

THREE CRUCK BUILDINGS IN LANCASHIRE AND CHESHIRE

I

PUDDING PIE NOOK, WREA GREEN

BY ROBERT F. TAYLOR, B.A., A.M.A.

PUDDING PIE NOOK was a three-bay clay cottage built on crucks during the second half of the seventeenth century, and stood in the north-west corner of Wrea Green, near Kirkham, set across a long croft which stretched back from the green itself. The cottage faced east-south-east—east for the purposes of this report—and stood on level ground; the northern boundary of the croft was a small stream that had been turned into a field drain.

I THE CONSTRUCTION OF THE COTTAGE

Externally the cottage was 37 feet long and 14 feet 9 inches wide, although recent brick skin-walls on the south and east had added to these dimensions. The total height of the cottage was 14 feet, of which the walls accounted for no more than 6 feet. Demolition took place on 7 October 1963 in order to provide pedestrian access to a small estate of new houses to the north and west.

In plan the cottage, typical of the Lancashire coastal plain, consisted of three bays open to the roof, except for the southern end bay which originally had a loft floor at the level of the wall-top. In 1963 the only entrance to the cottage was by the door in the east wall leading directly into the central bay, the housepart, but there were clear traces of a second door next to it leading to the room behind the fire, which we may call the third bay, being at one end of the cottage and having differing uses at different times and places. This door had been blocked with early bricks, apparently in the eighteenth century; such a separate entrance is not commonly found in the Fylde, and this feature together with the absence of a fire in this room, points to a non-domestic use for the third bay at Pudding Pie

Nook. Presumably it was used as a workshop, for, being only 9 feet by 13 feet, it was too small to make a satisfactory shippon. There had been a window in the east wall, but the insertion of the west window had removed any evidence in that wall.

Immediately inside the door to the housepart was a wattle-and-daub speer or screen, about 6 feet high and 4 feet long, terminating in a post which had formerly supported one end of the mantel beam, which had spanned the cottage from the speer to the opposite wall and carried the great inverted cone of the wattle-and-daub hood above the original open fire. The beam and hood had been removed so that a chimney could be inserted, but an area of soot on the wall, beneath the whitewash, showed the position and size of the hood. Nearly 13 feet square, the housepart was cross-lit, originally with a six-foot long mullioned window, later replaced by a large window, in the east wall, and by a three-light mullioned window, later blocked up, in the west wall; probably there was also a small light in the ingle as well, this being a familiar feature in such cottages.

Originally divided into two rooms with a loft over, the service bay was converted into a single room early this century. The two rooms were entered separately from the housepart by a pair of adjacent doors; the party wall between them had been of wattle-and-daub, based on hazel rods let into auger holes on the underside of the beam above. The larger of the rooms, 11 feet long and just over 6 feet wide, was the chamber, originally with a steep stair in the corner beside the door, the traditional position for the stair or ladder in the Fylde. This stair seems to have been similar to that surviving at The Old Cottage, Great Eccleston, built round a newel post set on a heavy sleeper beam that also formed the first step. The smaller room, just under 6 feet wide, was the buttery, and once had a brick floor. Both rooms had a three-light mullioned window originally.

The walls of Pudding Pie Nook were one foot thick, with parallel vertical faces, and made of daub—clay and chopped straw well mixed with a little water, and laid in courses between 12 and 15 inches high. After each course had been laid, it was covered with a thin layer of chopped straw to protect the wet daub from the rain and weather when left to dry out and consolidate before the next course was laid on top. At one point the straw was missing, and the top of the lower course was seen to be smoothed as if washed by rain. During demolition these courses were clearly distinguishable, as were the individual dollops of daub of which they were built up. These were not more than 6 inches square, usually 6 inches by 5, and about

