

Calcutt Farm, Houghton Regis, Bedfordshire A Measured Survey of a Moated Farmstead

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SUMMARY

It was known that the later brick facade of the Calcutt farm building hid the substantial remains of an early timber-framed structure. As it is possible that a long-standing planning permission could be revived it was decided that a very detailed survey should be carried out if possible. The building was destroyed in 1975, having changed ownership.

INTRODUCTION

Calcutt Farm (TL 012254) is situated on land which formerly was part of the Manor of Caldecote in the Parish of Houghton Regis. The Manor was granted to Dunstable Priory by King Henry I and remained the property of the Priory until the Dissolution of the Monasteries.

After the Dissolution, Caldecote passed into the hands of the Crown. Only part of the subsequent descent is known and this is given in the *Victoria County History of Bedfordshire*. In the eighteenth century the building with 117 acres of land came into the hands of the Gilpin family of Hockliffe Grange, for on the excellent survey map of the whole Parish of Houghton made in 1762,¹ the owner was given as Thomas Gilpin Esq., and the tenant as William Barton. It was then described as "Carcutt Farm".

The 1762 map shows the remains of moats and we can assume that in medieval times the homestead on the site was protected by a moat. The exact location of the medieval homestead is not known, but it may have been to the east of the present building within the main moated area. A reproduction of the 1762 map in figure 1, compared with that of the Ordnance Survey reproduced alongside,² shows how little the moats and field boundaries have changed, only the section of the moat to the north and north-west of the building having disappeared.

Large areas of the moats shown on the survey have in recent years been filled.

The site was chosen very near to the source of

two adjacent tributaries of the River Ousel. One of the tributaries, rising to the north, was led into channels passing round the buildings and discharging into the second tributary running across the southern end of the site. Further areas of water were taken from these channels to form additional moated areas, and perhaps, fishponds.

THE BUILDING

The present farm building has been modernised at various times and only three bays of the originally larger two-storey, timber-framed and jettied structure remain. An external staircase has been added giving access to first floor and attic and in more recent times a brick front has been built against the main west elevations destroying the entire framing at ground floor level on this face. A later outshot is wrapped around the north-east angle of the building and butts up to the external stair.

External chimney stacks are located on the east and north sides of the building.

Enough evidence remains to deduce that this was originally an "L shaped" building with a main range of three unequal bays running north to south and a two storey wing extending to the east from the east side of the northernmost bay. The original position of the East Wing is shown chain-dotted on the ground floor plan in figure 2. The jetty of the first floor projected along the whole west elevation which is assumed to have been the front of the original house.

The main frame follows the general pattern of a jettied building with the first floor joists spanning from a central spine beam. The north and south ends have studs at close centres stiffened at the first floor level by ogee braces. The roof was modified when the east wing was removed and only the section over the two southernmost bays is original. The section remaining is of queenpost construction with clasped purlins and wind braces. Pegged clay tiles covered the entire roof of the main building, stair and outshot.

