THE CLAY HOUSES OF CUMBERLAND

By R. W. Brunskill

THE division of Great Britain into a Highland and a Lowland Zone has been found useful in the study of traditional domestic architecture as in so many branches of archaeology. But within the two broad divisions there are a number of pockets in which the characteristics are in some respects modified, and even reversed, through the effect of some peculiar local condition. One such pocket is that part of the valley of the River Eden which swells out to form a low-lying plain in the north of Cumberland; the dominant river being met by the tributary Esk to emerge in the Solway Firth.

Here, on the Solway Plain, the building stones usually available in the Highland Zone are not found, whereas the clay and brick earths more characteristic of the Lowland Zone are plentiful. To this geological circumstance there was for long added the historical circumstance of proximity to a Border which was subject to frequent raids and counter-raids, and which gave to farmers, extracting a precarious livelihood, the choice of building expensive but durable towers, or cheap and easily rebuilt hovels. One result of these circumstances was the late survival of the tower-dwelling; another result was a tradition of building in clay, a tradition which long survived the circumstances which had presumably led to its adoption, and which is even now represented by an appreciable but rapidly dwindling number of examples.

The practice of building farmhouses and cottages in clay was sufficiently unusual to attract the attention of topographical writers from the end of the eighteenth century onwards, and from their descriptions it is possible to assess the extent of the practice and the periods of flourish and decline; the accommodation provided and its use; and the method of construction adapted as it was to the material and labour available. Over a hundred examples of clay-walled dwellings may still be seen on the Solway Plain and confirm the accuracy of the descriptions quoted of this once common practice.

Evidence survives from the notes and descriptions of eighteenth-century and nineteenth-century observers that clay-walled dwellings were at one time common in parts of Cumberland, that their construction had begun to die out towards the end of the eighteenth-century but that they continued to be built in the early part of the

nineteenth-century, and that they provided adequate and even commodious dwellings.

The most fruitful source of evidence is the 1794 edition of Hutchinson's *History of Cumberland* with its parish notes, mainly by Housman.[1] For many parishes, but unfortunately not all, the building materials normally used in house construction have been specified, and clay predominates in a number of parishes. To this number, Bailey and Culley, [2] added others, mainly in the north-east of the county. Dickinson,[3] writing in 1852, confirmed these additions and made others from his own observations. Parishes around Wigton were added to the list by Gate[4] recounting survivals and memories in 1894. To this evidence may be added the comment of Pennant[5] in 1772 that "ancient clay-dabbed habitations" still survived at Netherby to mar the agricultural improvements; and the complaint of an adventurous tourist who, visiting Bewcastle in 1754, found only "wretched huts" to greet him and serve as shelter.[6] When all this evidence is plotted on a sketch map (Fig. 1) the area of clay-walled construction is seen to stretch along the alluvial plain of the Solway into the Border Country and be contained by the upland regions of the county where stone construction predominates.

Hutchinson and Housman were not enthusiastic in their references to clay-walled dwellings, and referred to them in their accounts of several parishes as already falling into decay. In Holm Coultram, for instance, "the old dwellings are poor clay huts" but the modern ones are "genteel stone buildings or built of brick". In Grinsdale parish, houses "were formerly clay, but now built in general with brick in good stile". In Kirkandrews-on-Eden parish also, buildings "were originally clay, but most of them have been lately rebuilt with stone and brick in an elegant manner". In their notes on Kirklinton parish the editors of Hutchinson amended their earlier comment that the buildings were "generally of clay, low, mean, and ill-contrived" to say that great improvements had recently been made. In Stanwix parish, to give one further example, the "ancient buildings, all of clay", were being superseded by brick, a process, incidentally, which is still not complete.[7] "Retrospector" of the *Gentleman's Magazine*[8] had an equally poor opinion of the clay houses of Cumberland. Writing in 1790, he said that "the houses—or rather huts—of clay, which were small and ill-built, are mostly thrown down; instead of which strong and roomy farmhouses are built and building with hard, durable stone". A Cumbrian Dalesman[9], of 1875, spoke of clay houses as formerly the dwellings of the "peasantry" of some parts of the county,

while Gate,[10] referring to the Wigton district, spoke of clay building as an eighteenth-century practice, the buildings, but not the method of construction, surviving through the nineteenth century.

It appears, however, that building in clay was not entirely obsolete with the turn of the eighteenth century and the practice, like so many local customs, may not have been finally superseded until the coming of the railways in the middle of the nineteenth century. Hutchinson and Housman[11], while plainly not sympathetic, do not specify clay construction as obsolete in all parishes. In Burgh-by-Sands parish, for instance, of the clay houses, "many are bad, but there are many excellent buildings besides", and in Kirkbampton, where "the buildings are chiefly of clay, and though the owners of them people of good circumstances, they have no taste for the improvement of their houses". In Orton parish the authors were so enthusiastic about clay construction that they admit: "By this means, building comes low and expeditious, and indeed it must be owned that they have brought the art of clay building to some perfection . . . a house thus built will stand (it is said) 150 or 200 years." Clearly the inhabitants of many parishes were quite satisfied with clay construction. Housman found that "where clay or mud walls prevail the advances of modern improvements are admitted with some reluctance, the people considering them as an expensive and unnecessary luxury. Britton[12] described clay construction as quite the normal practice in Orton parish at the turn of the eighteenth century. Gibson wrote in 1857[13] of the custom in parts of Cumberland of providing a clay-built house for a newly-wed couple as dying out "only within the last thirty years or so". But Dickinson, his contemporary, described clay construction as a dead practice[14] and even suggested that surviving examples should be preserved.

It seems, therefore, that clay construction did continue in use, here and there among the northern parishes of Cumberland, until about the end of the first quarter of the nineteenth century. In the contiguous Scottish county of Dumfriesshire there is evidence that the practice may have survived even longer.

It is fortunate that some of the eighteenth-century and nineteenth-century observers carried their interest in clay houses so far as to describe the arrangement of rooms within them and that we consequently have a check against the surviving examples which have suffered alterations during the past 150 years or so. From the descriptions, it appears that the house consisted basically of two rooms on the ground floor—a living room and a sleeping room, that an