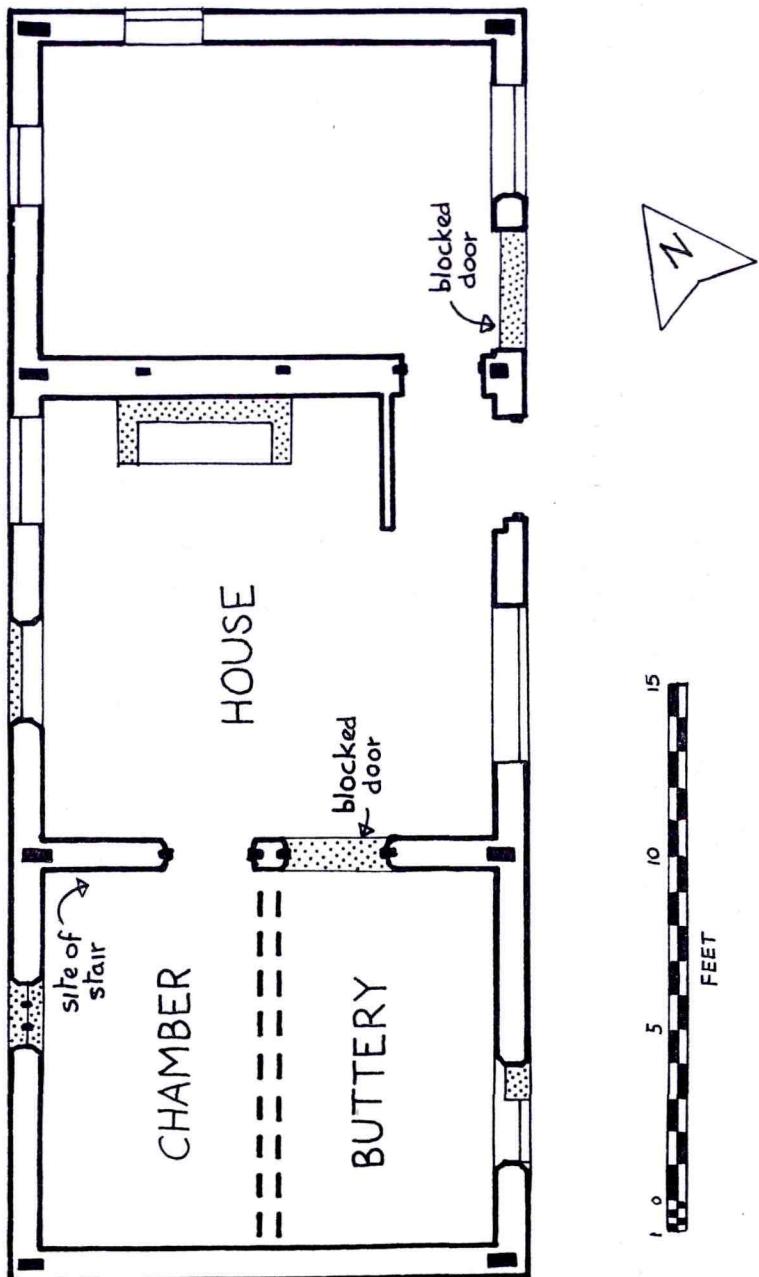


Figure 1.
PUDDING PIE NOOK, WREA GREEN: PLAN

3 inches thick, laid regularly like bricks. As the clay walls were of necessity built after the crucks and main timbers such as purlins had been raised into position, it would be reasonable to expect the roof to be thatched before the walls were built, so that it would afford better protection to the wet clay. Physical evidence of this is not forthcoming, but John Weld, in his *History of Leagram*, records a tradition that this was the sequence of building in the clay cottages near Chipping. It was not possible to say whether the clay walls at Pudding Pie Nook had stood on the usual cobble footings, because a brick footing had been inserted within the last hundred years. The internal faces of the walls had been roughly smoothed over when built, obliterating most visible traces of the coursing, after which a thin rendering of daub was applied like a plaster, up to a quarter of an inch thick. There may have been a similar rendering to the outer faces of the walls, though erosion and exposure to the weather had removed most of the evidence. Three layers were isolated on the western wall, the latest certainly having been applied before 1920; it was distinguished from the earlier ones by having been tempered with grass instead of straw, and by being secured to the wall by small wooden pegs 3 inches long, which had been driven into the wall after the rendering had been applied.

The east wall was leaning outwards badly, and had been propped by a brick skin wall, probably early in the nineteenth century. The south wall had been exposed to the weather, and a sherd in it pointed to extensive renovations in the last century. It should be noted that this later work was superficially indistinguishable from the earlier clay walls, but was not coursed in the same way. The east wall, on the other hand, had been kept weatherproof by continual whitewashing and colourwashing—at least fifty coats remained, beneath the later brick skin, many of which were blue and some of which were red.