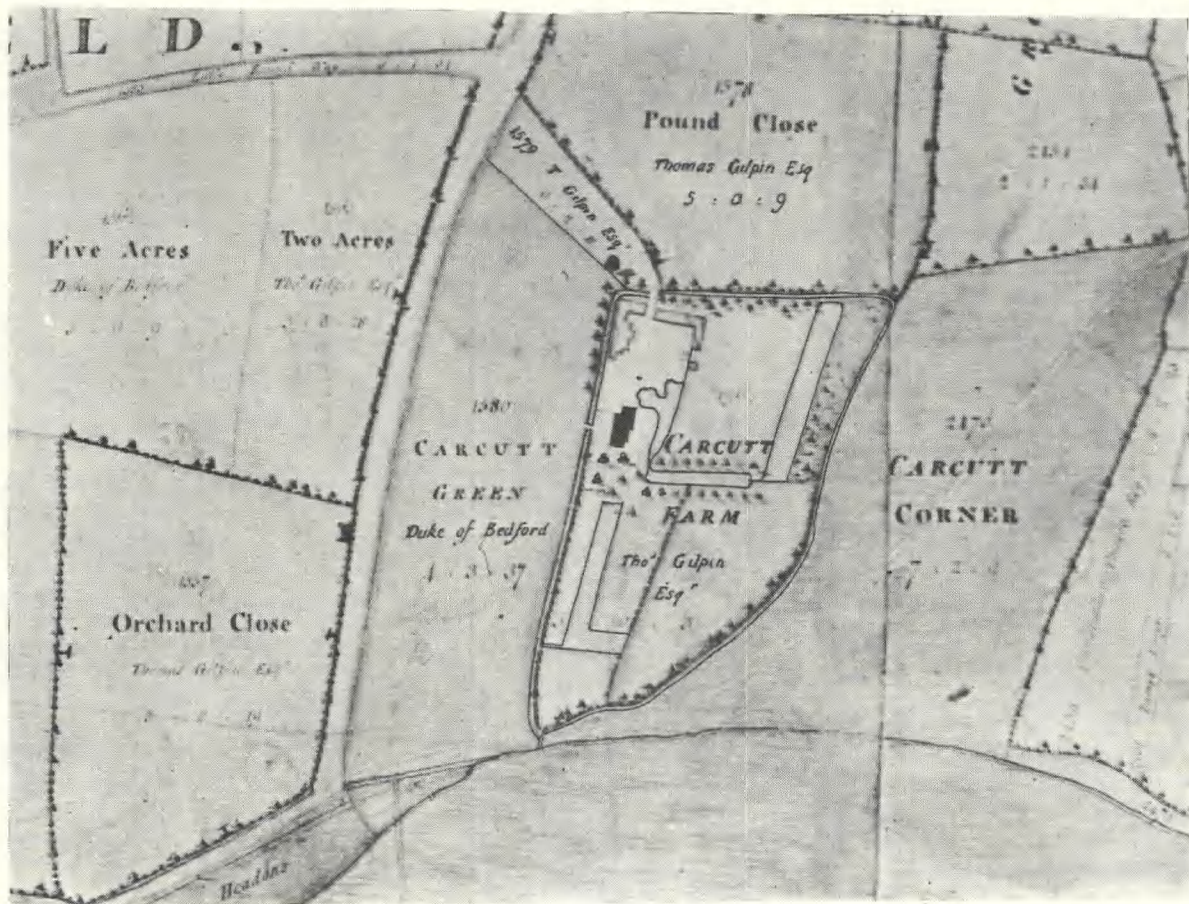


Fig 1 Portion of the 1762 map of "The Manors of Houghton Regis and Seywell belonging to John, Duke of Bedford", surveyed by Thomas Bateman, showing Calcutt Farm (marked as Carcutt Farm), compared with a modern Ordnance Survey map of the same area (opposite). Maps by courtesy of the Bedfordshire County Council and the Director General of the Ordnance Survey. Crown Copyright reserved.

POSSIBLE USE OF ROOMS

Presumably the middle ground floor room of the existing range was the principal room, i.e. the hall; the width of the fire place and its placing on one of the long walls suggests this. The southern room would probably have been a service room. Modern rebuilding of the east wall of the south bay and insertion of a modern fireplace has destroyed all evidence of the original structure so it cannot be proved whether or not the southernmost room was heated. It seems most likely that the north chimney is a rebuild and that the original chimney stack served the ground floor central bay only.

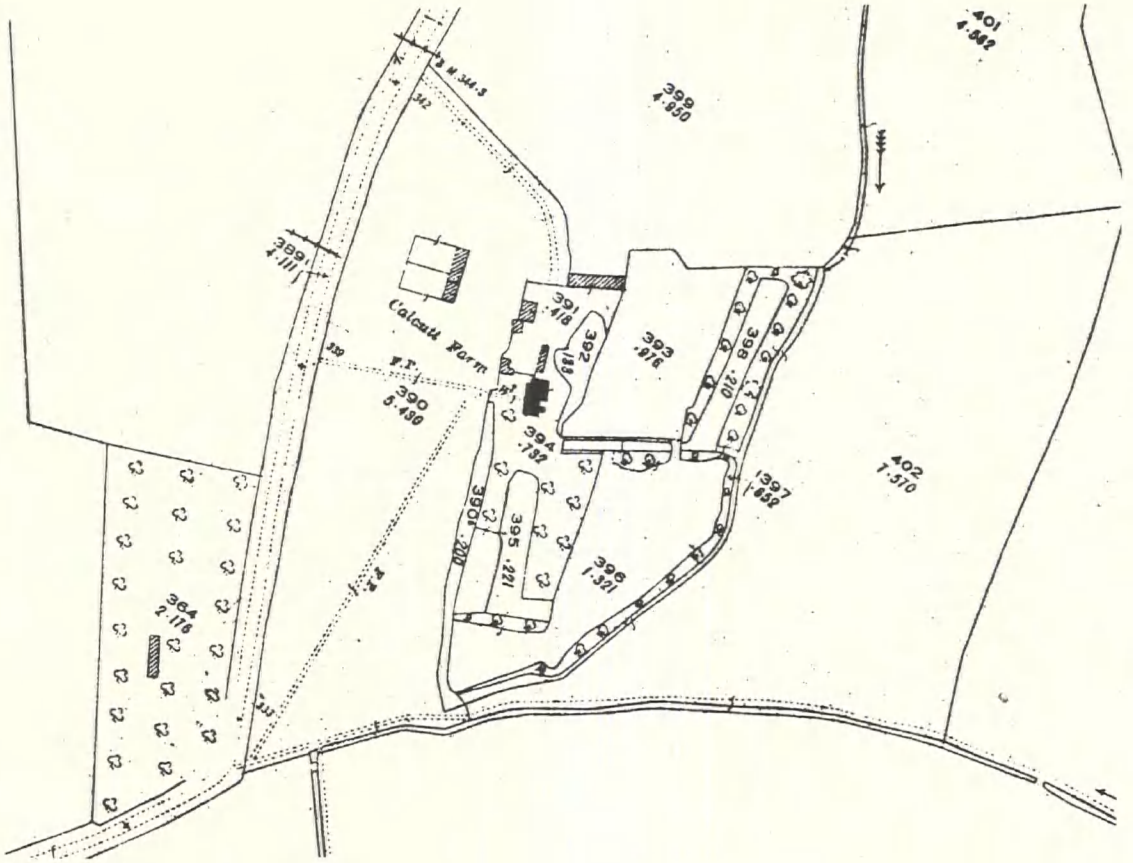
The northern room is most likely to have been

the parlour, and the room in the demolished east wing almost certainly contained the staircase.

