

## SOME BUILDINGS OF THE C17 IN THE PARISH OF HALIFAX

Thomas F Ford 1919

The paper from which these extracts are taken was accepted in 1919 as a Thesis in the final examination for the Associate of the Royal Institute of British Architects, when the author, Thomas F Ford, was placed first in the country, and was awarded the Ashpitel Prize. Published by the Thoresby Society in Volume XXVIII of *Miscellanea* in 1928 it describes the stone slate roofs in the Halifax District at a time when they were still in their original condition.

A notable feature of some of the country districts of England is the frequent occurrence of substantial yeomen's houses, built, as many carefully-dated portals show, between the years 1600 and 1700. During the reign of Elizabeth there took place in most parts of the country a very marked economic improvement, the influence of which was greatly reflected in the architecture of that period. Doctor Gardiner in his *Students History*, quotes a Spaniard as remarking, in Queen Mary's time, 'that these English', while in the matter of their table 'they fare commonly as well as the King yet have their houses of sticks and dirt.' In the South and richer agricultural districts the change of circumstances, which substituted well built homes of stone or brick for timber and wattle, followed within half a century of this observation. In the more backward parts of the northern hill country the change came later, and, where circumstances combined to give to a district a marked isolation, the style stone building developed assumes a local character as strongly marked and individual as is the local folk speech.

The old parish of Halifax, in the West Riding of Yorkshire, is at the present time remarkable for the rapidity with which its rather bleak moorlands and deeper valleys are being transformed into a busy and populous countryside. But here and there may be found a house or farm whose lines, proportions, decoration and material proclaim its origin in an age long since passed. To the eye accustomed to the C17th domestic work of the Cotswold or Northamptonshire District these buildings carry a familiar air. But on a nearer acquaintance it becomes apparent that they have many distinctive features. Though the Gothic tradition is maintained, its modification and development has proceeded along lines not perhaps to be paralleled in any other part of England.

That the architecture of the district should have developed on lines of its own is not at all remarkable when one considers the difficulties which its physical configuration has always presented to intercourse from the outside. The population is spread over a high plateau, into which at frequent intervals, the surface water drainage has cleft valleys, often to a depth of 800 feet, below the crest. The hillsides are excessively steep, and, for certain geological reasons, the beds of the valleys are by nature marshy. Thus the exchange of produce was confined to difficult and circuitous routes. There were, in fact, practically no roads for wheeled vehicles until the beginning of the nineteenth century, the pack-horse and mule being the only ancient means of conveyance. Pack-horse tracks are but four or five feet wide, and are still the chief channels of communication along the hillside and between the newer main roads, which now serve the district fairly thoroughly.

### THE GEOLOGY AROUND HALIFAX

The geological formation of Halifax needs notice here on account of it bearing upon the architectural style. The district is largely composed of the Lower Coal Measures, with outcrops of the Millstone Grits, both series of rocks providing an abundance of easily accessible building material of varying quality. Toward Bradford, distant only eight miles, but separated by a ridge attaining the height of 1,400 feet, the Coal Measures are exposed, and valuable coal seams have been worked, but about Halifax Town itself geological faults have brought the Milestone Grits nearer the surface and, indeed, a very hard Gritstone forms the top of some of the hills, often ending in a distant cliff-like formation at one edge.

The hilltops themselves are fairly level, with no great depth of soil overlooking the rock. Beneath the surface rock there is a great mass of softer shales, sandwiched between beds of harder sandstone, below all of which lies the real Gritstone - not generally visible on most hillsides west of Halifax, and often quarried for, by builders both ancient and modern, on account of its excellent quality. The beds of sandstone also provide excellent roofing material in the form of stone slate - obtainable in sizes ranging from 8 inches by 8 inches to 2 feet by 2 feet, and from 1 inch to 1½ inches in thickness. Slabs of stone of greater sizes than these can easily be quarried and are much used for palings, seats, gate posts, and in other ways.