The cottage had four trusses, all of which were identical in style and technique, including the anomalous third truss, which was a bastard truss. The tie-beam of each cruck-truss was on the south side, and assuming that the task of rearing the trusses was done in the most logical sequence, we can suggest that erection began with the south truss and finished with the northern one. As there are no assembly marks on the timbers, the trusses have been numbered in this supposed sequence of erection for greater convenience. The trusses were A-crucks, with straight blades and slightly curved blocking-pieces that approached the shape of upper crucks, and also reached up as far as the collar or even higher, an unusual length which made

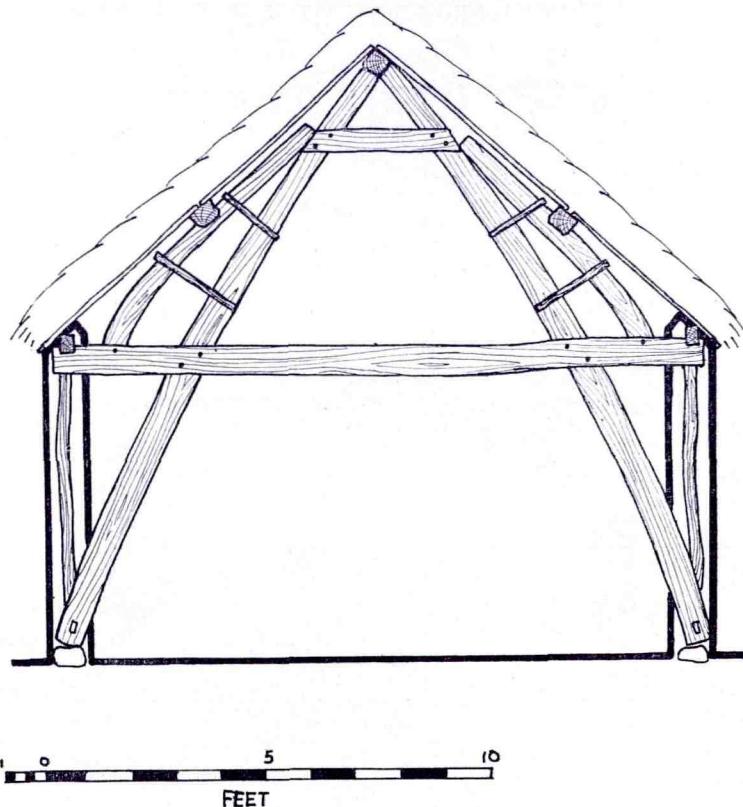


Figure 2.

NORTHERN TRUSS FACING NORTH

them more like principal rafters than is normal in this type of truss. Besides carrying the purlins, these blocking-pieces also carried wind-braces of riven timber, of the same scantling as the rafters. Apart from the normal pegs of riven oak, the blocking-pieces were further secured to the cruck-blades by slender tapering struts of trapezium-section, which slotted into carefully cut and shaped channels in both cruck blade and blocking-piece.

Each truss had a single collar some 8 inches below the apex; the cruck-blades barely touched at the top, forming a V-shaped notch for the seven-inch ridge-pole to rest in. All of the trusses except the second one were formed of single trees halved along their length; the second truss was made of two slender trees.