Just what were the respective functions of hall and parlour at this period is not at all clear, although it is known from literary evidence that there was a growing confusion between them. Probably the Hall was also the kitchen and if so, the room south of it would have been the pantry. In that case, the other service room in the wing was perhaps a buttery, where drink was kept; the association of parlour and buttery is not uncommon in the seventeenth century.³

CONSTRUCTION OF MAIN FRAME

The method of jointing at the southwest cor-



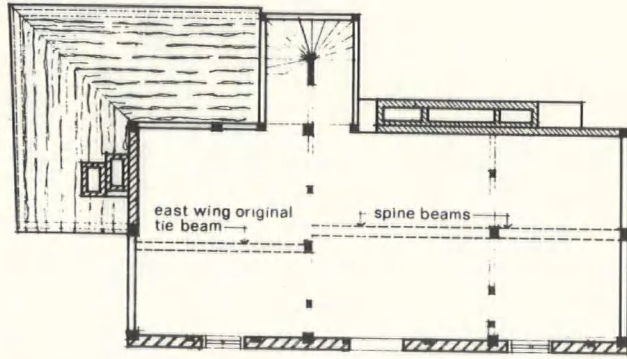
ner of the building is illustrated in figure 5A (north west corner similar). The first floor corner posts have foot tenons which tie the junction of the side bearer and bressummer. The side bearers are halved on the underside to fit over the ground floor top plates. A most complicated and unusual joint has been used for this purpose. The side bearers are rebated along their length to receive the floor boards which run from north to south.

At the north and south ends, mortices in the underside of the side bearers show that originally 150mm wide studs were inserted at 325mm centres at ground floor level. At first floor level the studs remain and these are the same size and at similar centres. These first floor studs, it should

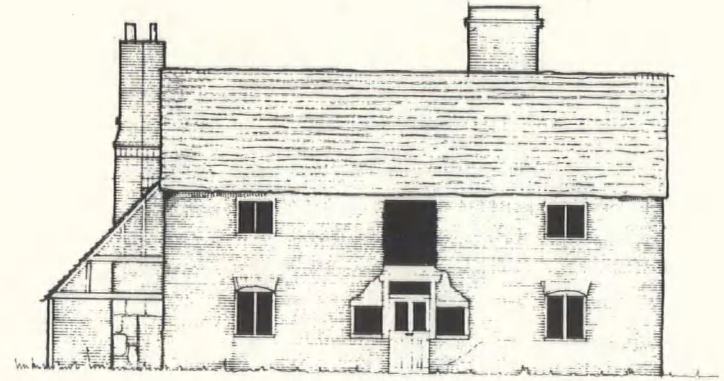
be noted, butt to the ogee braces and are fixed with iron nails.

The studs, although tenoned at top and bottom are not pegged. Figure 5B shows the construction of the western end of the southernmost intermediate frame.

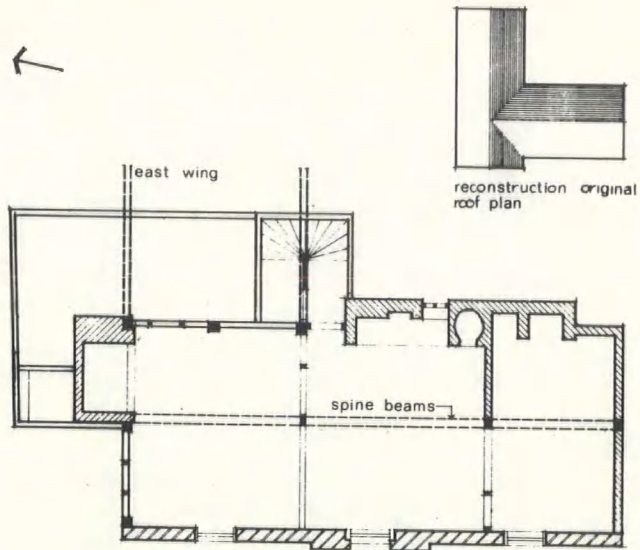
The two internal partitions are infilled in a similar manner to the ends but with lighter studs. In both cases a main central post with two subsidiary posts supports the tie beams and the frames are stiffened by curved tenoned and pegged braces at ground and first floor levels. The 75mm by 75mm studs are at fairly wide centres and have unpegged tenons on to the ties and nailed butt joints to the curved braces. The frames would originally have had lath and plaster infilling.