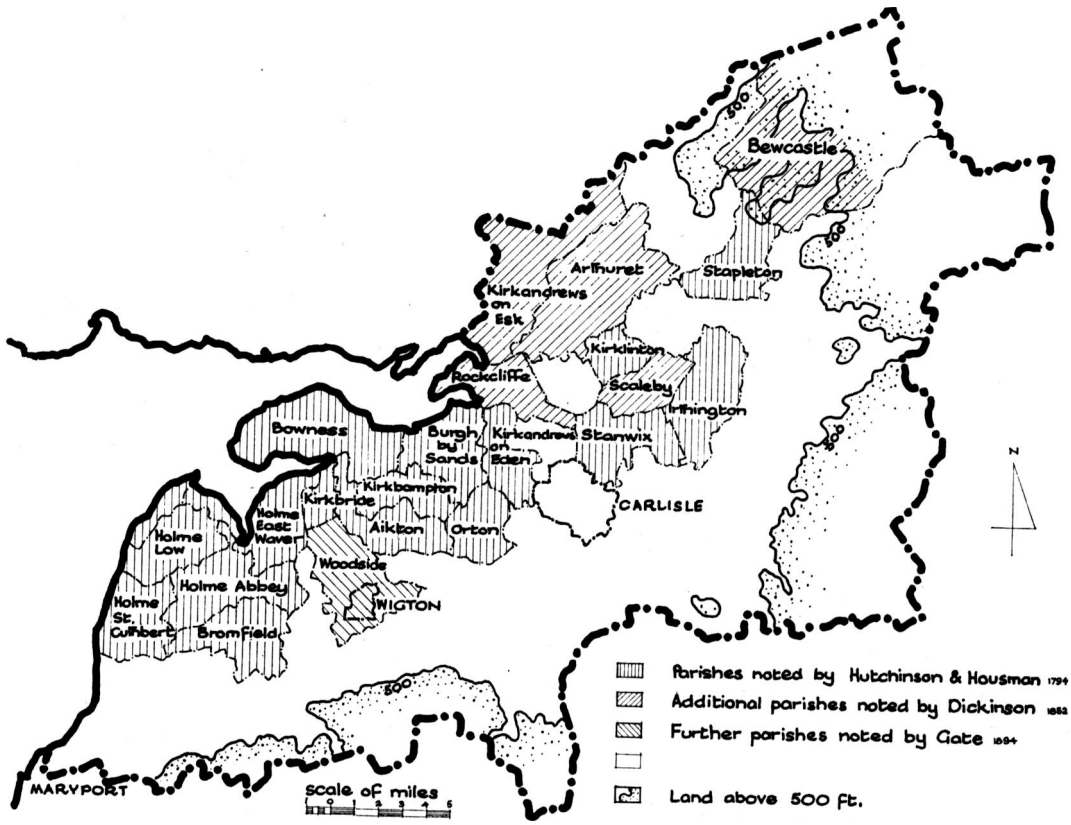

Bewcastle
Arthuret
Stapleton
Kirkandrews on Esk
Kirkinton
Rockcliffe
Scaleby
Irthington
Bowness
Burgh by Sands
Kirkandrews on Eden
Stanwix
Kirkbampton
Kirkbride
Holme East Waver
Aikton
Orton
CARLISLE
Holme Low
Woodside
Holme Abbey
Holme St. Cuthbert
Bromfield
WIGTON
MARYPORT
scale of miles
0 1 2 3 4 5
N
Parishes noted by Hutchinson & Housman 1794
Additional parishes noted by Dickinson 1883
Further parishes noted by Gate 1894
Land above 500 ft.

FIG. 1.

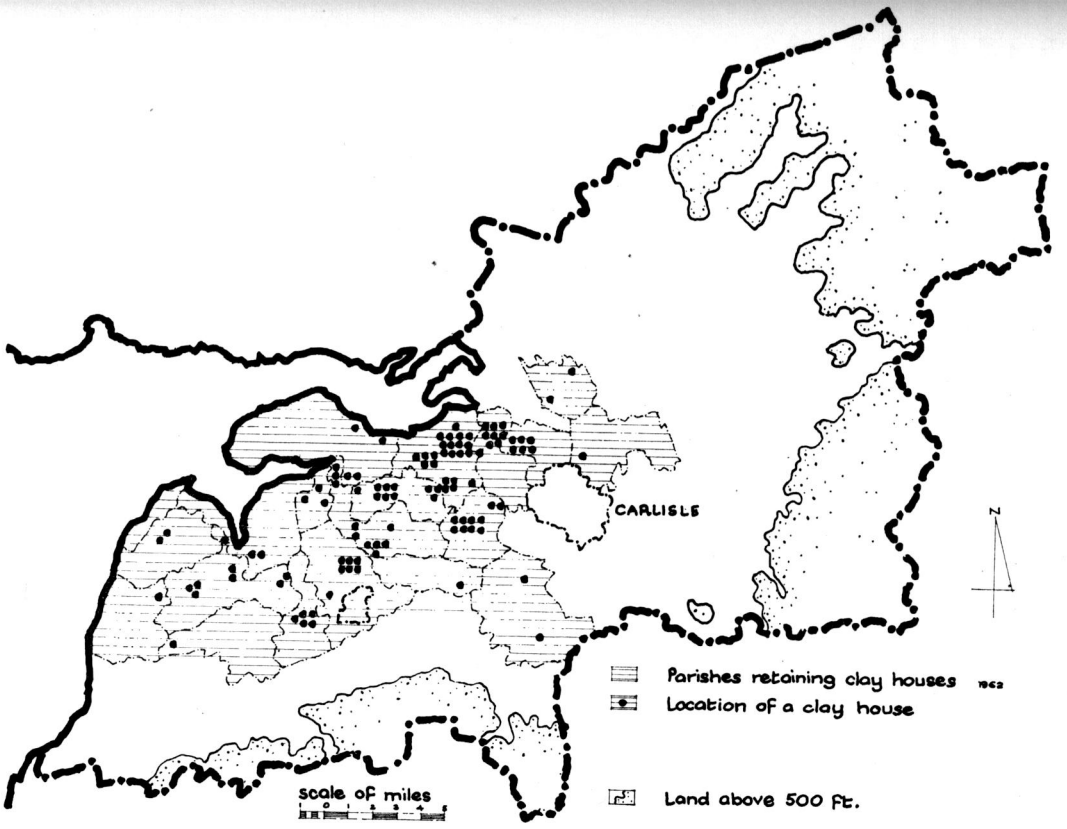

CARLISLE
N
Parishes retaining clay houses
Location of a clay house
Land above 500 ft.
scale of miles
0 1 2 3 4 5

FIG. 2.

additional storage room was often provided, and that, in the eighteenth century at least, these rooms were commonly lofted over both for greater comfort and to provide additional sleeping accommodation. Attached to the dwelling house there might be a service room, but more commonly there was a range of farm buildings, and sometimes accommodation for humans and beasts was interconnected.

Housman, after noting the affection of clay-house dwellers for their old-fashioned homes, goes on to describe the disposition of the rooms[15]. "Most of the ancient houses belonging to the common people in the county are extremely simple, consisting of a kitchen and parlour only: in the former the family sit, eat, and do all their household work, and in the latter they sleep and sometimes keep their milk, butter, and cheese." Grainger and Collingwood quote a decision[16] in 1720 of the Manor Court of Holm Cultram providing for the erection of a house apparently with two rooms and a loft, only one of the rooms having a fireplace and chimney.

