

Traditional Dwellings in the Cheshire Countryside

BY

WILLIAM A. SINGLETON,
M.A., Ph.D., B.Arch., A.R.I.B.A., A.M.T.P.I.

THE economic conditions and general growth of an area are often governed, in a large measure, by geographical factors. Circumstances such as proximity to the sea, access to an important highway or the shelter of a mountain range, frequently exert as great an influence on the development of a region as its natural resources or the character of its people.

In Mediaeval times, Cheshire, with its well watered plains, extensive forests and the variety in the configuration of its surface, had physical features which determined to a large extent its economic and social progress. The broad lines of development have been centred upon agriculture, both pastoral and arable, with a pattern of individual farms surrounding small villages. These in turn were dependent on marketing centres. The soil overlying the triassic formation, which has made this agricultural economy possible, has always been considered among the most fertile in England.

The whole settlement pattern of traditional domestic buildings in the County has been developed, since the early Mediaeval period, along the lines of individual small holdings, the land for which was generally won directly from the forests or 'wastes.' This structure is still clear today despite the intervening industrial development. Cottages and farms were clustered together in the village, with a few perhaps scattered outside, and each surrounded by its own small garden or 'toft.' All these rural communities were self-supporting, with home-grown food, home spun and woven fabrics, tools fashioned by the carpenter and shod in iron by the blacksmith. The homes were constructed by the village mason, carpenter, thatcher, and other craftsmen.

Domestic buildings vary greatly in size and importance in accordance with the social status of their owners, and it is obvious that this factor is of the greatest importance and must be considered at an early stage. The range of sizes to be found in the rural areas of Cheshire varies from the humble cottage of the peasant to the manor house, or 'Hall' of the landed gentry, with suitable types for the various social grades between these

two extremes. In general, any new developments in the field of structure, or in the use of materials, would first be apparent in the larger houses, whence they would be transmitted in turn, and by ever diminishing degrees, to the smaller types. It is natural, therefore, that the smaller dwellings retain particular traits of local character for longer periods than the larger ones.

In the short space allotted here, it is not possible to review all these size-types, but, as the lesser dwellings retain and illustrate the characteristics of local traditional style for longer periods, and in a simpler form than the larger ones, reference is being made only to, what may be called, the "Cottage" and "Small House."

Throughout the County, domestic buildings of a very wide range of dates are to be found, but, because the smaller dwellings did not achieve a reasonably permanent form before 1500, it is natural that few, if any, can definitely be placed before that date. Likewise, few traditional dwellings were built after 1840, as the impact of the industrial revolution on the use and manufacture of building materials and techniques almost completely destroyed the local methods and styles. This industrial trend was particularly felt in the great advances that took place in the field of transport. Whereas, up to this time it was unusual for building materials, because of their weight and bulk, to be transported more than a few miles, distance was no longer any deterrent and materials were transported freely from one area to another.

In addition, due to the various geographical, geological, economic and social conditions prevailing in the area, many different local and regional styles and practices have been found. Indeed, the further this subject is pursued the more it becomes evident that these diverse factors, physical and otherwise, have dictated the structural materials available in each locality and in every period. For example, on the Cheshire "Plain" prior to the 16th century, timber, principally oak, was the generally accepted structural material, and it remained in use, on a gradually diminishing scale, until about the end of the following century. In the foothills to the Pennines, however, the supply of timber, with a very few exceptions, was extremely poor and local stone was the staple building material.

It is a well established fact that traditional dwellings were, in general, very simple units, where the outer coverings confined and narrowly defined the interior. Indeed, the external appearances reflected very faithfully the inner facts of use and disposition. The available constructional materials of any area and period were used logically to provide a suitable internal living space for the owner or tenant in accordance with his social status. The basic elements of wall, roof and floor were provided with suitable windows, doors, chimneys, etc., all of which were arranged logically within the primary elements and almost the

whole of the internal arrangements could be easily plotted and assessed from the outside.

A careful study of traditional dwellings will reveal, that, after consideration of the various factors related to size, the next most important index is that of the basic walling material. Indeed, if a systematic classification of these buildings is carried out, it is desirable to make this factor the basis for the whole system.

Cheshire contains examples of three primary walling materials, brick, stone and timber. The regions of their use have been defined directly or indirectly by the geology of the locality. Considering the county as a whole, brick dwellings predominate, followed at some little distance by sandstone, gritstone, and timber. Each of these materials has its own very special characteristics, which have been fully utilised and exploited by the local craftsmen and moulded into the various traditional details peculiar to the area.