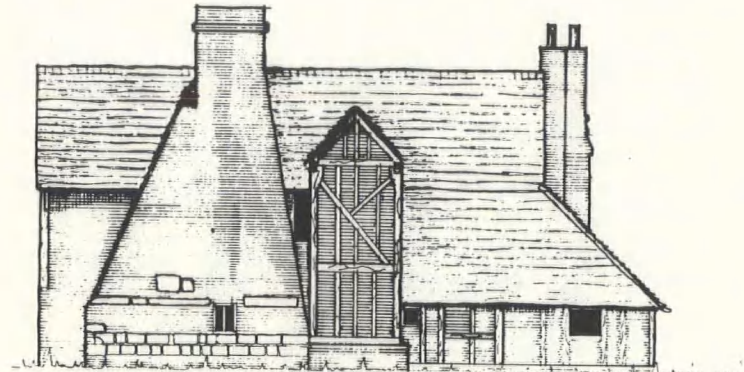
FIRST FLOOR



WEST ELEVATION



GROUND FLOOR



EAST ELEVATION

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Fig 2 Calcutt Farm, Houghton Regis. Plans and East and West Elevations.



Plate 1 Calcutt Farm, Houghton Regis, in 1969, looking at the east and the north fronts.
(Photograph: Bedfordshire County Council)

Floor joists are jointed to spine beam and rear plate by two variants of central tenons with diminishing haunch and peg, these are illustrated in figure 6. Also illustrated in figure 6 is the method of jointing the east ground floor top plate to the north east corner post. The joints are arranged so that the top of the joists are flush with the spine beam but lower by the width of the floor boards where they strike the plate. This allows the side of the floor boards to finish neatly against and flush with the platetop.

The roof trusses have curved tie beams and collars. The curve on the top of the tie beams indicates that the attic joists were intended as a ceiling support and that a usable attic floor was not intended. The principal rafters reduce to half their thickness above the purlins, and are tenoned into the tie beam with two pegs.

The rafters notch into the top of the wall plates and are jointed and pegged at the ridge. Each common rafter is pegged to the purlin.

Short, virtually straight wind braces stiffen the roof structure.

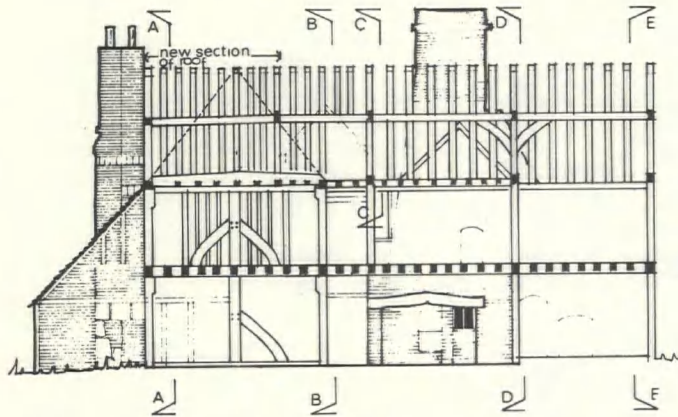
METHODS OF JOINTING

Scarf Joints

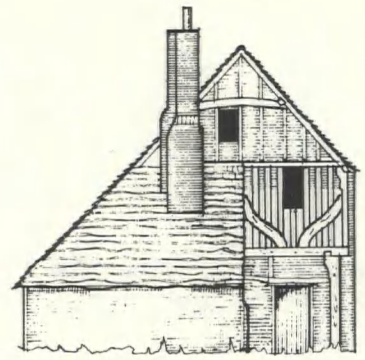
There are three types of scarf joint remaining, and these are at purlin, bressumer and top plate. No section of ground cill with scarf now exists.

Purlin scarf, (fig 5E). This is a common purlin scarf joint used throughout the sixteenth century and later. It is not supported on the collar, but located between truss and junction with wind brace.

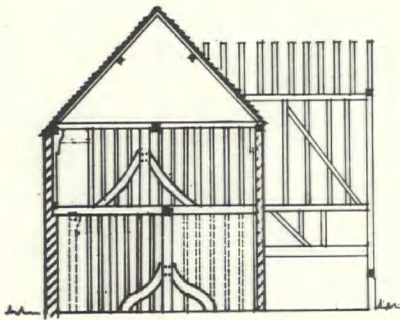
Bressumer scarf. (fig 5D). This is a squint-