A more exciting description was given originally by Mark Lonsdale[17], in notes to a piece of dialect verse recording the events at a party held about 1780 in a clay-walled farmhouse in Great Orton. The whole house was devoted to the party, card games being played in the kitchen (living room), other card games in the unheated bower (bedroom) and dancing on the continuous loft above. A similar occasion was described in pieces of verse by John Stagg (1770-1823)[18] about a wedding party with dancing in the loft, chatting in the ingle-nook of the kitchen, and music in the bower. It appears that the ingle-nook was sufficiently spacious for several guests to occupy themselves with tankards, and that there was a low, lean-to, store room in which one guest was discovered reclining to sleep off his stupor. Other pieces of dialect verse[19] confirm that windows were normally glazed by this time and that the hooded chimney included a beam from which hams and meat were suspended.

The upper, or bower, end of the house was sometimes divided into two parts: the bedroom proper, and a pantry or dairy. In a piece of dialect verse describing a party held in Kirklinton parish in 1802[20], the kitchen of the house was used for dancing, the bower was used for gossiping by the "better sort", the card players occupied the loft, while the sweethearts were found, surprisingly, in the pantry.

Another piece of dialect verse[21] records the disgust of an old man at a younger generation that would build on a new brick parlour, when the "three good rooms" of the old clay houses should be adequate. At the same time Britton[22] confirms a decline in party-giving which

coincided with a decline in popularity of clay construction; the improved houses of brick and stone were presumably too valuable to be let out for such occasions, and probably less well adapted in plan for the dancing which was such an important part of the festivities.

The living accommodation must frequently have formed one end of a range of buildings, the other end being occupied by farm buildings —byre and barn—and the two ends being separated by a cross passage. Dickinson, describing the method of erection of surviving clay-walled farmhouses continues: "The plan originally followed in erecting these houses was a long range of buildings without any loft." But after about 1750, he adds, farm buildings were located apart from the dwelling house. In describing a farmstead near Wigton, iv, he states[23] that "A century ago, (i.e. 1776) many sets of farm buildings consisted of oblong blocks adjoining the farm yards. The dwelling at one end of the block was separated from the outbuildings by a covered passage. There was an inner door opening out of the passage into the kitchen or living room, and another on the opposite side to the byre; and the passage was a common thoroughfare for men and dogs, horses, cattle, wheelbarrow, poultry, etc." Quoting instances near Wigton again, Gate[24] recalls that "it was not unusual up to a half-century ago to see the dwelling house, farm buildings, and out offices in one range, with an entrance for all the inmates—biped and quadruped. There was a central passage, within which were turns right and left. A familiar visitor knew the turns to find his human friend, but it was not uncommon for the stranger to take the wrong turning and find himself at close quarters with the farmer's cow." Gate could not quote any surviving instance of this practice: "Even yet we may see such buildings in some parts of our Union with their thatched roofs and clay floors. The central passages are paved with rough cobble or patched with broken flags and bricks, and the cattle, if still housed in such places, are honoured with a separate entrance."; but in the absence of more specific indications the superior paving of the cross passage suggests that more ponderous than human feet had trodden it.

The extent to which this "long house" arrangement whereby a cross passage gives access to both domestic and agricultural accommodation in a single range of buildings, is more than an accident of poverty and a particular type of farming economy is a matter of some dispute. Nevertheless it is apparent from the descriptions that, in the parts of Cumberland under review, it was a long established practice. Andrew Boorde, describing in 1542[25] the quickly erected (and probably clay-walled) houses of the Border parishes, even goes so far as to place

family and horse in one room. Hutchinson quotes the story of a well-respected thief of Bewcastle who, on being surrounded in his one-roomed house by the forces of the law, made his escape by means of the horse which was tethered to his bedpost.[26]

These various descriptions indicate that clay houses consisted essentially of two rooms on the ground floor, but might have additional rooms for domestic or agricultural purposes on the same floor, or in a loft. Of the basic two rooms one was evidently used as a general living room, and the other as the bedroom of the master and mistress of the house. The additional rooms were used for storage, presumably of milk, butter, eggs, and meal, while the loft was used as a dormitory for children.

In this part of Cumberland the general living room was most commonly described as the "kitchen"; it contained the principal, and usually the only, hearth, this being situated between a wall and a partition to form a "nook", otherwise known as a "chimney nook" or an "ingle nook". Smoke from the hearth was gathered into a plastered chimney rising like a pyramid from the ceiling to the ridge; there are several references in the dialect ballads to the "balk" or beam from which hams were suspended in the chimney, and to the vulnerability of the hearth to snow falling without hindrance down the spacious enclosure.

The principal bedroom was called variously the "bower" or the "parlour". The former term appears to have been more common, the latter clearly refers to a bedroom on the ground floor but presumably relates to the withdrawing room which would occupy the corresponding position in a house of superior degree. It is evident that the bower would not normally be provided with a fireplace; a paraphrase of Lonsdale's description of a party in North Cumberland given in *Dugdale's British Traveller*[27] includes the specific note: "As the Upshot is commonly held in the long evenings when the weather is cold, the players, both male and female, frequently sit themselves in Bed to be more comfortable, for the Bower being at the further end of the house with a damp earth floor and no fire at hand, they cannot be so agreeably situated with respect to warmth in any place."

Elsewhere on the ground floor there are occasional references to the "pantry" which appears to be adjacent to the bower, and to the "turfwhol" store which in Lonsdale's description of an Upshot party appears to correspond to the lean-to store room still locally known as a "toofall".

Above, and apparently running without interruption over the kitchen and bower, was situated the "loft". This was also called the "long room" in Stagg's verse "The Bridewain",[28] and according to Hutchinson the space within the roof of a one-roomed cottage in Bridekirk was put into use. The loft was apparently spacious enough and open enough for dancing during the parties.

While the names for the parts of the clay house were given with some uniformity there was wide variation in the name given to the building type, and confusion between the type and the process of erection. The clay house was referred to variously as a "clay house" (Anderson), a "clay dabbing" (Gate), a "clay biggin" (Dickinson) a "clay dabbin" (Carrick), a "clay daubie" (Dickinson again), a "clay daubin" (*Fraser's Magazine*) and by Pennant, who did not approve, as a "clay walled habitation".[29] The building process was called "clay daubin" by Anderson and by Gibson, "housin" by Dickinson, "daubin" by Eden and "dabbing" by Gate.[30] This confusion gives rise to difficulty in determining the method of construction of surviving examples and assessing the extent to which any other methods might once have been in use and later superseded.

From the descriptions already discussed it has been established that the clay houses were lofted single-storey habitations with thatched roofs and clay or clay-daubed walls. But the extent to which the clay walls were load-bearing, or were weather-proof infilling panels to a framed structure, has still to be established; nor has it been made clear whether the clay-daubed walls were of solid clay erected in a daubing process, or were actually wattle screens daubed with clay as a waterproof and fireproof rendering. There is evidence, however, that the clay walls were at least partly load-bearing, and that they were a solid construction adapted to speedy erection.