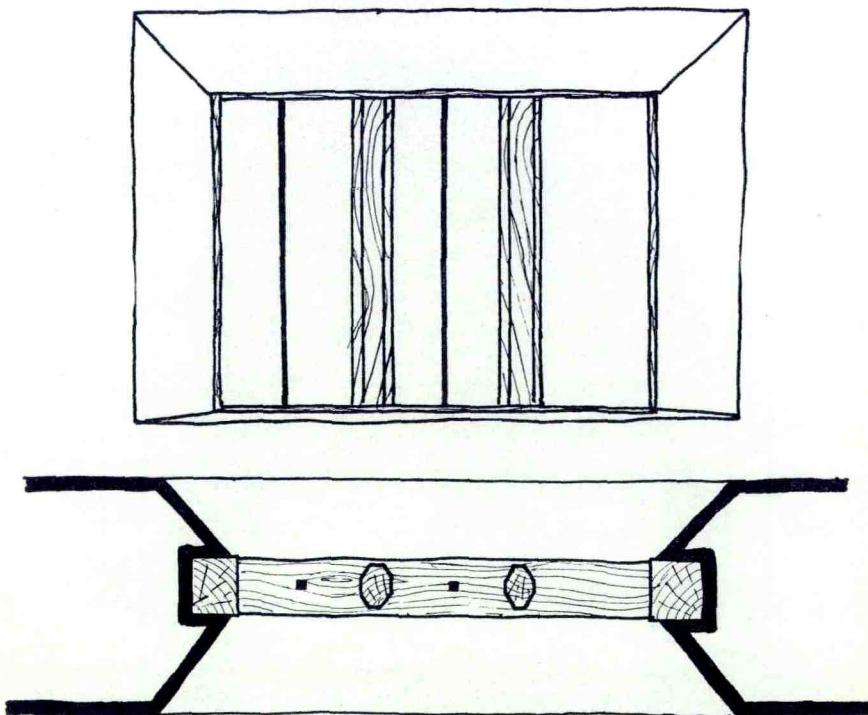


Figure 3.

ELEVATION AND PLAN OF WINDOW IN THE CHAMBER

Scale $\frac{1}{10}$

The blades averaged 9 inches by 4, while the blocking-pieces and tie-beams were lighter, only about 6 inches by 4. There were mortice-holes in the feet of all the cruck-blades on the face which would have been uppermost when the truss was assembled for rearing. These mortices would have taken poles which, when borne upon during rearing, would have helped to stabilise the truss and prevent it from slipping forward as it was raised.

The third truss, behind the fireplace, was a bastard truss. The western half was a normal cruck-blade comparable with the others in the cottage, while the eastern half was a simple truss with a principal rafter whose lower end was tenoned into a six-inch square post in the outer wall. During demolition it was not possible to examine the tie-beam in sufficient detail to be able to state categorically that there was no half-joint for a cruck-blade, but no such joint was observed, nor any other

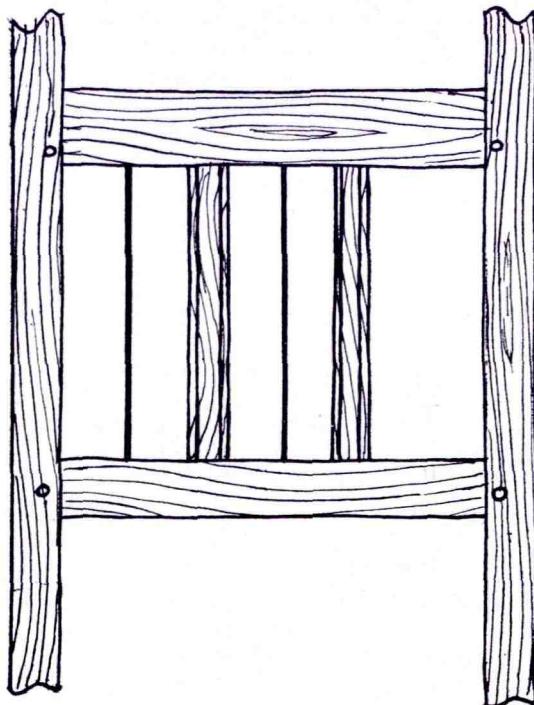


Figure 4.

FRAMEWORK OF WINDOW IN THE CHAMBER

Scale $\frac{1}{10}$

feature that would suggest that this truss was a later alteration. If there had been a cruck-blade in this position, the door between the housepart and third bay would have been almost impossibly low; such a door is invariably found in three-bay cottages in the coastal plain, and this not only gives a reason for the existence of this anomalous truss but also argues strongly for it being an original feature.

Traces of several original windows were found, their component parts incorporated into the daub walls in such a way as to leave no doubt as to their primary nature. In the west wall of the service bay was a three-light wood-mullioned window, 21 inches wide and 15 inches tall. The sill and lintel were mortised into the jambs, the upper ends of which were nailed to the wall-plate, while the lower ends were about 18 inches below the sill, in the thickness of the wall. In the centre of two of the three openings there had been a quarter-inch vertical iron bar. Apparently the windows had originally been

unglazed; the later diamond-leaded panes of pale-green cylinder glass were insertions of the early eighteenth century. The absence of an intermediate bar in one light of a mullioned and unglazed window is seen in other buildings of the period, for example at the brick-built Turner's Farm, Samlesbury, where in a well-made four-light timber window, the third light lacks the intermediate wooden bars of the others. The clay around all the original windows at Pudding Pie Nook had been carefully chamfered and smoothed to give a splay on both sides and the top, inside and out, partly to admit more light, but perhaps also to improve the appearance of the windows. All of the original windows in the cottage had been unglazed and mullioned, the largest being in the housepart, 15 inches high, 4 feet long, and probably of six lights.