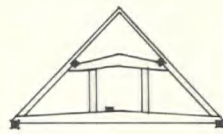
LONGITUDINAL SECTION TO EAST



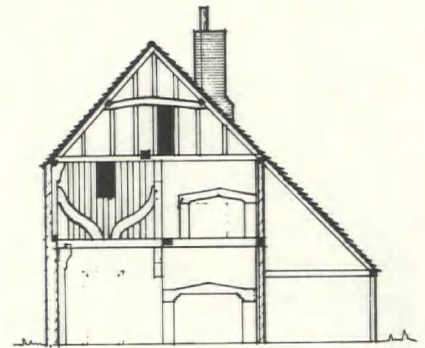
NORTH ELEVATION



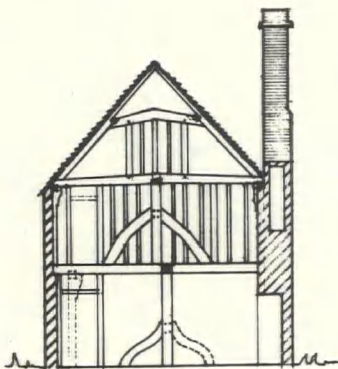
SECTION B B



SECTION C C



SECTION A A



SECTION D D

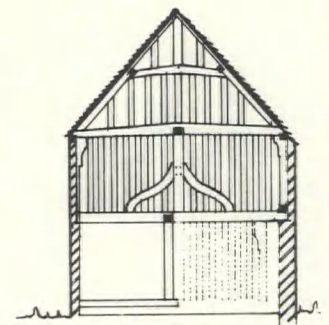


first floor



ground floor

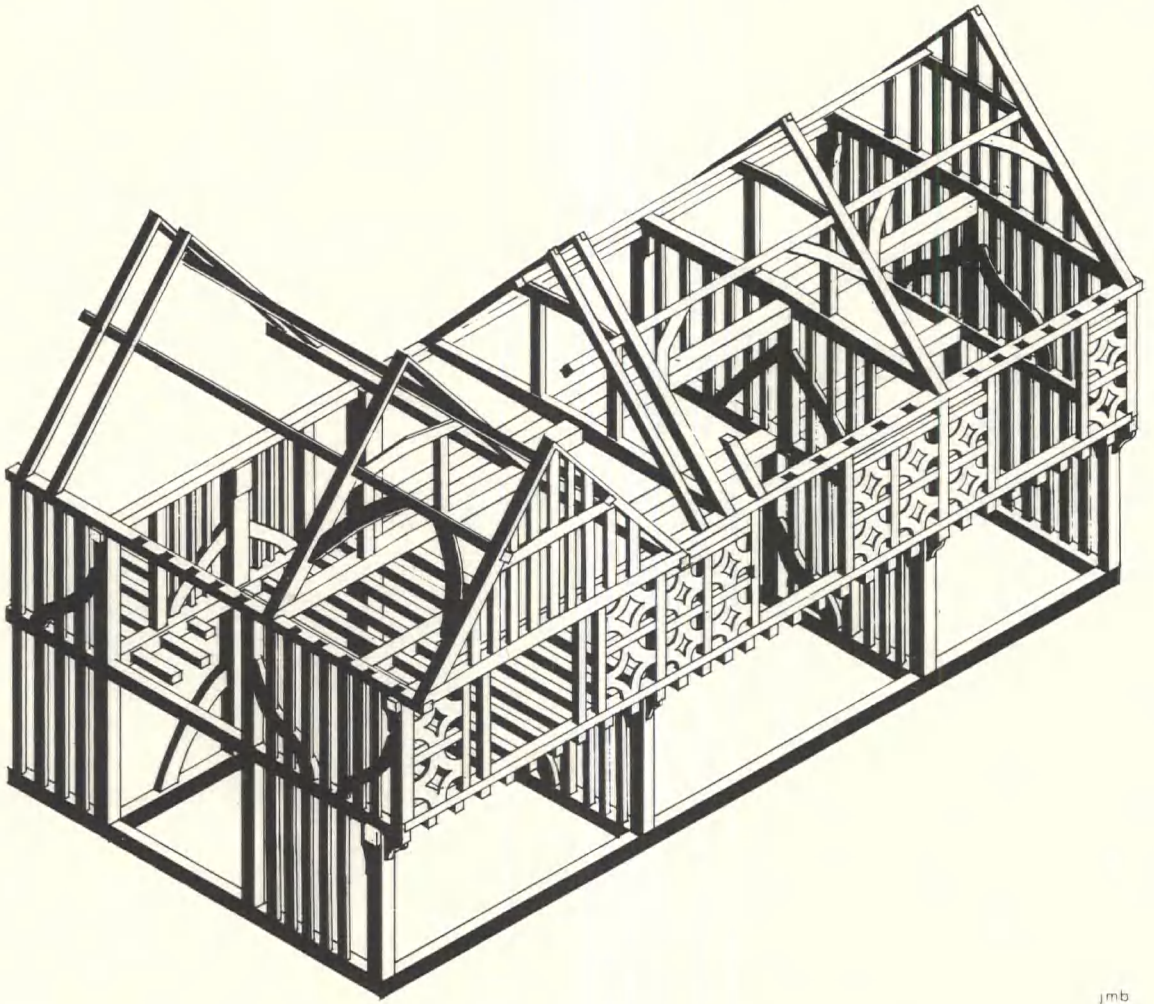
FIREPLACE LINTOLS



SECTION E E

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Fig 3 Calcutt Farm, Houghton Regis. North and South Elevations and Sections.



