Plaster

The plaster was made of lime dug out of the ground and prepared as a building material. Limestone or chalk was burnt, then mixed with sand and water to produce a mortar which hardened as the calcium hydroxide was converted to calcium carbonate. Indoor plaster was made from soft lime burnt from chalk and mixed with ox or cow hair; for outside a hard limestone was used, sometimes mixed with mutton fat to help increase water resistance.

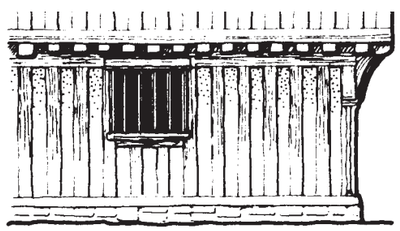
The roof was made from tiles—Yardley had a thriving tiling industry—which were bedded in lime mortar.

Finishing Touches

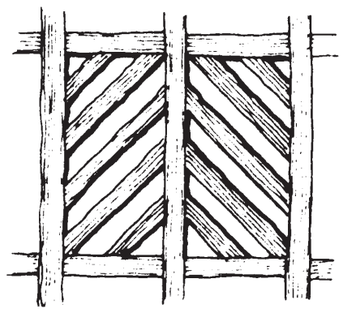
Once the floorboards were laid, then the Hall was almost finished. Last jobs would be putting glass in the windows and 'plumbing' the gutters and gullies with lead.

In the 15th and 16th century, timbers with very little structural importance were added to the framing to make decorative patterns. The wealthier the owner, the more patterns were on display. Blakesley Hall has three. **Close studding** on the ground floor, **herringbone** on the first floor, and **star** on the top floor. To emphasise his wealth, Richard Smalbroke had the patterns all around the Hall, not just at the front!

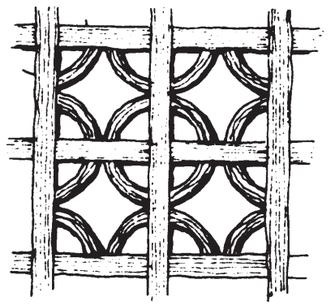
Close Studding



Herringbone



Star



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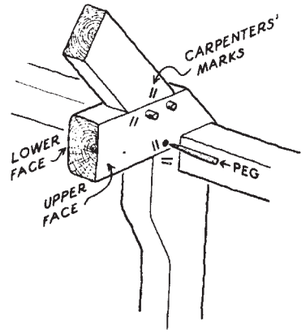
BUILDING

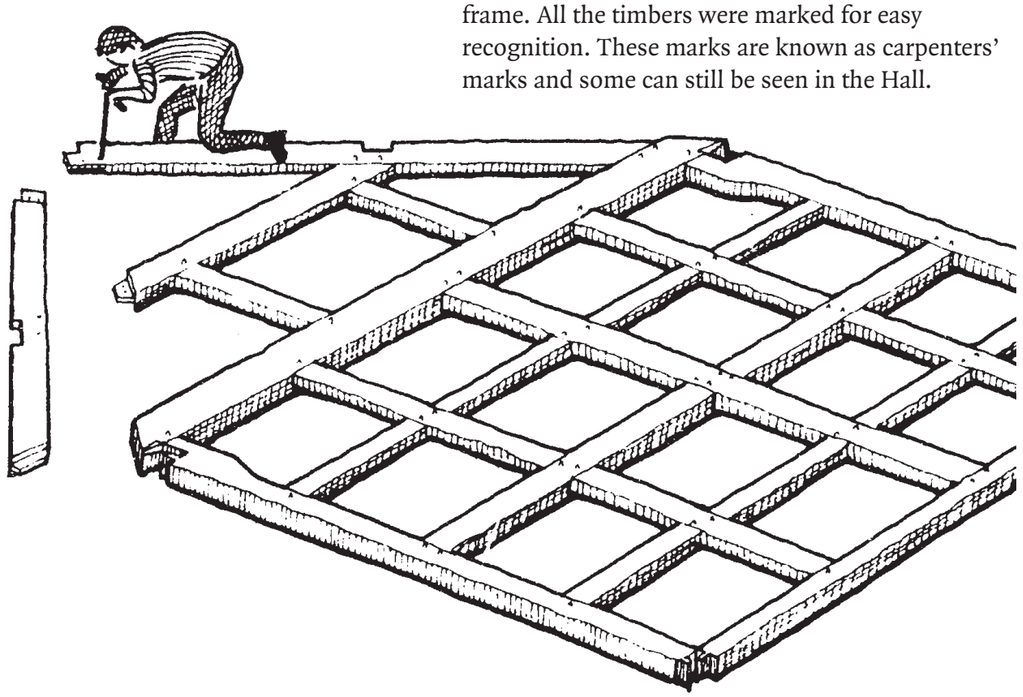
Blakesley Hall



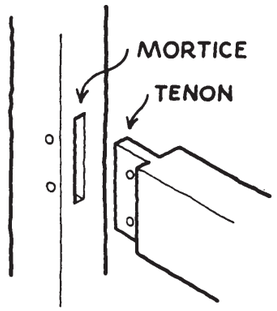
On site, the timbers were joined and pegged together—lying flat on the ground—into frames which would form the main structure of the Hall.

