

# THE PATTERN OF MORAY BUILDING

## An introduction to traditional building materials and practices

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### Introduction

In 1962 a book was published in England that looked at buildings not through the eyes of the architectural historian, not for their ancient or modern associations, their illustrious family connections nor their style or plan form, but solely for the materials from which they were constructed and the sources from whence those materials came. This study revealed a rich heritage of visual interest, a wide variation of types and textures of walling and roofs and the reasons for these variations. The buildings included were mainly secular and ranged from the manor to the small cottage, from the medieval gatehouse to the suburban villa. Different types of stone, clay, brick, wood, plaster and metal all found their way into this study.<sup>1</sup> This paper attempts to identify buildings and their materials in similar vein in a small geographical area in north-east Scotland, taking into account the differences of history, communications and social pattern. Here too, examples are drawn mainly from the field of domestic architecture.

The District of Moray (Fig.12.1), combining since 1975 most of the old counties of Moray and Banff, is an area of geographical, geological and economic variety. The hills and plains, coast and glens that make up the varied landscape are also the source of different building materials and local building typology. Though there is a considerable survival of medieval fabric in the District, compared with other similar sized areas in the north of Scotland and some important 16th and 17th century tower houses such as Brodie Castle and Innes House (1640-53), the greater part of the traditional domestic buildings date from the later 18th and 19th centuries. These were times of great change; improvements in agriculture, expansion of the fishing industry and the increased circulation of money. Well into the 19th century most building, except for the affluent, was confined to local materials, but as roads improved so there was some modest expansion in range of transport. The greatest changes came in the later 19th century with the introduction of the railways, when materials from outwith Moray arrived in the district, competing with some local resources. As most of the surviving buildings fall within this period, from the late 18th century onwards, they serve as a mirror not only of building history, but also of some aspects of society, economics and communications. The growth of agriculture and change in farm buildings, the desire of the medium sized landowner for greater domestic style and comfort, the improvement in housing of farm workers, estate employees and fisherfolk, all this and more is mirrored in this network of building.

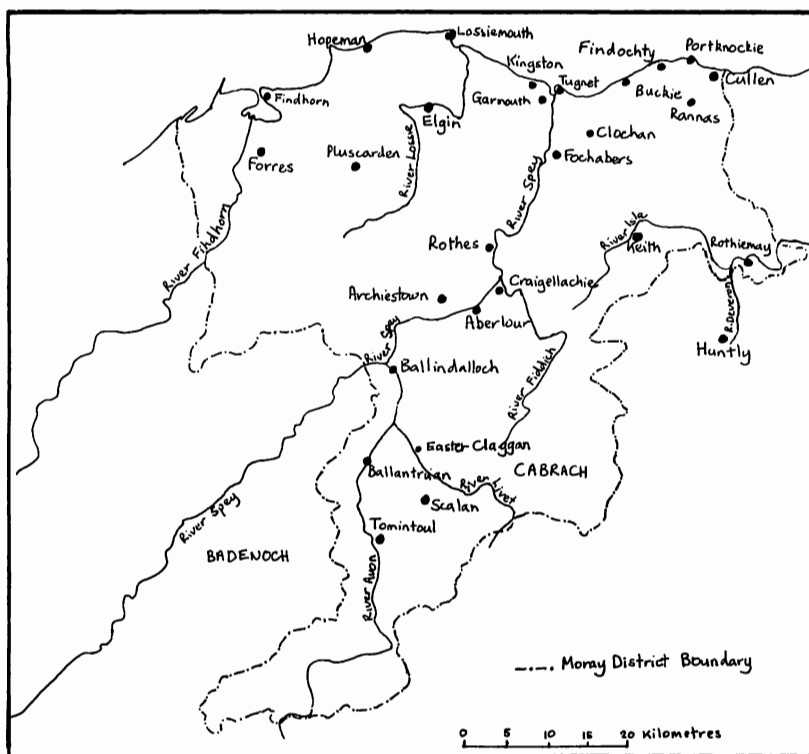


Fig. 12.1 Map of Moray District.

The word building is used in favour of architecture, for most cottages were constructed without plans by local people. Many larger houses erected before 1820 were designed by architects living and working far from Moray who may not even have visited the site nor had knowledge and experience of local building fabrics. Even the laird was limited to local resources unless he could dig deep into his pocket for transport, as at Innes House,<sup>2</sup> particularly if he lived away from the coast and seaborne goods. Though the architectural profession plays little part in this study, the letters and specifications of the architect William Robertson, who practised in Elgin from circa 1821 until his death twenty years later in 1841, do throw interesting light on choice, sources and quality of materials and the cost of their transport at a time when roads were expanding locally. So do the advertisements of entrepreneurs and tradesmen in the Elgin and Forres newspapers, circulating from the late 1820s.