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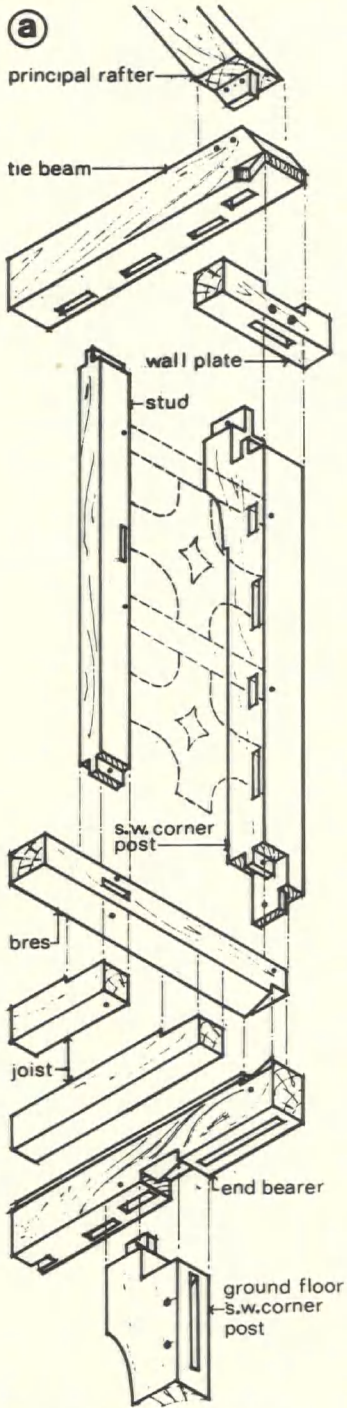
Fig 4 Isometric reconstruction of the original frame of Calcutt Farm, Houghton Regis, West gable infill and east wing studs conjectural; decorative infill panels shown are based on the mortise joint evidence.

butted scarf with secret bridle and two edge pegs; a joint that was in use over several centuries. C.A. Hewett records its use in the ground cills at Crissing circa AD 1200.⁴ The writer has noted its use in sixteenth century south Bedfordshire buildings as a top plate scarf.

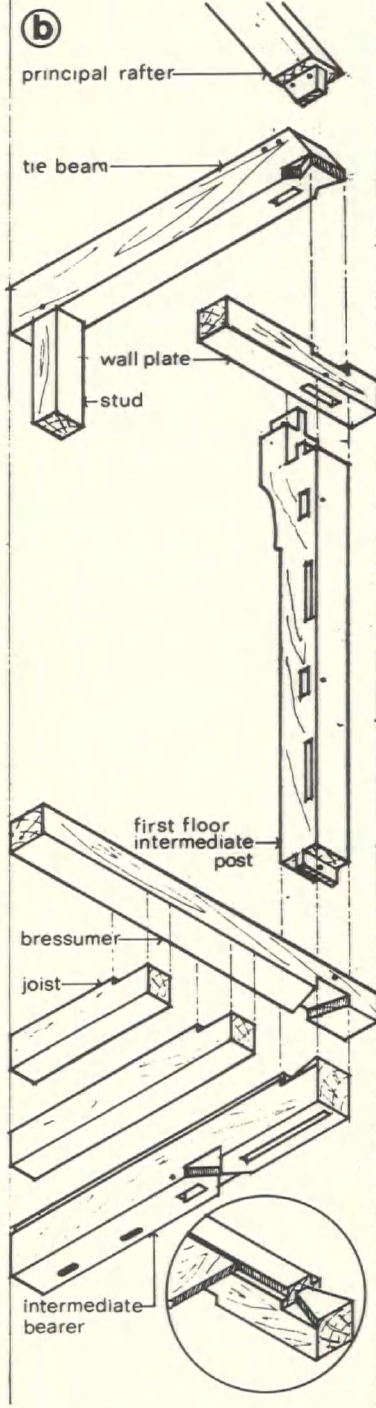
Top plate scarf, (fig 5C). This is a more involved form of the Edge-halved scarf with bridled butts that is common in the fifteenth and sixteenth centuries.

