

When we come to the present south end of Purton Green Farm we have what is virtually another house, linked to the rest of the building by the inserted chimney stack. An extension of the eastern arcade-plate here becomes the wall-plate. The eastern aisle has not been extended; so that, although this end is still wide, by comparison with other timber buildings, it is narrower than the rest of the house.

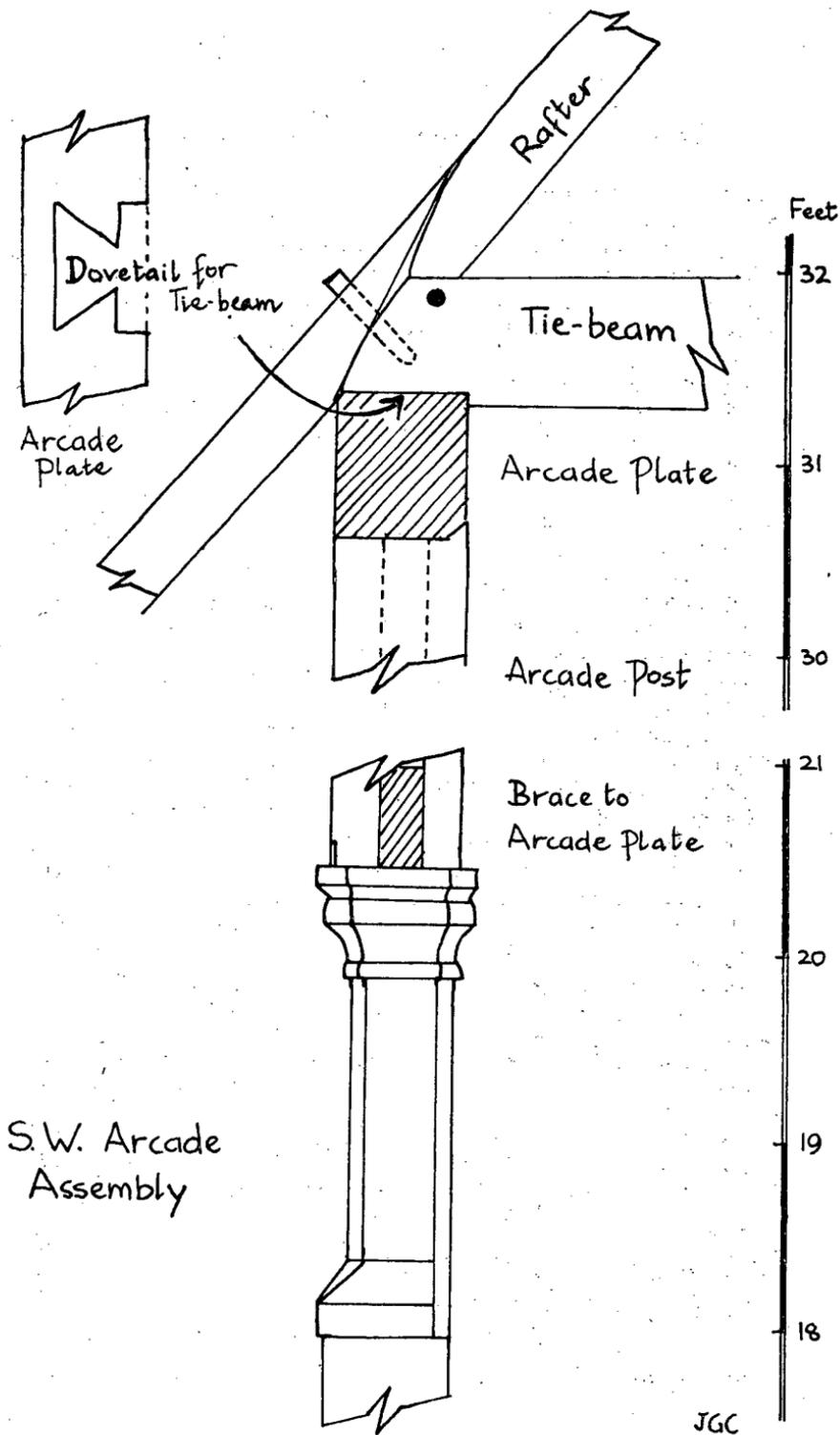
In the upstairs room sixteenth-century features prevail. The room, some 19 feet long, is divided into two short bays, the posts and beam of the central truss bearing mortises for what must have been very large braces. The south window is made up of one long window with smaller lights on each side. There were also small windows in the east and west walls opposite each other and of equal size. There are grooves for sliding wooden shutters over all these windows, each groove, naturally, twice the length of the window opening. With the exception of the window on the east side, which has been slightly enlarged, all these windows have been filled-in. One ovolo-moulded mullion is still in position; the remainder have been re-used in a curious fashion underneath the treads of the present stairs—a structure of no great antiquity.

The roof in the south end is still of uniform scantling, each pair of rafters notched together with a collar, but also with side-purlins.