There is, therefore, a local 'pattern' of building harmonising with the landscape until well into this century. It is hoped that the following notes,

if only tentatively, will echo Alex Clifton-Taylor's response to 'the visual aspect of our buildings, and the reason why they look as they do in one place, and perhaps so different only a few miles away'.<sup>3</sup>

## Stone

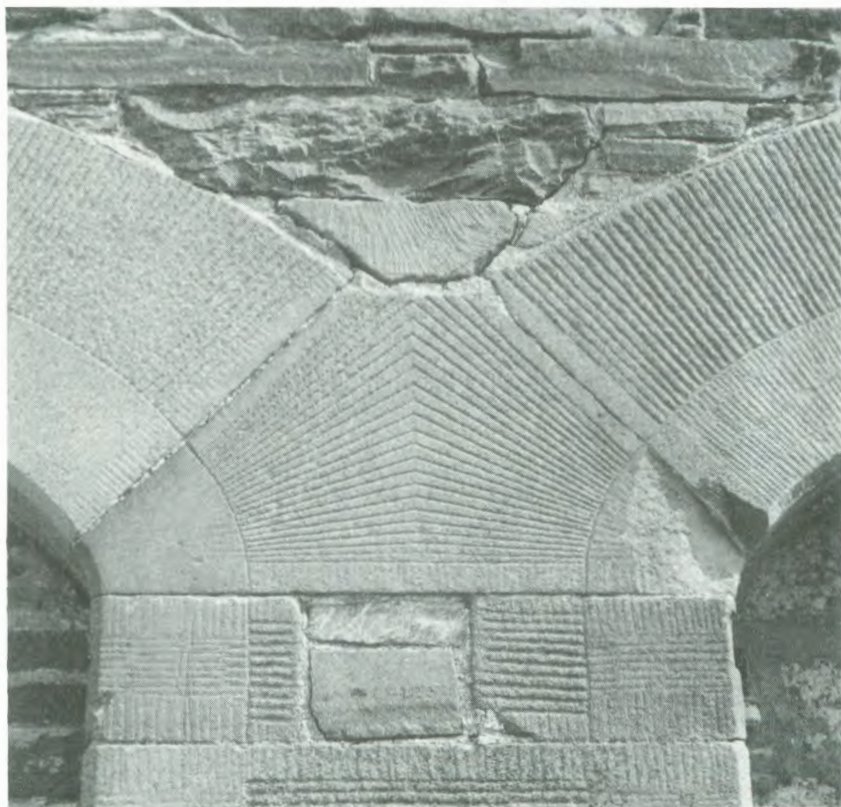
The geological map of Moray shows that a wide variety of rock types occur in the District, providing a range of materials of varying type and quality for building purposes. The low-lying, more highly populated coastal fringe of the Laich was well provided for by having extensive outcrops of good quality sandstone. Inland there are some scattered exposures of granite, while along the coast from Buckie to Cullen the rocks are mostly flaggy schists and gneisses, constituting an inferior building fabric. Each have their own texture and some were better than others to quarry, tool and with which to build.

In lowland Moray outcrops of sandstones of Upper Old Red Sandstone age were widely quarried along the ridges from Alves to Elgin, with very large workings at Newton and in Quarry Wood. This stone is creamy yellow to pale pink in colour and the textures vary from pebbly, through gritty to fine-grained varieties. As these sandstones are well cemented, they could be dressed to smooth ashlar and were suitable for carving and decorative tooling. Beds of finely laminated stone also occur but are poorly cemented, wearing badly if used as facings; some of these split well and were utilised as roofing slabs.

Along the coast between Burghead and Lossiemouth there were many quarries working in the sandstones of Permo-Triassic age, which also outcrop on the ridge at Spynie and on the top of the hill at Quarry Wood. This is generally a more even-grained and firmer textured sandstone of a pleasing pale yellow colour; the harder varieties were much sought after for facings and decorative work and were dearer than those that were softer (Fig.12.2).

These quarries in lower Moray achieved a considerable reputation far beyond Moray. In 1746 there were thirteen quarries between Burghead and the Broad Hythe, where the planned village of Hopeman was established in 1812. Clashach quarry, east of Hopeman, had its own jetty, and was used, no doubt, by some or all of the 'five large boats with six people in each ... employed in transporting stones from quarries to different parts of the country'<sup>4</sup> in the 1790s.

In Elgin, many fine public buildings, villas and cottages are constructed from these sandstones. The medieval cathedral is outstanding and of national importance, if now a roofless shadow of its former glory. The three remaining late 17th century arcaded merchants' houses in Elgin High Street have harled rubble walls, utilising cheaper stone, but well-tooled columned arcades and margins (Fig.12.3). The austere classical St. Giles



*Fig.12.2 Cullen Home Farm, 1816. Decorative tooled Moray sandstone dressings with local schist rubble walling. (Crown Copyright: Historic Scotland)*

Church<sup>5</sup> is executed in smoothly finished sandstone ashlar with fine joints and restrained carved detailing.