Both the ballad writers and the eighteenth-century observers agree on the survival, in those parts of Cumberland in which clay building was carried on, of the practice of erecting houses in one day, by a whole village, for an individual family, but as a communal venture. Robert Anderson, living in Kirklinton parish between 1777 and 1829 transcribed under the title "The Clay Daubin"[31] an account of such an occasion. In his introduction he refers to the erection of walls consisting of layers of a clay and straw mixture, separated by thin courses of straw, and these walls, for the sake of proper consolidation, had to be erected in one day. He then relates how, on an appointed day, all the neighbours come together to execute the work with the aid of forks, shovels, and wheelbarrows, and,

having completed the walls at least, salute the house with a party, eating and drinking and dancing as guests of the householder. Housman, in his notes on Orton parish in Hutchinson's *Cumberland*,[32] describes the erection of clay houses there: "These houses are generally made up in a day or two; for, when a person wants a house, barn, etc. built, he acquaints his neighbours who all appear at the time appointed; some lay on clay, some tread it, while others are preparing straw to mix with it. By this means, building comes low and expeditious, and indeed it must be owned that they have brought the art of clay building to some perfection. They generally ground with stone about a yard high; and a house thus built will stand (it is said) 150 or 200 years." A description in rather similar terms is given in the Cumberland volume of *The Beauties of England and Wales*.[33]

The custom was most appropriate as part of village wedding celebrations. Gibson,[34] describes how, after the wedding, "their friends would assemble about dawn at the appointed spot and, labouring with good will, each at an allotted task, would erect, long ere sunset, the clay walls of a dwelling for some young couple who had to rely on a bridewain for means to finish it and furnish it. The walls reared and the floor laid of the same materials, the volunteer operatives would "hansel" the cottage by a dance on the wet clay floor. . . . Many cottages with clay walls and thatched roofs built by this method which was called "a clay-daubing" are still to be seen in the northern parts of the country." Gibson further states how tenacious the custom was, adding, "this old custom has died out within the last thirty years or so". i.e. about 1820.

In his account of *The State of the Poor*, Eden, writing in 1797,[35] was sufficiently impressed by this form of clay construction that he quoted an account of the method as practised in the parish of Dornock, just over the Border in Dumfriesshire: "The manner of erecting them is singular. In the first place they dig out the foundation of the house and lay a row or two of stones; then they procure from a pit contiguous, as much clay or brick earth as is sufficient to form the walls, and, having provided a quantity of straw or other litter to mix with the clay, upon a day appointed, the whole neighbourhood, male and female, to the number of 20 or 30 assemble, each with a dung-fork, a spade, or some such instrument. Some fall to the working of the clay or mud by mixing it with straw; others carry the materials; and four or five of the most experienced hands build, and take care of the walls. In this manner, the walls of the house are finished in a few hours; after which they retire to a good dinner, and plenty of drink, which is provided

for them, whereupon they have music and a dance, with which and other marks of festivity they conclude the evening. This is called "a daubing" and in this manner they make a frolic of what would otherwise be a very dirty and disagreeable job." Pennant's tour to Scotland passed through Cannonbie, close to the Border, where a similar practice was observed though, with more intense Scottish economy, the neighbours "came furnished with victuals at their own expense".[36]

All the accounts have referred only to the erection of the walls, the implication being that the roof was erected and the house completed on some other occasion. If the houses were so small that the roof could be a light construction of coupled rafters, then its construction would present little difficulty to the householder. But the houses described have been large enough to accommodate several groups of people at the same time, some of them engaging in quite energetic activities. It is likely then that the roof would be carried on some sort of framework round which the clay walls could be erected on one of these neighbourly occasions. Dickinson's account[37] of the construction of clay-walled houses in Cumberland describes how, by means of the technique of cruck construction, for which ample evidence still survives in the county, such houses were erected.

" These old farmhouses, judging from samples still existing, and from recollection of numbers pulled down and rebuilt, once the residences of our forefathers, were of a very humble description. In those parts of the county where stone suitable for building purposes was scarce, or, from the deficiency of proper quarrying implements difficult to procure, and which the sledges and pack-horses of the day were ill-qualified to remove, recourse was naturally had to such materials as were most at hand. In these places, wood and clay being more plentiful, buildings of these materials were constructed, by first erecting the main timbers. These timbers, corresponding with what are now called principals, were then called couples, and consisted of two trees chosen with natural bends. These, when pinned together at the smaller ends, and set up in a triangular fashion, with the butt-ends let into the ground, and the curves bending outwards below, were again fastened by a cross-beam, high enough to admit of persons walking under it. The cross-beam in the out-house was called the jenny-baulk, from it being the usual domicile of the barn owl.

"When a sufficient number of these couples were set up and connected with pannions—all being of half-squared oak—the clay walls, tempered and mixed with straw, were begun upon the surface of the soil, and carried up to "man-height", that is 6 or 7 feet, and then

roofed with split oak rafters and thatch. The doors and window holes were small, on the principle of a small entrance being more easily defended than a large one, light being of little importance in dwellings where the domestic operations were simple.

"Some few examples of such buildings, in all their primitiveness, may yet be seen; and, being specimens of the common residence of the laird, the yeoman and the cottar 'of the olden times' should not be extirpated till we can properly appreciate the comfort of better dwellings."

A similar technique in Dumfriesshire was known as "cat and clay" and was still in use at the beginning of the nineteenth century according to Neilson.[38] He in turn refers to Jamieson's *Dictionary of the Scottish Language*[39] which explains the "cat" as straw laid flat, as reaped corn lay in a field before being bundled in sheaves, and the technique as involving rolls of mixed clay and straw laid between "the different wooden posts by means of which the wall is formed".

Two other methods of construction of the clay walls of these houses have been suggested. Grainger and Collingwood[40] believed that clay houses were built by pouring a thin mixture of wet clay and chopped straw into a timber formwork, but quoted no evidence to support this belief. This, a relatively sophisticated method of construction, is said to have been practised in some parts of England,[41] but, again, no conclusive evidence survives; and, in any case, being slow, and requiring each course to harden before the next could be laid, does not explain the speedy construction of the village teams. Nor requiring the expensive provision of formwork in a district poor in timber, was it likely to have been employed in the humble villages of the Border. Canon Bouch[42] believed that the term "clay house" was appropriate to the relatively substantial buildings which still survive, and that they were built according to the technique suggested by Grainger and Collingwood; he suggested that the term "clay daubin" should be reserved for more primitive wattle and daub dwellings, now disappeared, but presumably on the lines of the charcoal burners' huts of the Furness district which have been so enthusiastically described.[43] There are records of the former existence of shielings used as temporary summer shelters on the eastern fellsides,[44] and the huts of the Borderers which Andrew Boorde described in 1542 as capable of erection in three or four hours may have been of this type, but ample evidence has been quoted to show that the term "clay daubin" has been applied to substantial permanent dwellings in the lowland villages. Jamieson mentions[45] "the twigs that are sometimes

planted from one post to another" but rather in the sense of an extra reinforcement supplementing the layers of straw in the walls.