In the downstairs room (parlour), which gives every indication of being the best room of the house, considerable alteration of windows has taken place, and an outside door inserted. It is in this room that the one discrepant dating feature is found: the decoration on the heads of the posts bearing the main ceiling beam have carving which suggests far more strongly a later seventeenth century date than a sixteenth century one (see detail, Fig. 14). The front door is also of a distinctly classical seventeenth century form.⁷ At the risk of appearing to make these features fit the theory, it has occurred to us that the carving on the posts in the parlour might well have been made some time after the posts were in position, and that the original post-heads had the same plain bulbous shape as those in the room above. The carving on these posts, together with the front door, could then be taken as a further late seventeenth century improvement—the last alteration of the house in the vernacular period.

It is when we begin the search for comparative material that

⁷ Part of an earlier door, with lapped joints, is still in the house.



S.W. Arcade
Assembly

JGC

FIG. 19.—Purton Green Farm, Stansfield, S.W. arcade assembly.

the remarkable nature of this ancient house strikes us afresh; for comparative examples are few indeed. Aisled halls there are, though not in plenty, but many of these already bear the developed roof-structure of crown-post and collar purlin. Cases of aisled buildings with trussed-rafter roofs are very hard to find. For our purposes, Fyfield Hall in Essex is the most important example, presenting as it does the most striking parallel to the trusses at Purton Green. Chennells Brook Farm, Horsham,⁸ has a trussed-rafter roof, but its combination of base-crucks, tie and collar-beams is totally different from Purton Green Farm.

This scarcity of roofs of the trussed-rafter type is due not simply to the great age of the buildings involved, but also to the inherent weakness of the method itself. The absence of any lengthwise strengthening puts a great strain on the joints, and any weakening of these will cause pairs of rafters to lean over, pushing the roof sideways and often causing its collapse.⁹ The insertion of purlin-like members at the north end of the original roof at Purton Green Farm suggests that some such weakness may have developed there.

The use of long straight braces in the trusses, rather than the more usual tie and collar-beams puts this house and those few buildings which resemble it in a separate group. Fyfield Hall is the only fully comparable house, but there is also the belfry of the church at Navestock in Essex,¹⁰ described as 'one of the notable timber towers of Essex'. It is ascribed to the fifteenth century, a surprisingly late date.¹¹ From the photograph taken after bombing in 1940 it seems that the pairs of long braces rising from ground level to the tie-beam are doubled. At Fyfield Hall (see Fig. 20), the long braces are also doubled and halved-in on each side of the tie-beam.

No such doubling of braces occurs at Purton Green Farm. Here all the long braces are single, halved-in on one side of the arcade-posts and tie-beams. That this is the earlier form, and that the doubling method is a development from it, is suggested by the use of doubled long braces in conjunction with a crown-post and collar purlin in the roof of Edgar's Farm, Stowmarket.¹² Here the technique of long-bracing is clearly obsolescent. (Fig. 21).

⁸ R. T. Mason and G. A. Packer, *Sussex Archaeological Collections*, ci, (1963).

⁹ J. T. Smith, 'Mediaeval Roofs', *loc. cit.*

¹⁰ V.C.H., *Essex* iv, photograph opp. p. 52.

¹¹ Since writing this, our attention has been drawn to Mr. C. A. Hewett's article: 'The Timber Belfries of Essex; Their Significance in the Development of English Carpentry', *Archaeological Journal*, vol. cxix, (1962), where the belfry of Navestock Church is much more convincingly dated to the early thirteenth century.

¹² Long braces also occur at Abbas Hall, Great Cornard, but further investigation is needed here.

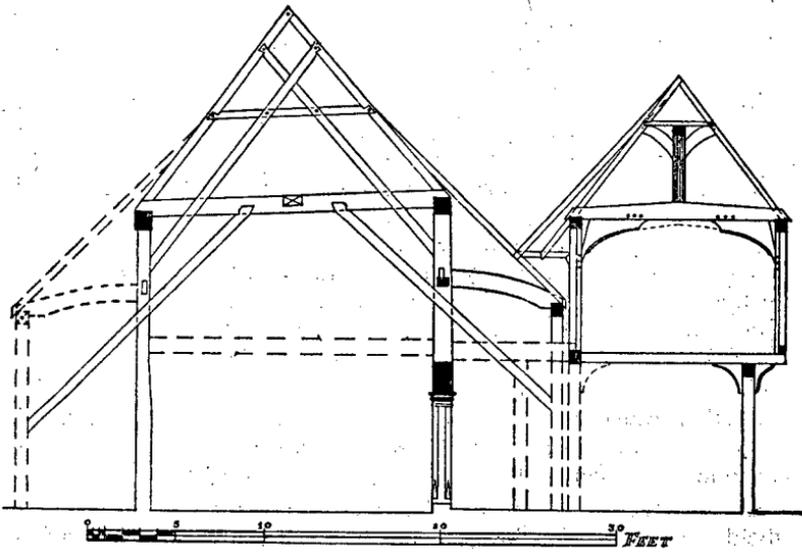
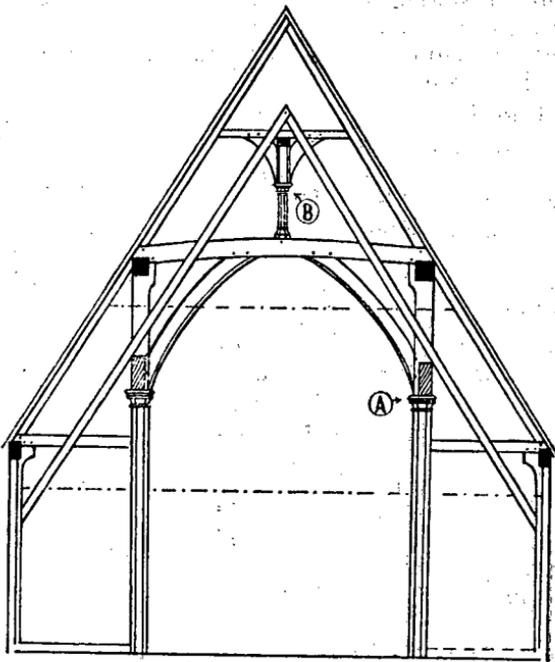