II THE DATE OF BUILDING

Although a date in the second half of the seventeenth century is here suggested for Pudding Pie Nook, it must be remembered that close dating of the clay buildings of the Lancashire coastal plain is not yet possible. Cruck building appears to have gone out of use by about 1725, and was replaced by load-bearing clay walls and brick. Dated crucks are too few to allow any stylistic sequence to be worked out, but a few pointers exist. Blades made from a single tree seem to be earlier than those made from a tree sawn down the middle, although the latter type probably indicates a relative unavailability of suitable timber, and the presence of both types at Pudding Pie Nook is significant. However, massive undivided baulks date mainly from the years before 1650, as at Newsham Hall Cottage, which has been dated to not long after 1600 by a painting of the coat of arms of Elizabeth I with the supporters of James I. Similarly, curved cruck blades are generally early, occurring at Newsham Hall Cottage, but again the comparative lack of suitable timber in the later years of the century may be the determining factor. Straight cruck blades, usually requiring blocking-pieces, tend to be later than curved ones, but the upper crucks at Dolcis, Preston, dating from about 1700, are curved while most others in Preston are straight. Wind-braces survive the cruck tradition, and occur as late as about 1750 in Wrea Green, but the later ones are almost invariably straight, while the earlier ones are often curved; at Pudding Pie Nook the curve was very slight. House plans are not very diagnostic in the seventeenth century, the variations being more indicative of social standing than date. Real changes in plan only come in the eighteenth century,

when new building materials allow new ideas to become manifest. By the middle of the century the doorway was moving away from the fire to the centre of the facade, and walls were becoming higher and so permitted better accommodation on the first floor. Pudding Pie Nook, however, is typical of the yeoman's house of the seventeenth century, and its plan and basic concept of style of living can be taken as typical of most houses in the area until the middle of the eighteenth century.

III LIFE IN THE COTTAGE

The original room-use of Pudding Pie Nook and other cottages of the Lancashire coastal plain can be reconstructed with a considerable degree of accuracy, mainly on the basis of probate inventories and surviving traditions. The principal room was known as the house, or sometimes the firehouse, both significant names. This was the centre of life, the heart of the building, into which the only entrance opened, and from which all other rooms were entered, except for the lofts and attics. Furthermore, the only fire in the cottage was in this room. Thornber in 1837 describes the room as typically "dark, low, open to the smoky rafters, well stored with bacon, dried beef, etc., having a large open fireplace, over which a low heavy oaken beam ran across the room, forming a sort of canopy, beneath which was the family hearth." Around this fire-hood or chimney, between the mantel-beam and the rear wall, was a small platform, "what was called the soot-loft, the depository of lumber". This feature is now rarely seen, but still exists at Stock Cottage, Haskayne, as a clay floor, based on wattle, on either side of the hood. The furnishings of the house, as given in seventeenth-century probate inventories, consisted of a table, a varying number of forms, chairs and stools, with or without cushions, frequently a chest and other storage facilities, and the cooking equipment in the ingle or "chimney corner" as one inventory calls it. Although these were frequently lumped together as "other irne geare", and varied according to the affluence of the householder, the basic equipment consisted of the actual fire-irons, pots and the hooks to suspend them over the fire, spits, griddles and other toasting irons, and smaller items such as iron bars and ladles. The salt was traditionally kept in a box near the fire, and goods kept in chests in the house included oatmeal and the best linen.

The main feature of the buttery, the narrower of the two rooms opening off the house, was the shelves lining two or three of the walls, and surviving in some cottages until the present

day. Thornber calls this room the pantry, and this would certainly have been part of its function, for though the inventories fill the shelves with pewter, brass, earthenware and treen vessels, and "other odd things", and only rarely itemise churns and salting-tubs, smaller items of food can hardly be expected to find mention.