The slates, however, were the generally-accepted roofing materials throughout the district. They are, of course, heavy, though with a large lap they may be laid to a very flat pitch, producing, on the whole, a fairly light roof. The method of fixing has not changed greatly since the seventeenth century. Battens, nowadays of sawn fir, but at that time of split oak, or small tree branches, are nailed, or pegged, or even tied to the rafters, and the slate, with two holes driven through at the head, are hung with strong oak pegs over the battens. The courses diminish towards the ridge, which is covered with inverted vee shaped stones, these, and one or two courses immediately below them, being pointed in lime mortar. The other slates are mossed; that is, under the lower

end of each slate is placed ordinary moss, which is driven in as tightly as possible. This grows in its position, and during a rainstorm absorbs some of the water, whilst the large air-space introduced between the slates renders impossible any capillary attraction. Mossing although the customary method in the seventeenth century of rendering the lower edges watertight, was replaced to some extent towards its latter end by the practice of pointing the lower edges in mortar. This, however, is far from common.

A well laid roof of stone slates, their upper surfaces often silvery with mica (deposited in horizontal films in the sandstone), forms a very durable covering. Its ancient name was 'thack' or 'thatch', spelt indifferently either way, but perhaps the former was more in harmony with the pronunciation, as the following local rhyme serves to show:

*Halifax is made of thacks, Heptonstall of stone;  
There's pretty girls in Halifax, In Heptonstall there's none.*

The author has a theory that the earliest roof covering used in the district was, not stone slates, but heather thatch. A short acquaintance with the topography of Halifax would lead to the supposition that, when building was in a more rudimentary state, heather would naturally form the first roofing material. As additional evidence may be adduced the fact that, only twenty years ago, in Halifax itself there were still several old houses with heather thatched roofs, and the rhyme just quoted draws such a distinction between thacks and stone as could hardly stand if in both towns the stone slates had been the common roofing material. The word thatch itself is a weakened form of thack, which, in turn, is almost pure Anglo Saxon, and cognate with the Latin 'tegere', its prime meaning being therefore a 'covering', irrespective of the material used, although at first, perhaps, heather thatching was implied.

Be that as it may, it is certain that stone slates came into use at an early date, for in the lease of Holdsworth Farm, dated 1432, it was specified that the eight crucks or bays of the house to be built by the lessee were to be covered 'cum tegulis Anglice splate stones.'

#### ROOFING MATERIALS

Although abundance of stone, oak, and slates were to be had in the Halifax district, neither lime nor lead are to be found where sandstone formations underlie the surface, and it was necessary for the 17th builders to travel as far afield as the Skipton district, where, in the limestone rocks of the Pennines, both of these materials were to be obtained.

Of these the lime was essential for the stone buildings, but the lead was not so essential, and as its high price, added to the tax imposed upon it, and the cost of transporting such a heavy substance, made it a luxury, its use was very limited. The roofs are, therefore, commonly constructed with slate valleys, lead valleys being seldom employed, and lead flashings never.

Having appreciated the processes by which the Halifax house was brought to the condition in which it is found at the beginning of the seventeenth century, it will be instructive, in describing the treatment of the exterior, to develop a comparison with the architecture of a district further south, where somewhat similar conditions of isolation prevailed at this time. The architecture of the Cotswolds is extremely well known, forming quite a standard type for late Gothic domestic building, but, with all its excellence, it lacks certain features which give to the Halifax style a piquancy that is very attractive. One striking difference at once becomes apparent upon contrasting a few typical houses from each district. The dominant note of the Cotswold house is vertical, whilst the Halifax House, although hardly horizontal in treatment, is yet far lower, and possesses less of the verticality so characteristic of the Gothic styles. This contrast is enhanced by the fact that the one is usually of three stories in height, and the other has but two, and the top storey being in both cases contrived in the roof, the difference is visible in the gables, which are such prominent features of both styles. This difference is further accentuated by the pitch of the Cotswold roof being 55 degrees or more, whilst that of the Halifax house is but 35 or 40 degrees, and seldom higher than 45 degrees.

The steeper Cotswold roof enables the second story to be placed entirely in the roof space, above the level of the tie beams, but in the North the upper stories (in this case the first), rises up three or four feet only into the roof, and the tie beams, unless directly over a partition, often stand free inside the room.