The literary evidence, then, has indicated the practice of erecting, in certain parts of Cumberland during a period extending at least to the close of the eighteenth century, houses and farm buildings of a substantial clay construction, with a timber structural frame of cruck-truss variety. These houses commonly included walls erected as a communal act by unskilled labour, and yet were large enough to include two or more rooms on the ground floor, and a useful loft above. Such houses had become unfashionable in the nineteenth century and many were likely to have been demolished to make way for new buildings of stone or brick.

During 1956, and with corrections to 1962, I made a survey to discover what remained on the ground of the technique of clay house construction which had so fascinated the eighteenth-century and nineteenth-century observers. This survey was part of a larger superficial survey of the northern half of Cumberland, intended to cover all types of house construction which could be ascribed to the period before 1840. More than one in ten of the thousand or so examples recorded were found to be definitely of clay construction.

The map (Fig. 2) indicates the location of clay-walled houses in relation to the complete survey area. It may be seen that, in general, their distribution follows that deduced from the accounts of the earlier observers; only in some of the parishes north-east of Carlisle is there little survival of what had been the former practice in construction. The degree of concentration of examples increases with distance from alternative sources of building materials, the Solway parish of Burgh-by-Sands being particularly rich; and this suggests that, for all their professed affection for the clay daubins, the villagers were reluctant enough to neglect the more conventional building materials of stone or brick wherever nature or cheap transport could provide them. The map is, of course, a record of surviving examples; once a clay-walled dwelling has been abandoned, the protective coat of plaster, requiring an annual coat of whitewash, is penetrated, and, in a short space of time, the clay walls return to the earth from whence they were extracted, only a grass-covered mound remaining to record the site. Where the advice of Dickinson, that clay walls are good manure, was taken, destruction must have been even more rapid.

Of the 105 clay-walled houses recorded, ten bore some sort of date, usually a dated stone lintel, and these range from 1672 to 1825, with six of the ten between 1722 and 1756. In some cases the dates may

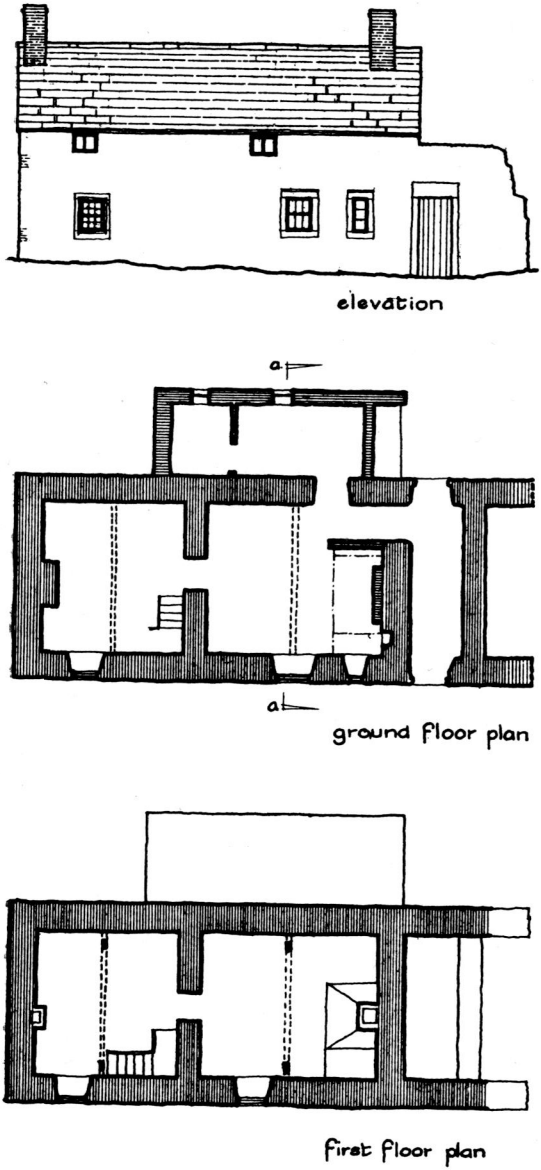
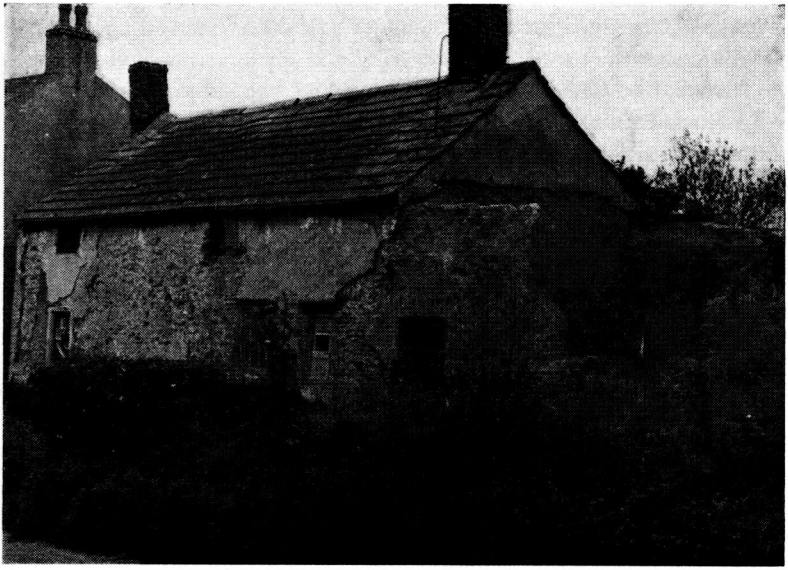


Fig. 3. House at Aikhead Hall, Cumberland.



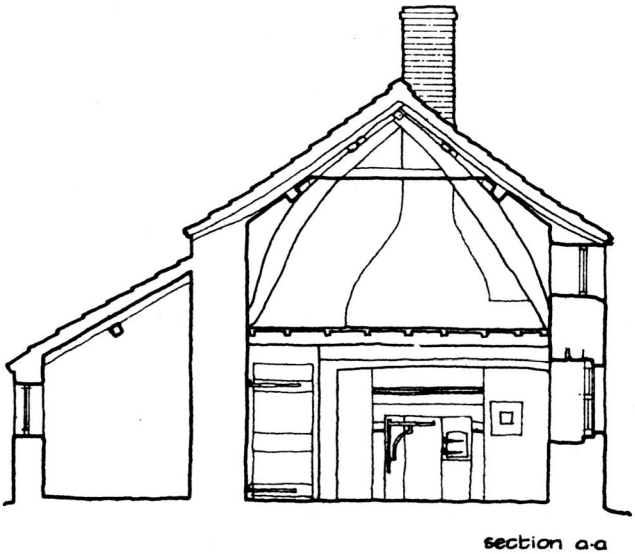


Fig. 4. House at Aikhead Hall, Cumberland.

refer to alterations rather than new construction; the dated lintel 1804, at Kirkbampton Post Office, is part of a crucked clay-walled building, but may record alterations which apparently included raising the eaves; the dated timber plaque, 1705, pegged to the tie beam of a cruck truss at Longburgh, may also record the raising of eaves to improve first floor accommodation in an older house. The evidence of mouldings on stone dressings to windows and doors does not suggest that the surviving examples are older than the middle of the seventeenth century, but it does suggest that many of them were built in years well into the nineteenth century.