Next to the buttery lay the chamber or "chommer", a name now confined to a ground floor room, though in the seventeenth century chambers occur on the first floor as well. Inventories frequently distinguish between the "chamber above" and the "chamber below", although functionally there was little or no difference between them, or between an upper chamber and a loft. It may be that the term loft was only applied to attics, and that upper chambers were structurally semi-attics, with very low walls, but this is not certain. The loft or upper chamber above the service bay was always reached by a ladder or stairs from the chamber or lower chamber, and there is a tradition that the parents occupied the ground floor room, and so controlled access to the room occupied by their children. The inevitable item of furniture in all chambers was the bed, that in the loft being generally placed centrally because of the limited headroom, as Thornber points out. Sometimes two beds are mentioned in the one room, complete with feather mattress, pillows, and either linen or canvas sheets. Sometimes there would be a table and several chairs, pointing to the chamber being a sitting room as well as a bedroom. This arrangement survived until 1962 at Dole Cottage, Eccleston, where the chamber was the bedroom of the cottage, with convertible sofas so that it could serve as a sitting room by day. Arks and chests are usually mentioned in chambers, full of linen and similar household goods, and also meal and other provisions. Sometimes the loft is used simply as a storeroom, perhaps because access was often only by movable ladder, as at Dole Cottage.

Finally there is the third bay, reached by a door beside the fire of the house. This is the room that is omitted in poorer cottages, and its function varied according to the social standing and occupation of the householder. If it was used for domestic purposes, it was called the parlour, and was furnished with bed, table and chairs as a chamber; in such cases the chamber may be a bedroom only. Such domestic use points to an occupier of superior standing, and finds structural expression in a second fire, built against the inner wall, so that both fires are together in the heart of the cottage. Pudding Pie Nook and perhaps the majority of cottages had no second fireplace, and this room would have been a workshop. This intimate relationship of