The flatter pitch arises from the different substance of the slate used in the two districts. In the Halifax district the shales give slates from three-quarter inch to one and a half inches in thickness, and of large size, whilst the Cotswold slate is thinner, and small in size, giving less lap, and requiring a steeper pitch to produce a watertight roof. In each locality the process of trial and error probably determined the slopes at which their respective slate could be laid with greatest efficiency.

Beyond this general dissimilarity in appearance there are some important features of the Cotswold type which are not found in the Halifax house at all. Of these the largest is the bay window which, in the canted or the

square form, is found so frequently in the former district. But not even in the larger halls did the Halifax builders attempt this most charming device for breaking up the wall surface.

The gabled dormers which accompany the bays in the Cotswold Hills are also missing, so that the Halifax style lacks four of the characteristics of the southern style, viz, the tall gables, the steep pitched roofs, the bay windows, and the gabled dormers. It might be imagined that without these features the style would be poor and unattractive but it is far from being so, since its deficiencies in these directions are more than compensated for by the fine porches, Jacobean doorways, and elaborate door lintels, the stepped gable windows, the multitude of carved drip terminations, finials, kneelers, and lastly the many-mullioned windows, all of which combine to make the buildings wonderfully varied and interesting.

It has been a matter for wonder to the writer that these roofs, so crudely built without the precaution of soakers, cover flashings, aprons, gutters, valleys, and so forth, formed in lead, should yet have afforded their duty so efficiently. A leak is not often seen in those houses which are well looked after, and is usually due to a slipped slate, and not to the lack of lead in the flashing.

The slates, diminishing in size towards the ridge, are finished with a ridge piece of stone, cut in the shape of an inverted vee the intersections where they occur being worked in one stone. It is bedded and jointed in mortar and pointed, together with the course of slate immediately below it, whilst the double course of slate at the eaves is also bedded in mortar, the rest of the roofing being laid dry and pointed with moss. The mortar pointing to ridge, eaves, and verges (where the latter run out over the gable wall), must often be renewed when defects occur, and this has led to an almost universal custom of limewhiting the whole of the pointed joint, whenever the retouching is done. These white lines at ridge, eaves, and verge give a very quaint, but pleasant appearance, and often serves to distinguish the great house from its grey and often misty background.

The heavy slate roofs naturally tend to sag inwards, producing a slightly concave surface, and when the slates run out over the gable walls, a corresponding concave lie is given to them. This whole outline, however, can be noticed in some gables which have not been finished in this way, but with a coping. In setting the copings two methods were in use, in one of which the coping is bedded direct on the stonework of the wall, with a rebate on the back edge into which the slates are tucked, and pointed, in the other it is bedded direct upon the slates themselves, which in this case come right through to the front of the wall. When the latter course is pursued the coping has below it a strip of pointing, and this is commonly finished with a cut edge, and perhaps some slight shaping at the apex. It is the latter form of construction which at times produces the curved lines to the gables, as the ridge piece and the bedding up at the eaves, apart from any settlement of the wall, naturally give a concave form to the verge and the coping bedded upon it. This seems to be the only reasonable explanation for an effect which is not infrequent, for it seems quite unlikely that settlement in the wall itself has anything to do with it.

#### ROOF DETAILING

The difficulty of making a satisfactory and weathertight joint at the intersection of a ridge with the slope of a higher roof, led to the practice of keeping the ridges at the same level and varying the pitches of the wide spans of the rooms below, often producing in the same house gables of widely differing slopes. The effect of such an obviously constructional expedient is by no means distasteful and leads one to think that the modern tendency to equal pitches might be modified.

The coping stones themselves, unlike the majority of the Cotswold copings, are moulded, the sections in general use being the plain and hollow chamfered. The ogee is sometimes, though but seldom, met with, but may be seen at Wood House, Skircoat, being in that case a part of the rising Italian influence. The stones rest on the gable with no bond-stone tailing into the stonework, except at the apex, and the eaves, where bond is obtained, the short lengths and flat pitch of the coping making intermediate support unnecessary. No cramps were used to join the stones together, and time and the settlement of the roof has often tilted them badly, and destroyed their value by opening the joints. The apex is commonly formed in one stone, bedded with level joint upon the gable wall, with the coping moulding carried up and pointed at the head. In some cases, however, the moulding is returned horizontally to form a base for the apex finial.