DECORATIVE TREATMENT OF THE FIRST FLOOR MAIN ELEVATION

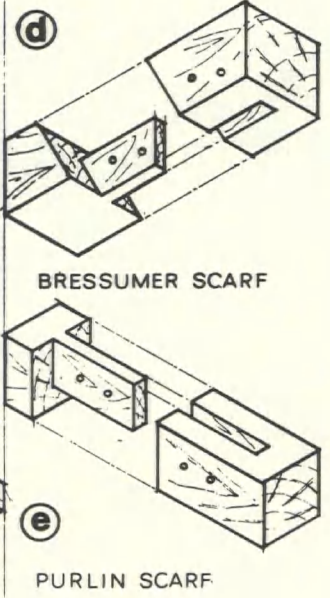
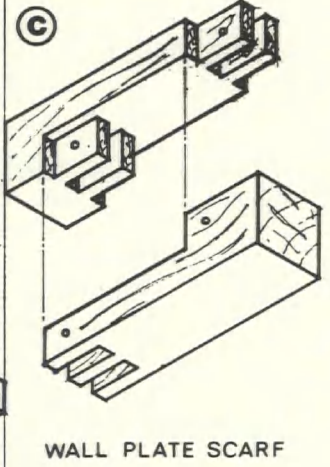
As the later brick front is still fairly complete and masks the majority of the remaining frame at first floor level, it is not possible to see every mortice on the external face of the building. The sides and inner face of the studs can, however, be examined, and one of these studs from the central bay has been removed during rebuilding and repositioned reversed which allows



SOUTH WEST CORNER
VIEWED FROM N.W.



INTERMEDIATE POST JUNCTION
WEST ELEVATION FROM N.W.



j.m.b

Fig 5 Calcutt Farm, Houghton Regis. Scarf and Tying Joints.

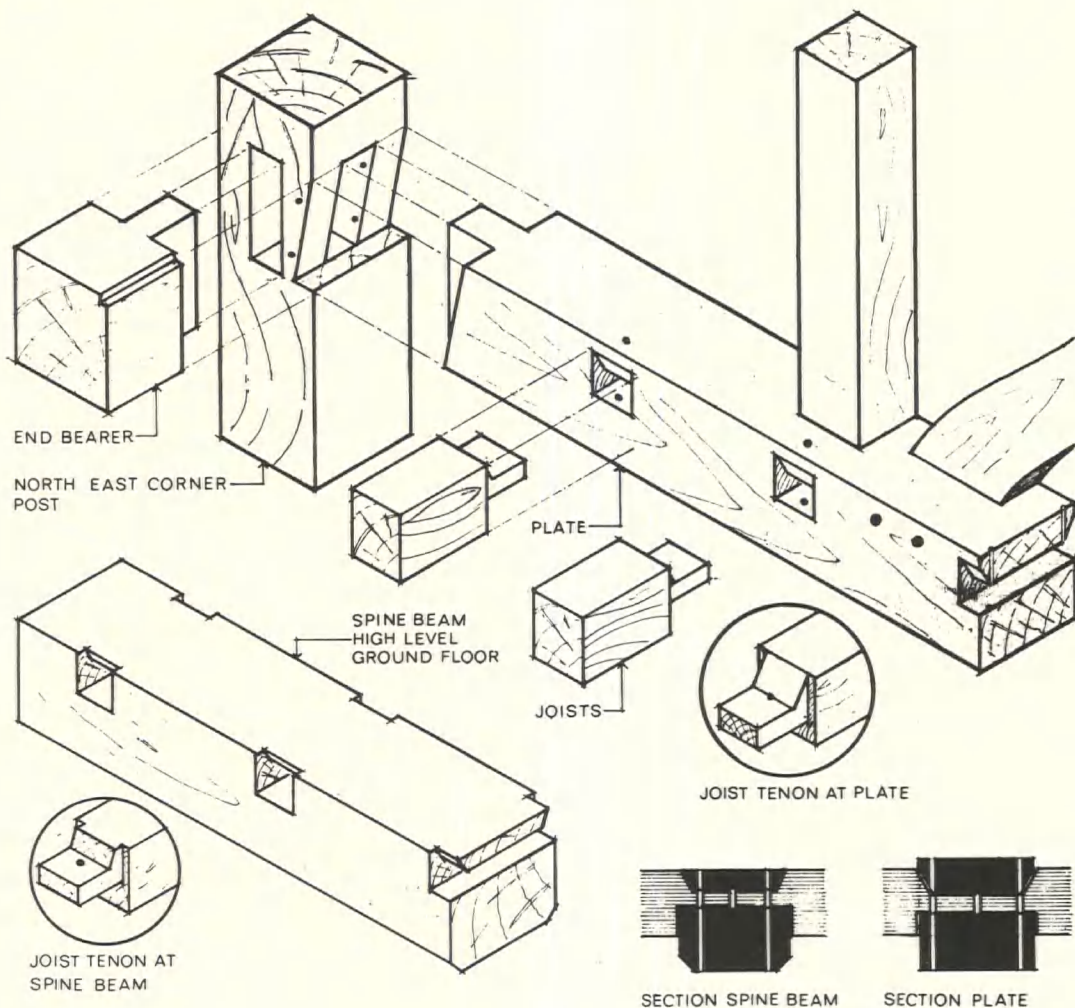


Fig 6 Calcutt Farm, Houghton Regis. Joints with the Floor Joists with the Spine Beam and the Rear Plate.

some of the jointing for the central window to be detailed. The first floor west elevation, had a window central on each bay and the spaces on each side of the windows had been divided into square panels by the introduction of horizontal rails tenoned and pegged to the posts and studs. In the case of the northernmost bay, an additional stud had been added on either side of those supporting the window to reduce the width between stud and post in order that the pattern of squares one above the other on either side of the window could be achieved. (fig 4).