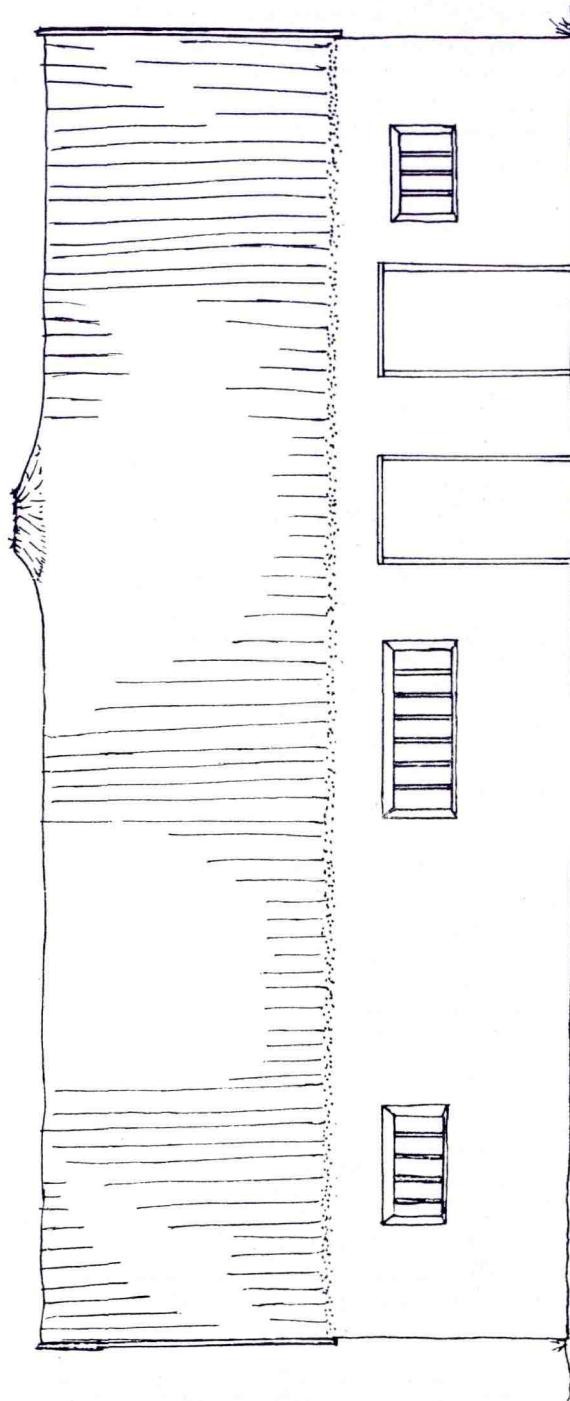


Figure 5.
PUDDING PIE NOOK: RECONSTRUCTION OF SOUTH-EAST ELEVATION

dwelling and workshop would have been quite logical at a time when, as inventories demonstrate, many yeomen derived their livelihood from both a small farm and practising a trade or craft at home. At Watts Cottage, Brewery Lane, Formby, the third bay was a smithy; at The Old Cottage, Great Eccleston, the bay was an addition, which, according to tradition, had been used by rush-weavers, and later became a barn. The original use of this room at Pudding Pie Nook cannot be known, though the absence of a fire, and its separate entrance, suggest a workshop; the Tithe Map of 1839 tells us that there was a weaving shop here, but it was probably a separate building in the garden at that date.

IV CLAY BUILDING METHODS IN THE FYLDE

Clay building is a common feature of vernacular architecture in the Lancashire coastal plain, and clay walls can be classified as load-bearing or non load-bearing, with or without internal timber studs, and as having vertical or battered faces. All walls associated with crucks are necessarily non load-bearing, the main weight of the roof being carried by the crucks. Floors are also borne by the crucks, because the main beams rest on the tie-beams. The only exception is found when the housepart has an attic above it; then one end of the floor-beams rests on the mantel-beam. Significantly, this beam is frequently a re-used, and consequently well-seasoned, timber.

The simplest type of clay wall is that found at Pudding Pie Nook, and consists of clay mixed with chopped straw as a binder to give the material added cohesion, and sometimes stones to act as a filler; according to tradition cow dung and urine were also added, the latter to act as a hardener. Ideally the clay would be dug and be left exposed to the frost during winter; the final working-up was called treading, when the chopped straw and water were added to the clay and mixed by being trampled by a horse, or even children, if we are to believe tradition. The only cost involved was the hire of the horse—the Thirty Men of Kirkham paid sixpence for this in 1765. The clay walls would be built up in courses, gradually, for the lower parts of the wall would have to consolidate before any weight was put on them. Usually there was a cobble footing of variable height, which acted as a primitive damp-preventing course, a very necessary precaution. Where it is possible to detect any method, the clay seems to have been laid in place in dollops, presumably with a convenient implement such as a spade or fork; generally they are about 3 inches thick, but the width,

which would depend on the implement used, varies from 5 to 6 inches as at Pudding Pie Nook to about 12 inches as at Hill Cottages, Larbreck. The height of the courses varies similarly, but it may be that they tend to be lower in load-bearing walls, which also tend to be thicker. At Hill Cottages, for instance, the courses were 14 inches high, equal to the thickness of the wall; as a rule, the height of the courses rarely exceeded the thickness of the wall. This type of wall-construction was very long-lived, and survived until the end of the eighteenth century with thick load-bearing walls.

Clay walls are also found with an internal timber studding, and superficially resemble the first group of walls, though they rarely exceed a foot in thickness. The studs are generally adze-squared timbers, mortised into the wall-plate, and their spacing varies from about 10 to 18 inches. At Newsham Hall Cottage, Woodplumpton, there is a secondary wall 8 inches thick, with 4 inches by $1\frac{1}{2}$ inches squared timbers mortised into the wall-plate; against these timbers dollops of clay about 5 inches square and 2 inches thick had been piled, sloping downwards away from the timbers slightly; no traces of coursing could be seen in the small section preserved. A more primitive type of studded wall is that with battered faces. At The Old Cottage, Great Eccleston, the walls of the original two-bay cottage were over 2 feet thick at the base and tapered to 18 inches at the top, and contained a very light internal frame of studs at 18-inch centres. Catterall Hall Cottage had a somewhat thinner wall, tapering from little more than 18 inches to 9 inches in the same height of 6 feet; the studs were roughly squared and set at intervals of about a foot.

Wattle and daub should be separated from these studded walls, for it is a distinct tradition. Although the technique is ancient, it is found used mainly for internal walls, and also for virtually all nineteenth-century clay building. These two facts, and the corollary that it would be the type of walling most frequently met with during alterations to cottages, probably account for the emphasis placed on it in the past. But except where a light wattle frame is buried in a thick clay wall, it seems to be confined to less sophisticated external walls and internal partitions. At Brook Cottage, Inskip, the wattle wall is 9 inches thick, and is based on posts at 30-inch intervals. The norm for external wattle walls is perhaps 9 inches, and for internal ones 5 inches.