In villages such as Lossiemouth, Hopeman and Burghead, use was naturally made of the stone from nearby quarries. Forres, on the other hand, is situated equally distant from the sandstone quarries of Hopeman, Nairn and Newton and stones from the last two sources are difficult to tell apart, though there is no difficulty in identifying those from the coastal quarries. The Forres High Street is lined with shops with dwellings above, churches and other buildings, all executed in sandstone with a variety of different textures and tooling. With the nearest quarries all being at roughly the same distance, transport charges from each would have been similar; however a few buildings show what might have been a compromise. They have been built of the massive (high grade) Moinian gneiss from the New



Fig.12.3 *Braco's Banking House, Elgin, 1694. Harled rubble, tooled and polished sandstone ashlar dressings; sandstone slab roof.*

Forres quarry on the outskirts of the town, while the dressings are usually of Hopeman sandstone. The gneiss is very hard and difficult to work and is currently quarried for roadstone. The gables of the buildings have been constructed with rubble while the frontages are of evenly dressed blocks of the same gneiss. This stone is dove grey with a slight pink tinge and contrasts well with the yellow sandstone.

South of Elgin, in Speyside and east to Keith, granite of various types was the principal building fabric. The large granite mass of Ben Rinnies and the smaller one at Rothes, are coarse-grained biotite granites, similar to that of the Cairngorms. There are no records of quarries of any substance ever having been opened for this stone. Granite *in situ* is generally very deeply weathered and there is considerable luck in uncovering fresh material. Loose stone from such sources soon disintegrates but some fresher materials could be found as water-rounded blocks in the River Spey or amongst the glacial erratics and fluvio-glacial debris which littered the countryside. These were gradually cleared to create fields during agricultural improvement and were exploited as building material, forming a useful source of random rubble of varied colour and texture. Of such is the walling of mid-18th century Arndilly House, near Craigellachie, though the dressings are of tooled granite; here later additions can be identified by the use of more easily handled sandstone ashlar margins. The original



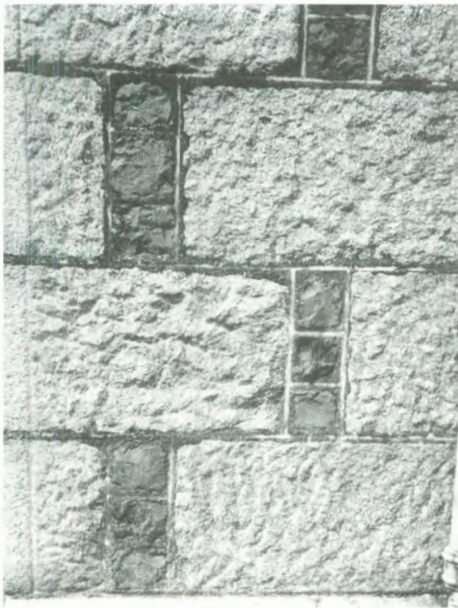


*Fig.12.4 124 Land Street, Keith, circa 1900. 'Aberdeen Bonding'; pale grey granite pinned with dark whinstone wedges. (Crown Copyright: Historic Scotland)*

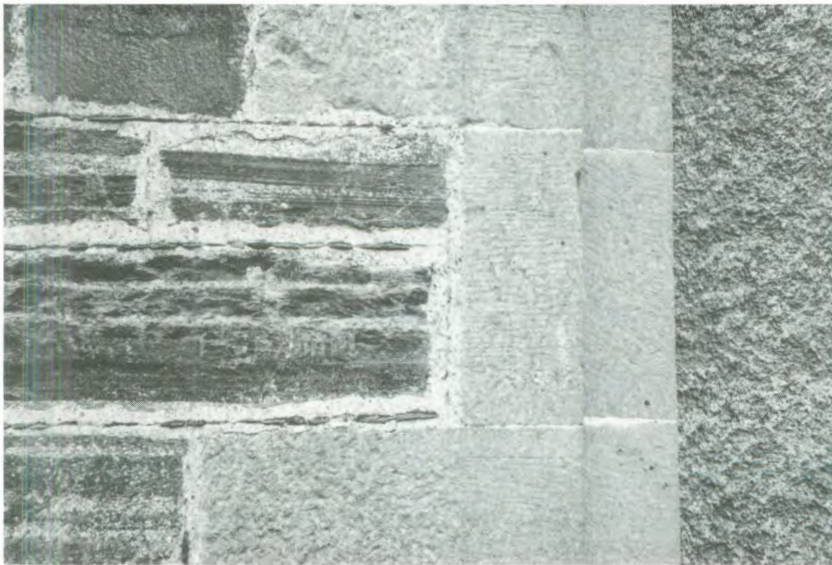
granite quoins are very pleasing though the work involved in their preparation must have been arduous.<sup>6</sup> In Rothes the mainly 19th century houses and cottages are fronted with roughly squared pink, brown and white granite, most of which splits reasonably well on the horizontal plane but which leaves rough fractures at the vertical edges. These fractures are masked by contrasting dark pinnings or 'Aberdeen Bonding',<sup>7</sup> making a decorative virtue out of necessity. Similar walling is found in Keith and Rothiemay, both sited reasonably near the Avochie granite quarries. This is a pale grey stone which contrasts well with dark pinnings, making a distinctive frontage to otherwise simple houses (Figs.12.4, 12.5).

At Keith, however, there is a separate, small outcrop of granite in which the town had its own quarry inside the burgh, subsequently infilled and built over. Many of the earlier houses in the town were built of this stone which is a drab yellow-brown in colour. It is an unusual type, being in the form of a coarse schist; it is this schistosity which has made the stone easy to work.