FIG. 20.—Section of open truss at Fyfield Hall, Essex.



OPEN TRUSS. Section A-A

SCALE IN FEET. 0 5 10 15

FIG. 21.—Section of open truss at Edgar's Farm, Stowmarket.

Mr. J. T. Smith has emphasized the unusual nature of trusses formed in this way from a series of long straight braces, and in the absence of any close European parallel, he suggests a possible similarity with the roof-structure of Norwegian Stave-churches.¹³ It is interesting, in the light of this suggestion, to find that pure examples of the technique have so far been found only in East Anglia, an area considerably subjected to Norse influences. Even in a hybrid form, long straight braces have so far been found only in one case outside East Anglia. At Manor Farm, Wasperton, in Warwickshire, they are used in one truss at the north end of the house.¹⁴ The roof is, however, a crown-post one.

Further research will show whether the suggestion that long straight braces in a pure form occur in a very restricted area, is a valid one. It is certainly interesting to speculate upon.

Let us now turn to the question of dating. In writing of Fyfield Hall, Mr. J. T. Smith has suggested that there is nothing to preclude a date about 1300. Chennells Brook Farm, Horsham, is also ascribed to the late thirteenth century.¹⁵ The majority of aisled buildings with crown-post roofs are dated to the fourteenth century; Edgar's Farm, Stowmarket, with its combination of types, to the early fourteenth century; St. Mary's Hospital, Chichester, as early as the later thirteenth.

It would not be reasonable to give Purton Green Farm a date later than that of buildings with a fully-developed crown-post roof; nor later than the hybrid type represented by Edgar's Farm and, apparently, by Abbas Hall, Great Cornard; nor—if our assumption that its single-bracing technique is a simpler and earlier form, is correct—later than Fyfield Hall. A date in the later thirteenth century is possible and seems reasonable. This we should like to postulate.

A house as well-built and durable as Purton Green Farm suggests considerable prosperity in its original owner. It lies within the clay belt running through the centre of Suffolk, that part of the county associated with piecemeal mediaeval enclosure and early agricultural specialisation, particularly in dairy-farming. The area round Purton Green is characterised by small, scattered settlements, and numbers of mediaeval houses standing in isolated positions. This is in direct contrast with areas of open-field cultivation, for example, to the north of Bury St. Edmunds, where mediaeval and post-mediaeval houses are concentrated in closely-

¹³ J. T. Smith, 'Mediaeval Aisled Halls and their Derivatives', *Arch. Journ.*, cxii, (1956).

¹⁴ S. R. Jones and J. T. Smith, 'Manor Farm, Wasperton, an early fourteenth century timber-framed house', *Trans. Birmingham Arch. Soc.*, vol. 76, (1958).

¹⁵ R. T. Mason and G. A. Packer, *op. cit.*

settled villages, and isolated houses are, in general, of no earlier than sixteenth-century date.

The vast majority of the mediaeval houses in which the county abounds probably do not date from earlier than the fifteenth century. While often of very considerable interest, they are not aisled. The rarity and significance of aisled buildings cannot be too strongly stressed; nor can we over-emphasize the unique nature of Purton Green Farm. A further example of this rare type may never come to light in Suffolk.

ACKNOWLEDGEMENTS

We should like to thank Mr. Lionel Reynolds, of Kirstead Hall, Norfolk, who, believing the building to be an aisled one, suggested our examination of it.

We also wish to acknowledge our indebtedness to Mr. J. T. Smith, M.A., F.S.A., for his help and encouragement in unravelling the complications of this fascinating house. The drawings of trusses at Edgar's Farm and Fyfield Hall appear by his permission. These drawings, which were made by Mr. Stanley Jones, first appeared in Mr. Smith's article: 'A 14th Century Aisled House: Edgar's Farm, Stowmarket'. (*Proc. Suff. Inst. Arch.*, xxviii).