Along with these three principal constructional traditions should be placed a method which must have come naturally to people living in an area where peat-mosses were such an

important factor in everyday life. So far it has not been possible to suggest when peat was first used for building, but most surviving examples appear to be comparatively late. The peats used measured 6 inches by 8, and ranged from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches thick. At Brook Cottage, Inskip, they were laid horizontally with thick bedding-joints of clay, the technique being very reminiscent of brick walling; in this case they were used as a repair and may date from the eighteenth century. The peats were hidden from view by a protective rendering of clay, for when dry they would be liable to rapid erosion. A variation in technique is seen at Grange Cottages, Pilling, where the peats are laid on edge, again with a thick bedding joint of clay but here with thin rising joints. In both cases some extra stability was given to an otherwise thin wall by inserting posts at wide intervals, of about 3 feet.

Although flags are often found in cottages today, the original floors were in most cases of earth. Puddled clay would be run over the area to be floored, and allowed to set, presumably with the help of some process aimed at consolidating the clay. It is alleged that a puddled clay floor was laid in Newton, near Kirkham, about 1920, the puddle being smoothed and consolidated by the workman who shuffled over the surface with two pieces of flat wood fastened to his feet. The floor at The Old Cottage, Great Eccleston, was about 6 inches thick, speckled with a little lime that can hardly have helped produce a better floor, and was considerably worn in the middle. Rushes would have been used to keep the surfaces damp and coherent, though in the nineteenth century they seem to have been replaced by quarry sand, normally used on flag floors. Upper floors of clay are now very rare, but the small area surviving at Stock Cottage, Haskayne, is simply clay laid on a wattle base. Clay laid on floorboards has been found in Preston, but not in the coastal plain to my knowledge.

ACKNOWLEDGMENTS

My wife and I are grateful to Mrs. Moore, the last occupant of Pudding Pie Nook, for permission to make the original survey, and for her hospitality then and on the day of demolition. The cottage had been previously investigated by R. C. Watson (*TRANSACTIONS*, Vol. 109, pp. 61-6). The writer's earlier conclusions were mostly shattered when he saw the cottage demolished, a salutary experience and a moral tale. The Lancashire Record Office contains a good collection of

inventories, but few of those useful to our purpose have yet been published; an interesting selection is to be found in R. C. Shaw, *Kirkham in Amounderness*. Thornber's *History of Blackpool* (1837), contains much useful background material, while an introduction to the subject of diet, necessary when judging the style of living in our cottages, is Roeder's article in Lancs. and Chesh. Ant. Soc. T., Vol. XX, though the quotations are not all accurate. The best introduction to clay-building techniques is Chapter XII of Alec Clifton-Taylor's *Pattern of English Building*.

The original survey and notes may be consulted at the Harris Museum and Art Gallery, Preston, to the governors of which I am indebted for permission and facilities to carry out the work.

II

SCHOOL HOUSE FARM, UP HOLLAND

BY G. H. A. BANKES AND J. P. HAWORTH

SCHOOL HOUSE FARM lies along Ormskirk Road, Up Holland, about half-way between Hall Green and Holland Moor. The earliest documentary reference which has been found so far is that given in J. J. Bagley's *Upholland Grammar School: the Evolution of a School through Three Centuries*, in which it is stated that when Robert Walthew endowed the Free Grammar School of Upholland in 1667-8, he gave the trustees the land of School House Farm to help finance the School. The present School House Farm consists of an early nineteenth-century house built onto a cruck house, which formed the major part of the School House Farm of Walthew's day. This house has one pair of crucks, the position of which can be seen on the floor plan.

The north wall consists of its original timber framework, with an infilling of nineteenth-century bricks, resting on a stone foundation. There are three windows let into this wall: the two most westerly retain their original framework and are in their original positions; but the third one, next to the modern house, has a more recent frame, and was possibly put in at the same time as the brickwork. Just to the west of this third window there is an upright beam on which there is some primitive moulding. This might have formed one of the door jambs for the original doorway of the cruck house.