In the Knockando, Ballindalloch and Archiestown area the granite is red, pink and yellow. As random rubble it creates an attractive walling; when tooled and laid in a chequered pattern and further pinned with dark bonding it is almost exotic. The finest examples date from the late 18th



*Fig.12.5 124 Land Street, Keith. Detail of masonry. (Crown Copyright: Historic Scotland)*



*Fig. 12.6 Cairnfield House, 1802. Actinolite schist rubble cherry-pointed with fragments of slate from same geological beds; tooled local granite dressings (later harling extreme right). (Crown Copyright: Historic Scotland)*





*Fig.12.7 2 East Street, Fochabers. Random rubble laid in courses developed from local clay building technique.*



*Fig.12.8 70 High Street, Fochabers, 1828. Mixed tooled rubble with painted joints; tooled sandstone dressings.*



century and are in Archiestown. The Cottage, a single storey house of circa 1790 with unusual advanced pavilion wings, has a red and yellow granite chequered frontage, while Old St. Andrews in The Square combines these same coloured blocks with dark pinnings. The stone is very hard and its preparation costly in human and economic terms.

Where squared blocks of stone are slightly uneven, the practice of 'galleting' (the word *galet* is French for water worn pebble) or 'cherry-pointing' is carried out. Small pebbles or chips of stone or slate are pressed into the masonry joints, either to strengthen the mortar course or to level up irregularities. Though strictly functional, the practice is also ornamental, particularly where there is a contrast of colours in the materials used. At Letterfourie House<sup>8</sup> the blocks of pink granite used on the north entrance front are levelled and decorated with tiny polished black pebble studs while the humbler red sandstone Bogmuir School (mid 19th century, now disused) has its broad mortar courses cherry-pointed with slips of black slate; mid-later 19th century Burgie Mains House has its frontage of yellow-brown sandstone similarly treated. Galleting is never used with ashlar, for the joints are too fine 'but even were this not so, galleting is too rustic a process to consort with such elegance'.<sup>9</sup> (Fig.12.6).

Courses of mis-shapen random or field rubble are infilled or caulked with smaller pieces, locally known as 'cherry-cocking'. This is a very old practice which has continued well into this century. Amongst early examples are the walls enclosing the garden at medieval Pluscarden Abbey and the park walls at Rothiemay House, occupying the site of Rothiemay Castle.

Nowhere in Moray is the variety of stone for building more in evidence than in Fochabers. Established from 1769 onwards by the fourth Duke of Gordon to replace the old village inconveniently sited nearer the castle, the town has a neat grid plan devised by the Edinburgh architect, John Baxter. The immediate neighbourhood is not blessed with good building stone and the variety of materials and methods of usage are of considerable interest. Small stones, gathered from field or river, are laid as random rubble, there are chequered walls of mixed pink, brown and white granite, red sandstone from Stynie and yellow-brown sandstone from Elgin, which became easier to obtain after the fast flowing River Spey had been bridged in 1810. The tradition of clay building in the immediate hinterland of the lower Spey, when the clay mix was laid in courses (a practice elaborated later in this paper) which dried out before the next lift was added, has been adapted to a mixture of small stones and mortar, the lifts regularised and defined in height by the tooled ashlar long and short corner dressings. The line between one lift and another is clearly visible, notably in some Gordon Castle estate houses at nos. 2, 4 and 6 East Street (Fig.12.7) and a row of late 19th century cottages (also Gordon Castle estate) in Bogmuir.

Fulton House, 70 High Street, dated 1828 (Fig.12.8), and 24 High Street



*Fig.12.9 16 Bogmuir, near Fochabers, 1828. 'Clay and bool' cottage; note horizontal lines indicating the courses, each of which was allowed to dry out before the next addition. Corrugated iron roof replaces former 'clay' thatch. (Crown Copyright: Historic Scotland)*

of circa 1870, both have frontages of squared mixed pink, grey and brown rubble with tooled sandstone margins, giving individuality to the frontages and variation to the principal street where the regular building line with simple 2-storey, 3-window elevations could otherwise be monotonous. The public buildings, such as John Baxter's Bellie Parish Church of 1797 which is the centre-piece of the village square and the Episcopal Chapel (facing it one block to the north) designed by Archibald Simpson in 1834, are of the finest ashlar. The impact and importance of these churches is brought about not only by their architecture and siting but also by the quality of the materials of which they are constructed.

### **Clay**

In certain parts of Moray, principally in the parishes of Urquhart, Bellie, Speymouth, St. Andrews Lhanbryde and Rathven, all in coastal districts near the outflow of the River Spey to the west and Cullen to the east, there is a scarcity of good building stone. Here, as in similar areas elsewhere in Scotland and England, clay has been exploited as a walling material.<sup>10</sup> Clay or mud, with chopped straw, heather or bent grass (vegetable matter prevented cracking during shrinkage) was worked to a stiff consistency before being laid in courses on a boulder foundation. Each course was allowed to dry out before the next was raised.(Fig.12.9) Dressed stone of

varying quality (according to means and resources available) was used for windows and door openings, and at the corners. Providing the walls were kept dry with an outer coat of lime harl or regularly lime washed, this was a durable and warm walling. Though mainly used for single-storey cottages, in 'the populous village of Garmouth .... The houses, many of them three storeys high, are built of clay, kneaded up with straw, in a frame (shuttering) as practised in the South of France'.<sup>11</sup> Though the use of shuttering is mentioned for these houses which exceed single storey height, many cottages appear to have been constructed without this aid.