Bricks are, at present, the most universal of building materials, but it would be wrong to imagine that this was the case when a cheap and plentiful supply of timber was available. The majority of brick dwellings in the county date from the latter half of the 17th century or the first few decades of the 18th century.

The bricks themselves, which were manufactured from the boulder-clay of the region, were hand-made and those generally used were approximately 9 inches long by $4\frac{1}{2}$ inches wide and $2\frac{1}{4}$ to $2\frac{1}{2}$ inches thick. Variations of these sizes have been recorded where the length has been as little as $8\frac{1}{2}$ inches and as great as 10 inches, the width as much as 5 inches. No obvious evidence of larger bricks, which may have been used on account of the brick tax* (1784-1850), has been found. However, there is a tendency for the thickness of bricks to increase towards the beginning of the nineteenth century, while colour, texture and size became more uniform.

For the main part, the type of brickwork found in the area can only be styled "plain." In fact, only very few examples of any form of decorative work are to be found. One interesting feature emerges in that only a small percentage of brick dwellings in Cheshire were constructed in "English" bond, the remainder making use of "Flemish" or variations of "Flemish." This seems a peculiar fact, as it would be reasonable to suppose the "English" bond originated or was extensively used in England. However, it is probable that many more Flemish craftsmen were employed in this country on brick-making and bricklaying than is commonly supposed. The early bricks were well-burnt and irregular in shape,

*NOTE—The tax on bricks was imposed in 1784 and not repealed until 1850. The tax was levied on the basis of so much per 1,000 bricks and it is this fact which tended to encourage brick-makers to produce larger bricks.

which facts, combined with the rather thick ($\frac{1}{2}$ inch or even over) and irregular joints, made up the vernacular character of traditional domestic buildings in Cheshire from the late seventeenth century onwards.

Whilst timber dwellings were being constructed throughout the lowland portion of the county, the weather in the high uplands to the East necessitated a stouter protection than wattle and daub could provide. The result was the traditional sturdy cottages and small houses in stone. Their character was largely determined by the local masonry and the form in which it could be obtained. This is an important fact, and it must be borne in mind that the smaller dwellings were invariably built with stone from the local quarry, and it is to this fact that they owe so much of their resultant variety in colour and texture. In most cases their charm is entirely dependent upon this intense local character and aesthetically they are always appropriate to their surroundings and, in fact, appear to "grow out" of the landscape. Their sturdy appearance, however, often belies their powers of resistance to cold and damp, especially as floors and even walls often rest directly upon the earth without any base or foundation.

Two distinct types of natural free-stone are found in the county. Millstone grit, or gritstone as it is generally called, is the formation which covers the portion of the county adjoining the Pennines and Derbyshire. It is a hard stone which does not lend itself readily to any form of incised decoration. It must always be used in angular or simple moulded shapes, and it has the very considerable advantage of good resistance to climatic erosion. It is rather coarse in texture and its colour is a dull golden brown, which often became very dark with age and weathering.

The other and, in many ways, the least interesting masonry type in the area is sandstone. It is found in the several small outcrops of rock which appear through the boulder clay of the county at such places as Alderley, Lymm, Beeston and Burton. It is particularly soft, rather porous in nature and therefore weathers badly. It is normally a dull reddish brown in colour, although a wide range of tones is to be found. It has a rough texture, is easily worked and lends itself to a richer form of detailing than is possible with the gritstone. Local masons were quick to note this fact, but, unfortunately, it is so soft that many of the mouldings and other decorative features have suffered badly from the erosion of wind and rain. In complete contrast to gritstone, this material is used in large blocks laid in courses and forming a rough ashlar wall. In addition to the use of this stone as a main walling material, it has been used in several instances to provide a base or plinth for timber framed buildings.

The earliest stone examples were constructed of unworked, or very slightly worked random-rubble, laid in two distinct "leaves." The cavity between these was filled in with small stones and mud. The thickness of these walls varied considerably, but, as a general rule, twenty-two to twenty-four inches was a minimum. The bonding material was composed of clay, beaten to an even consistency with straw and dung. For these early rough masonry buildings, the stones were seldom quarried, an ample supply generally existing on the surface of the ground or in the beds of rivers and streams. They were sometimes used in their entirety, but more often were broken up in a simple manner and cleaned of all irregular projections.

Since these early examples, the whole trend of masonry construction has been towards more regular stones and more even coursing and joints. Eventually, the machine cut stone of the late nineteenth century, which is so unsympathetic to the rural landscape, appeared in large quantities and new mechanical techniques superseded traditional methods.