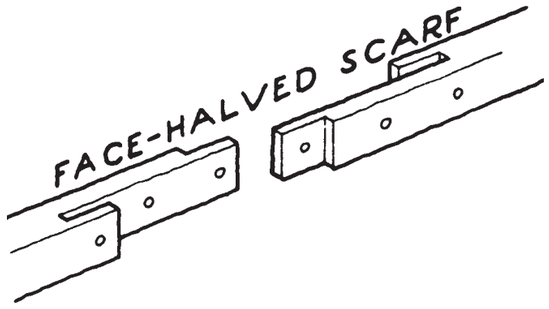
BLAKESLEY HALL is a timber-framed building. This construction method was common in the Tudor period, when oak was easily available. The description 'half-timbered' derives from the English practice of halving or cutting down the logs to an inner square section to use in building. Some of the other countries in Europe did not have hardwoods comparable to the English oak and had to use whole logs.

Richard Smalbroke would have planned Blakesley Hall with the help and advice of a master joiner. The site was cleared and perimeter footings of brick were put down ready to lay the **sill beam** (joined timbers running all around the base of the hall). Trees were felled and dragged to a timberyard for preparation. Carpenters sawed and shaped the main support timbers and those needed for the box-type frame. All the timbers were marked for easy recognition. These marks are known as carpenters' marks and some can still be seen in the Hall.

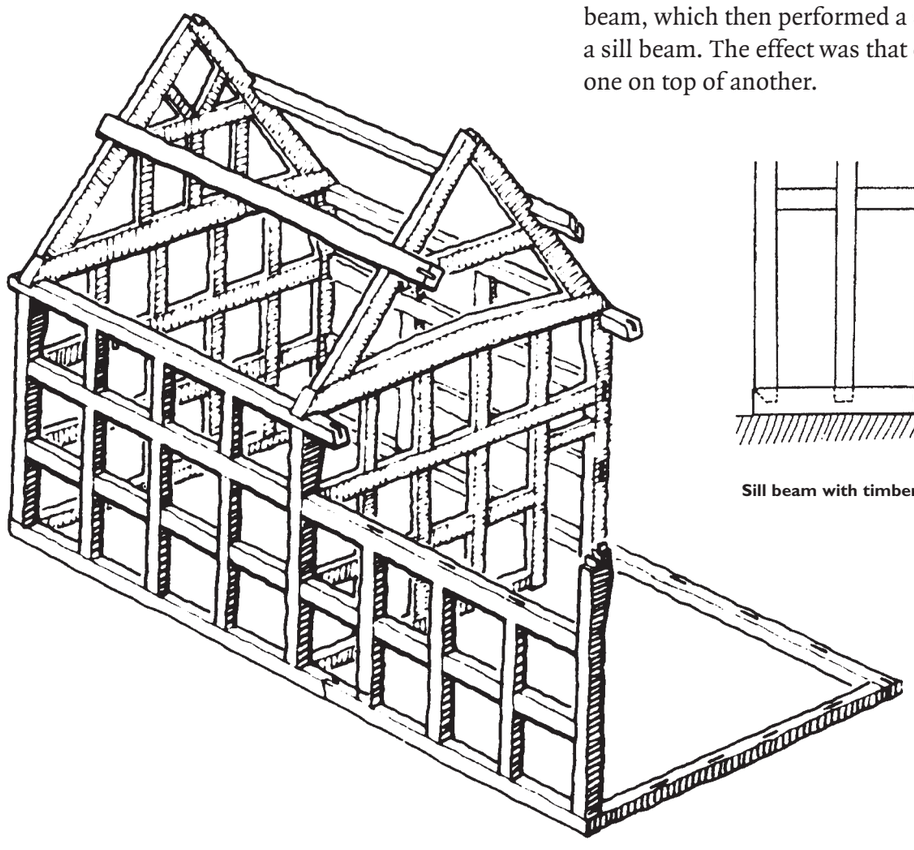


Joints
The most common were **mortice and tenon** joints, which slotted together and were held by pegs of wood. Other common joints were called **lap** and **scarf**.



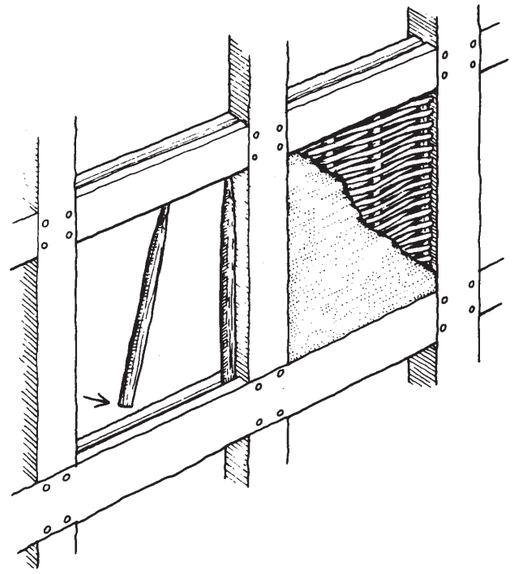


The frames were raised into position with the weight-bearing corner supports morticed into the sill beam. The top was tenoned into an horizontal beam, which then performed a similar function to a sill beam. The effect was that of a set of boxes, one on top of another.



Sill beam with timbers fitted into it

Filling in the gaps
The gaps in the frame can be filled in various ways. At Blakesley Hall the large squares are filled with wattle and daub and the longer, narrow spaces with laths which were then plastered over.



Wattle and Daub
Wattle was a form of basket work using split oak staves for the uprights and more pliable wood—hazel, willow, split oak strips—for weaving between the staves. Mud mixed with chopped straw, dung and urine provided a firm packing for the wattle between the timber panels. This **daub** was applied to both sides of the wattle, completely encasing it. A coating of plaster was added.

Lath infill
Where the upright timbers were placed closely together (known as close-studding), the gap was filled with horizontal laths, fitted or nailed in, then plastered over.