A variant where the clay mix has added round stones from the river or shore, known as 'bools', was called Auchenhalrig work from the name of a hamlet in Bellie parish. The following description, written in 1812, on the use and preparation of Auchenhalrig work, is worth quoting at length:-

'This work is built of small stones and mud, or clay, mixed with straw. The proportions of these materials required to make a rood of thirty-six square yards, are nearly as follows, viz. about thirty cart loads of stones, ten cart loads of clay or mud, and twenty-four stones weight of good fresh straw. When the clay is strong and tough it will require fully three cart loads of sharp water sand. The mode of preparation is thus — if the mud or clay is lumpy, it must be reduced with a mallet, mixed with the sand, and made pretty thick with water: the straw is then equally strewed over it, trampled with the feet and wrought from one side to the other; until the whole is of proper consistency for admixture with the stones.

In building any kind of stones will answer; even stones from the channel of a river, which are generally round, are preferred by some workmen to any other. They ought not to be larger than a workman can with ease put upon the wall; and though much smaller, they are perfectly sufficient; indeed, large stones are improper, as they prevent the mud from consolidating, and, by consequence, diminish the strength and durability of the walls, which are of much the same breadth as those built with stone and lime: twenty-two inches are sufficient for a wall of seven feet high: if higher, they should be two feet thick, carried up perpendicularly the same as other walls, and care should be taken never to build more than two or three feet of height in any one part in the same day: if raised more, the wall is apt to swell, for which there is no remedy but to pull it down, and rebuild. To prevent accidents of this nature the work is so proportioned to the number of hands employed, as to admit of three or four days for each division to dry, before more is put upon it. In order, therefore, to keep two men constantly at work, one building and another preparing the mud, a wall to the extent of about forty feet going on at one time is requisite. Where there is any joisting for grain lofts, etc. there should always be a wall plate of wood one and a half inches thick laid below the joists, and their ends brought within six inches of the outside of the wall: a similar plate is also necessary below the feet of the couples.





*Fig.12.10 Cowfurach, near Broadley. 'Clay and bool' revealed. (Crown Copyright: Historic Scotland)*



*Fig.12.11 Hopeman, circa 1900. Clay thatched cottages; the centre cottage is in process of being re-thatched and the underlay of divots is clearly visible. Note clay slurry on roof of left hand cottage.*

These walls are equal to the weight of any roof commonly put on mason work, either slate, heath, mud and straw, or stob thatch. If done with mud or stob thatch there should be a good heath brush laid on the wall head to bear up the straw, and to carry the rain over the walls, as nothing is so injurious as rain falling into the face, or getting into the middle of the wall.

In the course of two or three years after being built, the frost has generally such an effect upon the mud on the outside of the walls, that it falls off, leaving the stones (which are covered with it when newly built) quite bare. Whenever the walls begin to appear in this state, they should be harled over with lime properly mixed with pure river or sea sand pretty rough; and that the inside walls of barns and grain lofts may be sufficiently close and smooth, it is strongly recommended to do them over with a thin coat of plaster lime, which adheres firmly to the mud. Thus finished, the Auchenhalrig houses are, out and inside, as ornamental as those built entirely of stone and lime mortar'.<sup>12</sup>

As at Cowfurach, Rathven, the 'bools' are laid in neat rows (Fig.12.10): in a shed on Longhill Mill, Urquhart, they are in a herring-bone pattern. Most of the cottages at Kingston-on-Spey, built initially at the end of the 18th century to house workers in the ship building and timber industries there and at Garmouth, are of clay and bool. The material was used for simple linear steadings at Bogmuir and considered in 1820 for a 'Square of offices' to be built at Edom, Pluscarden. Here the farmer, Mr. Bain, when advertising for tenders for the work, stated that he would provide the materials but 'as it is not yet decided whether the offices will be of Mason or Achainhalrig (*sic*) Work, Contractors are requested to estimate for these different works separately'.<sup>13</sup>

Clay was used also for internal party walls. It was daubed over a wooden frame and straw or grass suspended from horizontal lathes or sticks and was widely used in Moray, even in houses of superior status. 'Braco's Banking House' (1694), High Street, Elgin, an arcaded merchant's dwelling, had such internal walling; an excellent example divides the attic from the stairwell at Pittensair, St. Andrews Lhanbryde, a beautifully detailed small house built for himself by the master mason, James Ogilvie, in 1735.