Cheshire falls within a group of counties in the North-West Midlands which were the chief timber producing districts in Mediaeval times. The county contained the vast forests of Macclesfield, Delamere and Wirral, and indeed the whole region appears to have been well wooded. Careful field study reveals that, not only are there a considerable number of timber dwellings still extant, but a great many more buildings which were timber-framed at one time. No complete examples of very early timber dwellings are to be found, and those still surviving belong mainly to the late 16th and 17th centuries or even later.

The earliest type of timber house was constructed with two or more pairs of "crucks," one pair at each end. The roof and walls were always independent of each other, whatever materials were used. The "crucks" were large curved, or naturally bent, timbers. Often a whole tree (possible trunk and suitable branch) was split down the centre and the two sections faced together to form a rough arch. The top of each was "halved" and notched into the other to provide a support for the ridge-pole. Each pair of "crucks" were fastened together laterally and kept in place by a horizontal beam, into which they were pegged with oak pins. This beam supported a purlin, which spanned between pairs of "crucks" and formed a "wallplate" for the roof timbers. As a general rule all the main timber framing was cut and shaped in the forests, each member being given a mark to relate it to the others. It was then transported to the site of the proposed building and framed together. The timber framework linking the "crucks" and forming the sides of the house was constructed of horizontal and vertical members, which from base to eaves were mortised, tenoned, notched and pegged together into a homogeneous whole, quite independent of wall-filling and roof.

The first member to be laid was a large oak cill, around seven inches square. It was laid upon a low plinth of stone or brick about twelve inches high by nine inches wide. Into this cill were tenoned the upright posts which were securely pegged in position by oak pins about 1 inch in diameter. The top of the frame was a kind of inverted cill, again mortised for the upright, and pegged. Between these vertical posts were placed the lesser important horizontal members, which were also tenoned and pegged into the uprights.

This main fabric, or "cage," as it is often called, was the responsibility of the carpenter, a craftsman little heard of today. He designed as well as constructed, the frame, while the joiner carried out the finer work, such as doors and windows.

In the earliest houses the panels between the timber frame were filled in with a variety of materials in several different ways. The method generally encountered in Cheshire consisted of forming a lattice, by first springing upright hazel wands into grooves notched into the timber frame, and inter-weaving them with smaller wands or brushwood rather like a wattle hurdle. Daub was applied to this wattle in layers on either side by the wallwright or dauber, hence the description, "wattle-and-daub." It seems possible that wattle-and-daub and thatching were carried out occasionally by the same craftsman, as references to "thatcher and dauber" are to be found. The daub consisted of marly-clay mixed to the right consistency with water, chopped straw and dung. The whole of the work was afterwards coated two or three times with lime-wash, thus adding an eggshell-like protection to the rather soft daub, which additionally was liable to shrink. It is due almost entirely to this lime-wash finish that so much wattle and daub still survives. The infilling of the panels in the later examples (i.e. late 17th and early 18th century) was often brick, laid in even courses occasionally stuccoed externally.

The early cruck dwellings were, broadly speaking, of one storey only. The whole inner cubic content of the house being occupied by the one or more rooms required. Gradually the idea of dividing a portion of the house in a horizontal direction to form a loft or 'shelf' was developed. This provided a good sleeping space, which was dry and warm and gave the owner additional room. A rough ladder gave access to this loft. The next step was to provide a continuous first floor which was lighted and ventilated, either at the gable ends, or by small dormer windows pushed out through the roof covering. This roof space was cramped, especially in the case of the cruck-framed buildings, and so further development was directed towards remedying this drawback. Gradually the houses increased in height until two complete storeys were quite common.

The main changes were affected in the gable ends and intermediate roof supports. Crucks disappeared and were superseded by a complete rectangular frame for the whole building, surmounted by simple timber trusses. Various kinds of "king-post" trusses were used in which, at first, curved timbers, similar to small crucks, were used. These became more regular and straight as time went on.

With the shortage of timber, which became acute in the first half of the 17th century, due to the great demands made upon it for ship-building, industrial and domestic purposes, the timber frames became more slender in character with smaller timbers and larger panels.

Space does not allow for a more detailed review of wall structure and attendant details, and so the final portion of this article will be devoted to a short summary of traditional roofing.