Two pegged tenons can be observed on the front of the bressumer where the brickwork has fallen away and in both cases these are situated

on the centre line of studs framing the window opening.

The square panels alongside the window openings all have unpegged mortices on the centre of the inner face of each horizontal and vertical timber surrounding the panel. It is assumed that these would be for decorative braces and a conjectural arrangement of these is shown in figure 4. This form of decorative treatment is rare in Bedfordshire being in the "West country tradition," but there is an example at Meppershall where panels in the main elevation of the manor house are treated in this manner. The construction of the building, however, is not similar.⁵

EVIDENCE OF THE EAST WING

It is fortunate that during the reconstruction of the roof, an original tie beam of one of the trusses forming part of the east wing roof structure was left in position, together with sections of the two associated wall plates. This remaining tie beam is on the longitudinal centre line of the building and spans the northern-most bay. It had to be retained as this tie also acted as a continuation of the first floor spine beams supporting the attic joists, which in turn support the false ceiling. The section of spine beam spanning the southernmost bay has been removed, and ceiling raised to the level of the collars. It is apparent that the spine beams are original as they tenon at either end into the tie beams, the remaining east wing tie beam rests on the original top plates, one of which now acts as a "tie beam" in the new north gable end.

The cross-halved joint used where the original east wing top plates cross the top plates along the front of the building indicate that the gable end projected beyond the front (west) face of the building as indicated in figure 4. Mortices in the top of the tie beam indicate that the east wing trusses were of queenpost construction.

Floor joists joints along both sides of the rear high level ground floor plate show that the east wing floor continued through with the first floor joists on the same line and centres as the main block.

There are mortices in the east face of the north-east corner post which relate to the east wing. One is identical to that for the ogee braces existing in the north end at first floor level, the other being for a ground floor top plate.

Where the east wing northern wall plate crosses the north-east corner post a scarf joint occurs of the type shown in figure 5C.

Dimensions

The remaining portion of the original building measured approximately 13.5m by 6m.

PAINTED WALL DECORATION

A small section of painted wall decoration was found on the inner face of the door post to the first floor doorway between the north and central bays. A section of this design, which was white upon a red ground, is shown in figure 7. It

Fig 7 (Opposite). Calcutt Farm, Houghton Regis. Wall Painting. A section of the original.



is a repeat design of a fairly large scale, not geometrical, but with fairly free and regular foliage, fruit and flowers. As the design goes around the doorhead it can fairly be assumed that it is not the remains of a design on a piece of reused timber. The design would have continued on the wall plaster now destroyed.

Dr E. Clive Rouse considers that the design is most likely to be early Elizabethan, but with only a small fragment to examine, it is not possible to give a close indication to date.

DATING

It would not be wise to attempt to give a firm date for the building on the evidence available.

The most likely time of building is the late sixteenth century. This opinion is based on the general form of the structure; the use of joints secured with iron nails and the general sophistication of joints particularly the degeneration from the ideal form of the joist tenons.⁶

ACKNOWLEDGEMENTS

My thanks are due to Messrs. Maltglade Ltd. for allowing me to enter and survey the building, prior to its possible demolition. I would also like to thank Miss M.L.

Miller for assisting me in measuring the building and Mr J.T. Smith for reading this paper in draft. Specific thanks are also due to Miss P.L. Bell, County Archivist for Bedfordshire, for drawing my attention to the 1762 Gilpin map and for providing a photograph of the relevant section for reproduction in this paper; to the Director General of the Ordnance Survey for allowing the relevant portion of the Survey to be reproduced; to Mr J.T. Smith for his comments on the uses of the various rooms; and to Dr E. Clive Rouse for examining a drawing of the decoration and giving an opinion on the possible date.

NOTES

- 1 H.S.F. Lea, 'Houghton Regis', *V.C.H. Beds.* III (1912), 389-394, esp. Calcutt Farm has previously been illustrated D.B. Baker, A. Cox and E. Marten, *Bedfordshire Historic Buildings*, (Bedford, 1975), 4.
- 2 Bedfordshire County Record Office, map B553.
- 3 These paragraphs owe much to discussion with J.T. Smith.
- 4 C.A. Hewitt, *The Development of English Carpentry; 1200-1700: an Essex Study*, (Newton Abbot, 1969), fig 93A.
- 5 J.T. Smith, 'Timber-Framed Building in England', *Arch. J.* 122 (1965), 133-158, esp. 137-143. The Meppershall building is illustrated conveniently *Bedfordshire Heritage*, (Bedford, 1961), no. 7; see also *Beds. Mag.* 7 (1959), 45-46 and further comment with photograph *ibid.* 71.
- 6 Paper completed August 1975.

The Bedfordshire Archaeological Council is indebted to the Bedfordshire County Council for a grant towards the costs of this paper.