At the eaves the copings of the earlier houses are finished with but small projection, the hollow, or chamfer being merely returned at the wall face, as is commonly done in the Cotswolds. The water shooting from the coping will not, in this case, fall clear of the wall, but will be drawn towards the side of the house. For this reason, possibly, the projection was increased by its lower end being cranked horizontally over a stone kneeler, the outline of which may have considerable variation.

Additional finials often rest upon these small ledges and form a charming finish to the roof. It is not common for finials to be found at the foot of the earlier forms of the coping, as there is, of course no flat surface for them, although at Upper Bentley one has the seating for a finial left standing above it, the coping continuing its

line as before. This is perhaps an anachronism, as the house was built in 1661, and the early form of coping disappears after the first few years of the century.

Copings and kneelers were seldom the full thickness of the walls they protected. The kneelers range between 9 inches and 15 inches in width, becoming thinner as the century proceeded, until in the eighteenth century work the kneeler is little more than 4 inches thick on face, and has a distressingly weak appearance. A width of 15 inches or even 18 inches would still give ample room on the wall for the slate to find a bedding as the walls are commonly about two feet in thickness.

The finials with which apex and kneelers were crowned are very diverse in design, more so than in the Cotswold district, where two or three types only seem to have been in use. In the Halifax houses, however, among all the variety of finials the reversed apex, exceedingly common in the Cotswolds, is almost unknown. Of the rest one or two types deserve notice.

The oldest form is perhaps that found in the earlier portion of Binn Royd, and is an attempt to render a crocketed Gothic pinnacle in hard sandstone. When the writer saw it time had considerably defaced its detail, but the outline was clear. A far finer specimen of this type is to be seen at a small farm in the valley, just south of the two Bentleys. A sketch of this is given and also of a more elaborated version from High Sunderland, in which Jacobean influence is very apparent.

Of the rest the robustly moulded square finials are most characteristic of the district, and one or more of these is to be found on nearly every building of any size.

Mention must be made of two finials which are remarkable as constituting badges of ownership. One is the stone lantern, standing on a kneeler of some small cottages at Beckfoot, near Bingley, the other the cross finial at Holdsworth Hall. Both of these badges were used, before the dissolution of that Order, by the Order of the Knights Templar, and after their dissolution in 1312, by the Knights of St John of Jerusalem, to distinguish their property. Exemption from tythe was enjoyed by all property owned by these religious bodies, and this exemption continued in the property, hence the desire to preserve some record of the former ownership. A double-armed cross, once a finial, may be observed built into the wall of a farmhouse in the north of the parish, and a similar cross on Coley Hall gateway is another example. This form is more common in the central parts of Yorkshire.

Lead valleys and secret gutters were unknown to the seventeenth century builders, who formed their valleys with slates laid at right-angles to the intersection, upon which the slates of the two slopes finished, cut to the rake of the valley. At the eaves no gutters were used until quite recent times, even the oak or elm gutter being practically unknown. The one example of a wooden gutter that the writer has seen was on a house in the Shibden Valley, known as Water Scout, dated 1701, but as the whole had recently been tarred it was difficult to determine of what wood it was made, or its age. Besides this instance of a wood gutter at least two examples of stone eaves gutters exist. At Lower Bentley, where the eaves of a gable would otherwise discharge the rain water over the entrance door, it is caught by a square stone gutter, which shoots it through shaped spouts onto the ground. Fallingworth Hall, Norland, has a stone gutter carried on small corbels under the eaves, which here run right across the front, with no gables to break the horizontal lines. No other seventeenth century gutters have come to the writer's notice beyond these three here given. Many gargoyles, or spouts, are to be seen, however, especially where the water is collected behind parapets and discharged away from the wall through stone shoots of simple design.