Clay was added to thatch in the clay building areas of Moray. Bundles of wheat, rye or oat straw (in that order of preference) were pinned to an underlay of turf divots daubed with a clay mix (Fig.12.11). After thatching the roof was washed over with a clay slurry which kept the thatch firm and only a strip of wood was required to hold it down at the eaves which were frequently re-enforced with a strip of heather thatch, a tougher material which protected the vulnerable wallhead.<sup>14</sup> Rye was grown expressly for thatching on some farms well into the 1930s.<sup>15</sup>

At Rannas, Rathven, a series of stone pegs project from the gable end of the 18th century implement shed (now slated) indicating that the roof



*Fig.12.12 Implement shed, Rannas, near Buckie, 18th century. Projecting stone 'pegs' for retaining thatch. (Crown Copyright: Historic Scotland)*

was originally thatched and secured to these pegs by ropes (probably of twisted straw). This is a West Coast and Highland practice (where the pegs are of wood) and the sophisticated Rannas example begs the question as to whether it was also widespread in Banffshire (Fig.12.12).

### **Bricks**

Clay is also the raw material for bricks and pantiles. Early bricks were moulded and then fired in field kilns near the clay pits, a process that became industrialised in due course. Brick and tile works were established at Tochieneal, near Cullen by John Wilson in 1841:<sup>16</sup> at Lochside, Spynie, William Priest set up The Morayshire Drain Tile and Pottery Works in 1847,<sup>17</sup> while by 1850 there were the 'Brick and Terracotta Works' at Craigellachie on or near a site formerly known as Mudhouse. This name soon changed to the appropriately industrialised version of Brickfield. Craigellachie not only offered 'Brown ware domestic pottery' and bricks but also 'drainage material, chimney cans, chimney vent linings, water sewerage pipes, flower pots, roof tiles etc..<sup>18</sup> Pantiles proved popular as a roofing material in the expanding seatowns which grew fast during the mid-19th century fishing boom and, to some extent, on smaller farm steadings and agricultural cottages, for they were usually less expensive





*Fig.12.13 Cullen House walled garden, 1788. Brick with Moray sandstone dressings and wallhead chimney stack (some stacks served glass-house and mural heating ducts, some were ornamental). (Crown Copyright: Historic Scotland)*

than slates but had a longer life than the cheaper thatch. Some pantiles were slightly porous, particularly on the exposed coastal sites, but this was remedied by a coating of pitch, causing the undulating roofs to take on a pleasing and characteristic black sheen. The availability of chimney cans indicates the gradual passing of the 'hinging lum', the mud daubed canopy which drew the smoke directly to a square, likewise mud coated, chimney; sewerage pipes suggest an improvement in sanitation, at least in the homes of the more prosperous, if an unlikely facility in rural cottages. Bricks were not much used as house walling, though a terrace of brick houses on the Dufftown Road in Craigellachie testify the local product: these houses would not merit a passing glance in the brick lined streets of English towns, but are noteworthy in north-east Scotland.

Bricks really came into their own for their thermal qualities as lining to large stone walled gardens. Their heat retention capability encourage the growth and ripening of fruit on wall-trained trees. The construction of these gardens was one aspect of the expansion of the greater (and also the lesser) country house and its estate from the mid-18th century onwards. Dockets for thousands of bricks appear among the building accounts for the large walled garden at Gordon Castle, constructed between 1803-4. These were supplied at 14/- per thousand by John Thow, Brick Macker (*sic*).<sup>19</sup> The slightly earlier but equally grandiose garden at Cullen House



*Fig.12.14 Cullen House walled garden, 1788. Detail of close jointed ashlar; also bricks laid in 'English garden bond', 4 rows of 'stretchers' alternated with 1 row of 'headers'. (Crown Copyright: Historic Scotland)*

was designed by James Playfair in 1788: it has solid brick walls (except for the north facing aspect of one wall) with fine sandstone ashlar corner stones and copes from Moray. The raw material for the bricks probably came from somewhere on the estate near 'Clay Pots' bridge and were moulded into bricks and then fired on site (Figs.12.13, 12.14).

Conversely bricks help retain cold. The biggest icehouse known in Scotland was built at the mouth of the Spey at Tugnet in 1830<sup>20</sup> to serve the rich salmon fishings of the River Spey belonging to the Dukes of Gordon. Ice was collected during the hard weather and stored in subterranean or semi-subterranean vaults and withdrawn as necessary as packing for salmon sent to the expanding urban markets of the south. At Tugnet there are six large vaulted chambers, entirely lined with brick.

Clay tiles were much in demand for field drainage, a vital factor in agricultural improvements and land reclamation during the late 18th and 19th centuries. Early field drains were stone lined but this practice was superseded by the cheaper, mass-produced earthenware pipe for which there was considerable demand.<sup>21</sup>

## **Turf**

The pliable nature of turf, besides its thermal qualities, made it the usual covering for the vaulted roofs of icehouses in Moray as elsewhere in Scotland. The three long parallel rounded roofs of the icehouse at Tugnet





*Fig.12.15 Gordon Castle park wall, 1814. Rubble with turf cope.*

are still covered with this material. Even for so illustrious and wealthy an estate as Gordon Castle, the use of a turf cope was considered satisfactory for the park walls, which run for several miles in length and were constructed of local rubble schist in 1814 by William Logie who charged respectively £35.10.2d and £31.12.2d for lengths of 145 and 150 feet.<sup>22</sup> Suitable stone for coping would have had to be brought to the site from a considerable distance at some expense while the turf was readily available, growing in the park in the process of being enclosed (Fig.12.15).