The recorded examples comprise 63 of two storeys, 25 of one storey with a loft lit by gable windows or very shallow windows at floor level, and 17 single-storey dwellings. The proportion of two-storey buildings is surprisingly high but the numbers include many—at least 15—in which an eaves line has been raised to transform an inconvenient loft into a commodious bedroom, as well as a number which were apparently built with two full storeys of clay from the beginning. The lofted buildings represent the standard seventeenth-century and eighteenth-century dwelling house described by the various observers. The single-storey buildings include a small number of farmhouses, but also many cottages of poor accommodation and with indications of late date.

In a superficial survey devoted only to such of a building as can be seen from the road, little can be recorded with confidence of the disposition of the rooms. Nevertheless there were indications that 44 of the clay houses had a cross-passage and in 11 of these cases the indications were confirmed. Beyond the cross passage, 21 appeared to have some sort of "service" room while 23 had farm buildings in this position. The proportions may originally have been different, as some of the service rooms may have been converted from barn or byre in alternate rebuilding of domestic and agricultural portions of a range of buildings on a farmstead. It was not possible to ascertain in this sort of survey whether domestic and agricultural portions were interconnected.

Cruck construction was recorded on 9 of the 105 examples but here again the true proportion is probably much greater, for of these 9 which were entered and the construction confirmed several gave no clue on the exterior of the construction hidden within.

Welsh slate was the predominant roof covering, represented in 42 of the examples. In every case this is likely to mark repair or reconstruction since such a heavy material could hardly have been transported

to this district before the revolution in rail and water communications in the middle of the nineteenth century. The original material would presumably have been thatch, and in no less than 23 examples steeply pitched corrugated sheet materials were recorded and such materials are usually held to cover or substitute for thatch. Since not a single exposed thatched roof was recorded in the whole survey area on an inhabited building, the 23 examples indicate the strength of the thatch tradition in these parishes. Nineteen houses were recorded as having sandstone flags as roof covering. This massive, rugged material was used generally in Cumberland wherever the flags were available or could readily be transported. Lake District slate was recorded as the roof covering in 13 examples. The remaining examples were ruinous or without roof covering.

Penetrating the roof, the chimney stacks were found always to be in brick, probably later reconstructions of a vulnerable part of the building, always near the ridge, never near the eaves. Fifty-three of the houses had chimney stacks forward of the ridge as if avoiding any interruption of the ridge line. and this feature normally indicates the existence of a hooded chimney in a kitchen or an added fireplace and chimney in a bower.

As a result of the survey several examples of clay-walled houses were measured and two are illustrated here.

A good example of a clay-walled house survives, almost intact, but inhabited only by poultry, alongside Aikhead Hall near Wigton. It is a two-storey dwelling house with the remains of a single-storey range of farm buildings at one end. (Figs. 3, 4)

The entrance door opens onto a cross passage, now roofless, but with indications in the clay partition walls of the joists of a loft. From the passage a door close to the far end leads in to the domestic accommodation—there is no indication in the somewhat ruinous partition wall of a door leading from the passage into the former farm buildings. A short passage alongside the hearth gives on to the "kitchen" or living room. From this room a door leads through the thick clay partition wall into the "bower" or bedroom while a further door in the rear side wall opens into a shallow store formed as an outshut or "toofall". From the bower, a staircase rises to the first floor, which here is divided into two rooms by the partition wall carried up to ridge level. The living room is dominated by the "chimney nook", whose hood is carried by a deep timber beam arched on the underside. The open hearth has been replaced by a nineteenth-century cast iron range, but the "spice cupboard", a small square recess with a wooden door, let

into the gable wall, still survives, as does the "fire window", here a tall, narrow, single-light window, overlooking the chimney nook. A stone and cast iron fireplace, which may be an insertion, projects from the gable wall of the bower. On the first floor the larger room is dominated by the bulging curve of the chimney hood, just as is the kitchen by the chimney nook; while both rooms are lit only by small, shallow windows set almost at floor level.

The clay walls are unusually massive, being 2 ft. 6 ins. in thickness with the partition walls 6 ins. narrower. They were formerly rendered on the outside, but most of the rendering has collapsed to expose a walling material of stony clay mixed with chopped straw, laid in roughly horizontal courses about 3 ins. deep and separated by courses of straw. The door and ground floor windows have sandstone dressings, set into the clay wall, with, in the case of the kitchen windows, an additional slate damp-proof course over the lintel. On the first floor there are no stone dressings, the wooden window frames being set deeply in the walls under the eaves. The slight chamfer to the dressings indicates, in comparison with similar details on dated buildings in the survey area, a date between 1750 and 1795.

A ridge-purlin and two sets of side-purlins are carried by the gable and partition walls, and, between these walls by two trusses of "upper cruck" form, both braced with light collars.[46] The cruck blades, which are not matching pairs, are of the poor quality timber characteristic of cruck construction in this part of Cumberland. The roof is covered with sandstone flags through which the two chimney stacks project forward of the ridge.

The house appears to be generally of one build, minor improvements and repairs having taken place during its human occupation. There is no indication in the wall of the insertion of new windows or door, and from the evidence of the stone dressings, and the descriptions quoted of comparable houses, it seems reasonable to date this building to the second half of the eighteenth century.

An example of the meanest level of clay construction remained, until recently, in the form of a pair of cottages at Causewayhead, near Silloth in Holme Low parish. As disposed immediately before their demolition in May 1961, the more easterly cottage consisted of two rooms on the ground floor and the more westerly of two rooms and a small outshut, also on the ground floor; neither cottage gave signs of having possessed a loft at any time. The easterly cottage was provided with two fireplaces which had been attached to either side