A cursory glance at the traditional dwellings of the county, at once gives the impression that the keynote of the roof structure is simplicity. Further detailed study will confirm this impression, more especially in the case of the cottage and small house. The large house also follows this general line, but in a few cases the roofs are more elaborate, in order to cover such well-known forms as the "E," "T" or "U" plans. The buildings are, in the main, simple and compact rectangular units, where the roof, whatever its covering, spans with a straight ridge between two gable ends. In some areas, particularly the upland ones, this rectangular roof is also continued to cover the shippon and barn. The only exceptions to this form of gabled roof are a very few examples of primitive dwellings such as those found adjoining Pickmere. Here the houses are single-storey, timber-framed, and roofed in thatch, which is "swept" round the square gable ends in a manner which is reminiscent of the "shielings" in the Isle of Skye.

Two main roof coverings are to be found in the county, stone "flags" and thatch. The first of these materials was gained from open quarries, which were everywhere to be found in the gritstone region, notably at such places as Kerridge, which is situated on a ridge of high ground, overlooking Bollington, and close to the Derbyshire border. These "Kerridge Flags," as they were called, were well renowned locally and were produced by hand-splitting suitable strata into thicknesses of one-half to one and one-half inches. The characteristics of the geological formation were such as to render them almost imperishable. In fact, it is not uncommon today, to find stone flagged roofs of derelict dwellings being stripped to provide material for roofing new houses.

The roof was constructed by hanging the flags on slender hand-riven batten by oak pegs, about $1\frac{1}{2}$ to $2\frac{1}{2}$ inches long, which were inserted in a hole at the top of the flag. A comparatively low pitch was employed and, if well laid, there was no drag upon the battens. The laying of these flags called for a high degree of skilled craftsmanship, as the courses diminished in size towards the ridge, and the valleys were "swept" round or laced to avoid the use of lead.

The general effect of these roofs has always been that of complete harmony with the rural landscape and the buildings thus treated appear to "rise out" of the moorlands, hills and valleys. Even the growths of moss, lichens and even large plants, which frequently adorn the roofs, have never seemed inappropriate.

The use of thatch is a survival of the most primitive of all forms of roof covering, and it is both interesting and remarkable to note that, during the many centuries of its use, no other natural material has ever been found which equals thatch in resistance to both extremes of weather and temperature. It is possible for a variation in temperature within a slate roof to be over four times that under thatch, for similar conditions. This insulating property, which applies equally well to sound as temperature, is due to the cellular nature of the construction caused by the many reeds, each with innumerable cavities in and around them.

The general character of thatching in Cheshire was to be found in the rather steeply pitched and gabled roofs covered with plain thatch. Very little decorative treatment, such as "cross-stitching" was to be found, and ridges, eaves and verges were as simple as possible. The local material was "wheat reed," and the roof was laid from the eaves upwards, and from left to right. The whole was secured to the roof-timbers by "spars" of cleft-hazel or willow, sharpened at each end and bent into the shape of a hairpin. Afterwards the surface was trimmed by the thatcher with shears or bill-hook.

Space does not permit a further enlargement of this fascinating subject. All the features of traditional domestic architecture in Cheshire are of great interest and represent a magnificent tradition. It is hoped that, as a result of this short review, many people may be encouraged to devote at least some of their energy to ensuring that this great heritage is not only fully understood but respected.

Books suggested for further reading.

- ADDY, SIDNEY O. "The Evolution of the English House." (Allen & Unwin. London, 1933).
- BATSFORD, H. & FRY, C. "The English Cottage." (B. T. Batsford, Ltd. London, 1938).
- CROSSLEY, F. H. "Cheshire." (Robert Hale, Ltd. London, 1944).
- GODFREY, W. H. "Our Building Inheritance." (Faber & Faber. London, 1945).
- HOLE, CHRISTINA. "English Home Life, 1500-1800." (B. T. Batsford, Ltd. London, 1947).
- HOLME, CHARLES (Editor.) "Village Homes of England." (The Studio, London, 1912).
- JONES, SIDNEY R. "English Village Homes." (B. T. Batsford, Ltd. London, 1936).
- OLIVER, BASIL. "The Cottages of England of the 16th, 17th and 18th centuries." (B. T. Batsford, Ltd. London, 1937).
- PAKINGTON, HUMPHREY. "English Villages and Hamlets." (B. T. Batsford, Ltd. London, 1945).
- POTTER, M. & A. "Houses." (John Murray, London, 1948).
- RICHARDS, J. M. "A Miniature History of the English House." (Architectural Press. London, 1945).
- WICKHAM, A. K. "The Villages of England." (B. T. Batsford, Ltd. London, 1933).