At a more humble level, turf was sometimes the walling material for the upper part of cottage gables besides the foundation for thatch. Remains of turf gables are to be found in deserted upland settlements such as Croft of Scalan in the Braes of Glenlivet and at Lyne in Strath Avon.

### **Concrete**

As Walker has pointed out 'mass concrete is a logical extension of the solid clay wall technique and concrete houses and sheds are often found in areas of clay construction'.<sup>23</sup> There are some examples of use of this material in garden walls and sheds in Garmouth, probably dating from 1886 onwards with the arrival of the railway.

The Banffshire coastal railway was largely responsible for another use of concrete and the establishment of a late 19th and early 20th century vernacular tradition in the seatowns which is still very much alive today. Villages such as Findochty and Portknockie grew and expanded as fishing prospered, wealth increased and the standards of housing improved. Inferior quality schists were available for rubble walling but there was no





*Fig.12.16 Seafield Street, Portknockie, circa 1900. Rubble walling with painted concrete angle and window dressings, cornices and lintels; also flared concrete chimney copes. (Crown Copyright: Historic Scotland)*

local good quality quarried stone for dressings and margins. With the coming of the railway in the 1880s it was possible to bring in concrete with which to cast on site the component parts such as chimney copes, skewputts, dormer finials, shaped door and window lintels, and blocks for use as window jambs and corner stones. Concrete, however, is drab and engendered the almost universal practice of surface painting, a custom that frequently spreads to the entire house front, even masking alterations and heightening of earlier cottages from single to two storeys. The square blocks used as dressings for corners, door and window openings, when painted have created the 'long and short' contrasting detailing which is very much part of the street scene in these settlements, so much so that where earlier cottages originally had simple stone margins, these sometimes have painted 'blocks' superimposed on the window surrounds to keep up with fashion. Add to gaily painted margins and long and short work the defining or 'stroking' of masonry joints with fine white brushwork, and the frontages take on a colourful appearance which has earned the Banffshire coastal villages the nickname of 'Tartan Tounies'. Cullen seatown, Findochty and Portknockie (Fig.12.16) are particularly colourful.

### **Lime**

Lime for mortar and agricultural use was extensively quarried along the outcrop running from Sandend (Banff-Buchan) through Keith, Dufftown and Tomintoul and there were innumerable quarries along this line, many

masons having their own particular workings. Today only one remains, the Richmond quarry at Dufftown.

## Slates

'Scotch slate' is often considered synonymous with the better known West Highland slates but Moray and Banffshire have been well endowed with this durable roofing material. The earliest surviving stone roofs are not of slate but of sandstone. The Rannas aisle (1612) at Rathven and Coxton Tower, St. Andrews Lhanbryde (dated 1644 but probably somewhat earlier) both have sandstone blocks slotted into the upper face of their vaulted roofs, laid so as to form a flush, sloping surface to throw off the rain. There are unusual roofs on two Moray dovecotes, at Pittendreich and New Spynie, both dating from around 1600. On both these simple rectangular buildings the roof is supported by two pointed masonry arches rising from the wallhead carrying the large overlapping sandstone slabs. There is no ridge to either of these dovecotes, the slabs meeting at the apex; the square pigeon glovers or cupolas are also constructed of these slabs. On Braco's Banking House, Elgin (1694) similar but thinner over-lapping sandstone slabs are laid conventionally on rafters, held in place with wooden pins. The material for this roof is said to have come from Leggat's quarry, New Spynie, which is probably true for a few discarded slabs suitable for roofing still lie scattered around this abandoned site in Quarrywood. This is an area where finely laminated Upper Old Red Sandstone occurs which is poorly cemented and therefore splits easily.

Some mica schists of the Moin series in western Moray could be split for roofing slates. A quarry at Kellas, five miles south-west of Elgin, was mentioned by the Earl of Fife's factor when reporting progress on repairs to Pluscarden Abbey in 1822.. 'I yesterday contracted for roofing in that part of the Abbey under the repairs ... which after a great deal of competition I got done for £485 .... We have some hopes of getting slate for it in Kellas which would reduce the expense a little but this is by no means certain, 'tho' if they can be got I think they would look well being of a dark sparkling colour and not so light in colour as the Enzie slate is'.<sup>24</sup> In neighbouring Rafford parish in 1798 there was 'a slate quarry on the estate of Clunie, let out by the tenant of that farm to quarriers, at the rate of 3s 4d the 1,000 untrimmed slate',<sup>25</sup> in 1840 this quarry 'was not exhausted but now not used'.<sup>26</sup> Further east on the banks of the Knockando burn at the similarly named Clune Lodge (now demolished), a disused slate quarry was noted in 1914.<sup>27</sup> Many of these small upland open slate quarries were of little commercial use but served local requirements, like that near the Grouse Inn on the Cabrach where there is a 'slate quarry of light grey colour on the Hill of the Bank; there being little demand for the slates, the quarry is not in lease. They are not sold, but given gratis'.<sup>28</sup> There are many abandoned farms and crofts in the hills of upper Banffshire. What



Fig.12.17 *Fochabers. Slates from Tarrymount quarries laid in diminishing courses.*

is remarkable about these houses and steadings is that they remain reasonably sound for many years because they have durable slated roofs. The landscape is therefore largely spared the depressing sight of roofless ruins that are all too evident in similar depopulated areas where thatching was the traditional roof, requiring constant renewal.