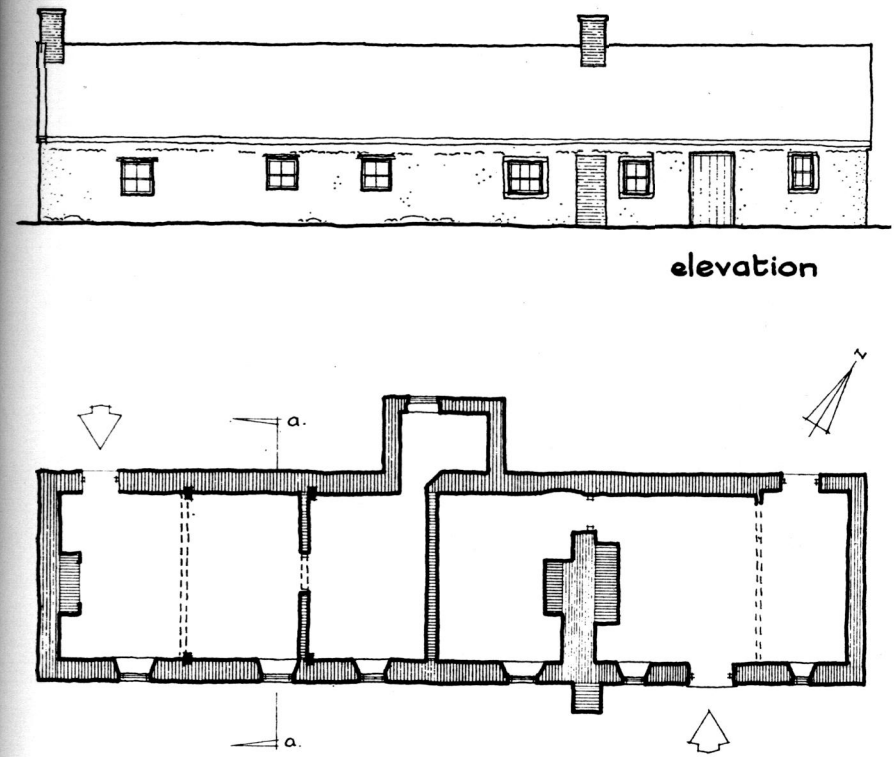


Fig. 5. Causewayhead, Holme Low, Cumberland.

of a massive clay cross wall and the other cottage had a fireplace on the gable wall. (Fig. 5)

Construction of the pair of cottages was of clay mixed with chopped straw, laid in courses between straw, as in the previous example, though there had been liberal repairs with cobble-stones and brickwork. The walls were quite slender, being between 1 ft. 6 ins, and 1 ft. 9 ins. in thickness, and rose from an irregular plinth of boulders. In the westerly cottage, the ridge and a single set of purlins were carried on two cruck trusses, each consisting of a pair of flimsy blades, tied at the head by a saddle-piece, and at wall plate level by an equally flimsy tie beam.[47] The blades were so far rounded that they appeared to be simple tree trunks from which the bark had been peeled and were at the opposite extreme from the carefully selected, subtly curved members, found in areas of more sophisticated cruck construction. The purlins were of similar timber and carried on the blades by means of quite heavy blocking pieces. No indication remained at the time the building was examined of the exact form of the roof construction of the easterly cottage but from the appearance of the timbers lying around the site there is no reason to doubt that it was similar to the other. The roof, which for some years had been covered with corrugated galvanised steel sheeting, was shown from the debris on the site to have been formerly covered in turf, and so recalled the piece of dialect verse quoted by Dickinson:[48]

> "His reuf may want patchin' and he out of thack,
> He may out onta t'moor and poo ling,
> Or bring in a burden o' seaves on his back
> For strea's ower costly a thing."

There were virtually no architectural details which could help to establish the date of the structure. In the easterly cottage, window openings were square but without any stone dressings, having shallow timber heads and thin stone sills. In the westerly cottage the windows were square in one case and narrow in the other two, all with stone dressings, though the door was without dressings. The square windows were used in stone-built small houses between 1660 and 1790 and in cottages even later; tall, narrow windows were used from about 1730 onwards. The section of the dressings was too indeterminate to give any further clue. The mean accommodation in association with thin walls and poor roofing materials suggests a building of the cottage class of a fairly late date, possibly of the nineteenth century in spite of the use of so ancient a system of roof construction. Or the building

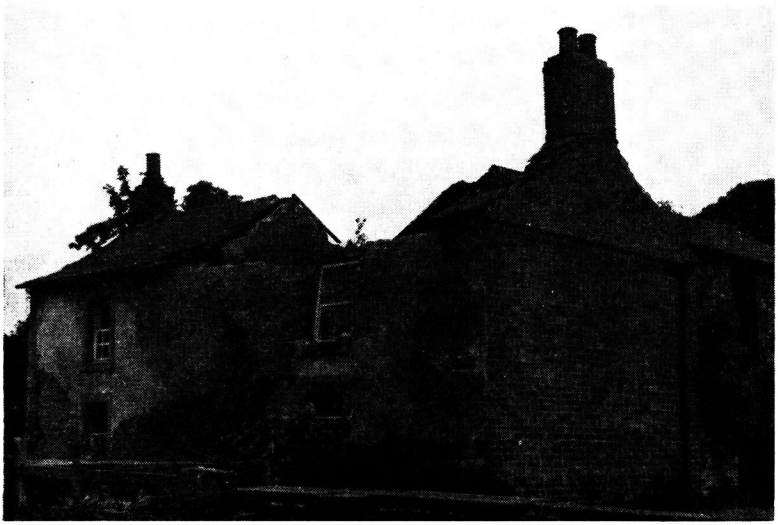


Fig. 6. House at Dundraw.

Fig. 7. Cottages at Burgh-by-Sands.

may have been erected as a farmhouse, the barn and byre being converted rather more recently into the easterly cottage.

Two further late examples are illustrated. The first, a small house at Dundraw in Holme Abbey parish, is a two-storey building mainly of clay though with gable walls rebuilt in brickwork apparently of recent date. The house has two full storeys and a thin slate roof of low pitch. The layout is characteristic of very late eighteenth or early nineteenth century in houses of this size; the stone dressings are of a common variety of which dated examples have been found not earlier than 1795; the door has the projecting stone cheeks of which an example dated 1820 survives in the same parish. A couple of cottages at Burgh-by-Sands provide together the second example. When first seen they had been abandoned and were in a ruinous state; they have since been destroyed without trace. From the illustration it may be seen that they were of two storeys, the lower of full height and the upper partly in the roof space, though still more than a loft. The walls were of clay to the full height, though the gable walls had been repaired in brickwork. The window and door dressings were of stone, the former of a type of which many dated examples survive of the period from 1771 to 1831 and the latter of a type of which dated examples range from 1795 to 1840. The roofs were of stone slates carried by crusses incorporating re-used cruck materials to form raised or upper crucks.

The examples illustrated are a few of a rapidly dwindling number of clay-walled dwellings in the northern part of Cumberland. The material itself, when properly protected, is as durable as stone; given care a clay-walled building can barely be distinguished from a stone-built one. But the small rooms, low ceilings, cramped staircases, minimal windows offend modern standards of accommodation and fall short of statutory requirements. At an ever-increasing pace the old clay houses are abandoned as dwellings, converted for a time to use as farm buildings, found wanting for an ever more scientific agriculture and finally destroyed. Planning regulations which are so often interpreted in country districts as to require the death of an old house before a new may be born, have been responsible for still further destruction. Nevertheless the contemporary descriptions and the surviving examples have testified to the importance of this form of construction as a response to particular local requirements during a particular space of time and it is to be hoped that the wishes of William Dickinson in 1852 that some examples might be preserved may be fulfilled before it is too late.

FOOTNOTES

[1] W. Hutchinson, *The History of the County of Cumberland*, 1794.
[2] J. Bailey & G. Culley, *General View of Agriculture of the County of Cumberland*, 1794, pp. 9-12.
[3] W. Dickinson, "The Farming of Cumberland", *Journal of the Royal Agricultural Society of England*, Vol. XIII, Part II, 1852.
[4] J. Gate, *History and Topography of Wigton and District*, 1894, pp. 24, 33.
[5] "Pennant's Tour to Scotland", 1772, quoted by J. L. Mack in *The Border Line*, 1924, p. 10.
[6] *Gentleman's Magazine Library*, "English Topography", Part II, 1790, refers to an article in the volume for 1754, p. 505.
[7] Hutchinson, op. cit.
[8] *Gentleman's Magazine Library*, op. cit., p. 251.
[9] *Fraser's Magazine*, "The Dalesfolk of Cumberland and Westmorland by one of themselves". Article in Vol. XI, New Series, July, 1875, p. 28.
[10] Gate, op. cit.
[11] W. Hutchinson, op. cit.
[12] J. Britton and E. W. Brayley, *The Beauties of England and Wales*, Vol. III, 1802, p. 186.
[13] A. C. Gibson, "Ancient Customs, etc. in Cumberland". Article in *Transactions of the Lancashire and Cheshire Historical Society*, Vol. 10, 1857-58, p. 103.
[14] W. Dickinson, op. cit.
[15] J. Housman, *Topographical Description of Cumberland*, 1800, p. 50.
[16] F. Grainger & W. G. Collingwood, *The Register and Records of Holm Cultram*, p. 240. The full quotation is as follows:

"The description of a small house built in 1720-1 for Ann Benson, widow, by the Manor Court under the custom of free bench or widow-right is given thus:—'Imprimis. Three pieces of timber 9s. It: For three dorments (roof timbers) 9s. It: for spears (spars) and finishing ye principalls 10s. It: For dales and Jests (deals or planks and joists) for lofting 3 yds and a half in length 18s. It: for three stone windows one to be 2 feet high and 2 feet breadth and ye second to be a foot and a half in height and a foot in breadth and ye third a foot square 6s. 6d. It: For glass for the windows 3s. 9d. It: For one door and 2 pair of cheeks 5s. It: for stairs 3s. It: for building ye walls and to make them 3 yds and a foot in height, ye east side wall and ye end walls to stand and to rest ye west side wall 3 yards ye height of house and Thatch ye house 21. It: for ye chimney and oven, Bricks Lime and Workmanship, with six loads of lime for plaistering ye walls 17s. 8d. It: for wood work and carriage of wood 13s. Total 61. 15s. 3d.'."

The three pieces of timber at the expensive sum of 9s. were presumably the members of the intermediate truss and the three "dorments" the ridge and side purlins. While it is not specifically stated that the house was clay-walled, Holm Cultram is a region with a high proportion of clay-walled houses surviving, the figure for building walls and thatching is so small as to suggest that materials were as cheap as clay, and the windows are specified as stone implying that they were set, as was common, in walls of an inferior material.

[17] "The Upshot" a transcription and notes by Mark Lonsdale (1785-1815) reprinted by E. R. & M. Denwood in *Oor Mak o' Toak*, 1946, p. 38.
[18] "The Bridewain" a transcription by John Stagg (1770-1823), reprinted in *Denwood*, op. cit., p. 53.
[19] e.g., pieces quoted in *Denwood*, op. cit., pp. 65, 104, 109.
[20] "The Blackell Murry-Neet" from *Anderson's Cumberland Ballads & Songs*, edited by T. Ellwood, 1904, p. 50.
[21] "Lang Seyne", from Ellwood, op. cit., p. 104.
[22] Britton, op. cit., p. 187.
[23] Dickinson, *Cumbriana*, 1876, p. 223.
[24] Gate, op. cit., p. 33.
[25] Andrew Boorde, *The First Boke of the Introduction of Knowledge*, 1542, Edition of 1870, p. 136.
[26] W. Hutchinson, op. cit., Vol. I, p. 26.
[27] *Dugdale's British Traveller*, 1819, pp. 620, 623.

[28] see *Denwood*, op. cit., p. 53. Hutchinson, op. cit., Vol. II, p. 324-5 refers to one Abraham Fletcher, born at Little Broughton, in Bridekirk parish, in 1714, who was an ambitious but untaught labourer "Over his house of one room there was a kind of loft or boarded floor (in Cumberland called a 'Bauks') which, however, had neither door, window, nor stairs. Hither by means of a single rope, which he always drew up after him, he mounted with his book and slate". Education in these uncomfortable quarters paid off to the extent of a fortune of £4,000 when he died in 1793.

[29] Anderson reprinted in Ellwood, op. cit., p. 104; Gate, op. cit., p. 24; Dickinson, *A Glossary of Cumberland Words and Phrases*, 1859; T. W. Carrick, *History of Wigton*, 1949, p. 16, Dickinson, *The Farming of Cumberland*, op. cit., p. 275; *Fraser's Magazine*, op. cit., p. 28.

[30] Anderson, reprinted in Ellwood, op. cit., p. 104, Gibson, op. cit., p. 103, Dickinson, *Cumbriana*, 1876, p. 248; Sir Fredrick Morton Eden, *The State of the Poor*, 1797, Vol. I, p. 553; Gate, op. cit.

[31] Anderson, reprinted in Ellwood, op. cit., p. 104.

[32] Hutchinson, op. cit., p. 515.

[33] Britton, op. cit., p. 186.

[34] Gibson, op. cit., p. 103.

[35] Eden, op. cit., p. 553.

[36] Pennant quoted in Mack, op. cit., p. 110.

[37] Dickinson, *The Farming of Cumberland*, op. cit., p. 275.

[38] G. Neilson, *Peel, its meaning and derivation*, 1894, p. 17.

[39] *Jamieson's Dictionary of the Scottish Language*, 1866-1910 under "cat and clay".

[40] Grainger and Collingwood, op. cit., p. 240.

[41] see Clough Williams-Ellis, *Building in Cob, Pise, and Stabilized Earth*, 1947, pp. 82-103.

[42] C. M. L. Bouch with K. S. Hodgson and C. G. Bulman, "Lamonby Farm: a clay house at Burgh-by-Sands". *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society New Series LIII*, 1954, p. 149. I am indebted to Canon Bouch's article for clues leading to many of the references quoted here.

[43] e.g. in C. F. Innocent, "The Development of English Building Construction", 1916.

[44] D. L. W. Tough, *The Last Years of a Frontier*, 1928, quoted, p. 50, Camden "Here every year, round about the wastes as they term them [e.g. Spadeadam Waste, the modern rocket testing site], as also in Gillsland, you may see, as it were, the ancient Nomads, a martial kind of men, who, from the month of April lie out scattering and summering (as they term it) with their cattle in little cottages here and there, which they call sheals or shealings".

[45] Jamieson, op. cit.

[46] This roof truss is an example of Class VIe—(1b), (3a) in the "Classification of British Historical Roof Types and their Members" by Professor R. A. Cordingley, *Transactions of the Ancient Monuments Society*, New Series, Vol. 9, 1961, p. 73ff.

[47] i.e. an example of Class VIIIa—(1a), (3f) in the Classification noted above.

[48] Dickinson, *Cumbriana*, p. 249.