At Rothes it was reported that there were 'quantities of mica slate imbedded (*sic*) in rocks of granite';<sup>29</sup> this may be the roofing material of the 18th century dovecote at Orton and the bothy abutting the walled garden nearby. Bands of schist (Dalradian series) produce extensive beds of a brown slate with a silvery mica sheen on the hillside of Cnoc Fergan in Strath Avon which were widely used in the area. An early example of the use of this material consists of a few slates embedded in the wallhead of the roofless 16th century Blairfindy Castle at Minmore. Graded Cnoc Fergan slates laid in diminishing courses make a very handsome roof, blending with and complementing local masonry. A particularly good example is on the 1844 former Free Church manse and steading at Claggan. The last known occasion when this slate was quarried was in the early 1930s when it was used to roof The Bield, Elgin, at the express desire of the owner, the late Lord Provost E S Harrison.<sup>30</sup>

Several slate quarries existed in the vicinity of Dufftown in 1836 though a slater, repairing a roof of this fabric in the 1970s, commented that 'Dufftown slates were sick in the head' meaning that they slightly soft and broke at the point where they were holed for nailing.<sup>31</sup>

Finally extensive quarries were sited at Tarrymount, Upper Allaloth and Oxhill in the Braes of Enzie near Clochan, Buckie. These belonged to the Duke of Gordon while Slateheugh, south of the Hill of Maud, was the property of the neighbouring Sir James Gordon of Letterfourie.<sup>32</sup> Slates



from the Enzie group were widely used in Fochabers and their warm, brown tone marks them out from the deep grey Aberdeenshire and purple or grey Welsh slates also used in that village (Fig.12.17). Oxhill slates and slabs were specified for the roof and dairy floor respectively of the new Bellie manse being built in Fochabers in 1822-3<sup>33</sup> and from Tarrymount for the same purpose for the new wing at Cairnfield House in 1825.<sup>34</sup>

These Moray and Banffshire slates were all fairly thick and consequently heavy. With improved roads, bridges and transport, they met with considerable competition. From the 1830s the quarry masters of the Aberdeenshire quarries at Foudland and Gartly were advertising their wares in the local newspapers and at the same time the recently opened Caledonian Canal facilitated the carriage of slates from Ballachulish and other West Highland sources. The final death-knell came in the later 19th century with the railway which brought in lighter, thinner and cheaper slates from Wales.

## Wood

Locally grown oak figures as building material for medieval Duffus Castle, for which Sir Reginald de Chen received a grant of two hundred oaks from the royal forests of Darnaway and Longmorn in 1305.<sup>35</sup> Of this woodwork nothing remains in the roofless stone motte and bailey moated fortification, but the splendid medieval hammer-beam roof of Randolph's Hall at Darnaway Castle survives to rank as one of the most important of its kind in Scotland, and is discussed elsewhere in this volume. Even if no other castle in the area achieved quite the sophistication of carpentry as at Darnaway, in a district so rich in castles and tower houses there must have been a wealth of panelling and carved wooden fittings. Some ecclesiastical work, such as the Laird's loft in Cullen old church, dated 1602 and incorporating re-used material, and the 1684 pulpit from old St. Giles', Elgin (now in St. Columba's Church, Moss Street, Elgin) indicate that both wood and the skill to work and carve it were available locally from early times.

Either oak or pine would probably have been the material for cruck blades. Cruck construction, when pairs of curved timber trusses, resembling the wishbone of a chicken, were set up in line to support the roof of a building, eliminating or at least substantially reducing the need for load bearing walls. The cruck blades were placed on a stone foundation or plinth, infilled to wallhead height with turf, wattle daubed with mud or with rubble, and thatched with heather or straw; the weight of the heavy roof was then transmitted directly to the ground by the cruck trusses. Thomas Dick Lauder illustrates skeletal cruck framed cottages standing ruined and desolate in the receding flood waters of the River Findhorn in 1829 at Broom of Moy, the greater part of their turf walling carried away by the 'Great Spate'.<sup>36</sup> A single jointed cruck blade has recently been



*Fig.12.18 Buckie. Banffshire seatown panelled front door with characteristic convex centre rail. (Crown Copyright: Historic Scotland)*

revealed in a close in the centre of Elgin, evidence that cruck framed dwellings were an urban as well as a rural tradition in Moray.<sup>37</sup>

In the 18th and 19th centuries, timber from the pine forests of Rothiemurchus and Strathspey was harvested in considerable quantity and was highly regarded for its quality throughout Scotland. Some of it found its way into houses in the immediate area. Good examples of mid-18th century raised and fielded panelling box beds, doors and cupboards are at Ballantruan in Strath Avon and Croughly near Tomintoul. Logs were floated down the Spey to the yards at Garmouth and Kingston-on-Spey for use in the boat building industry in these locations and for distribution elsewhere. The increase in house building from the mid-18th century onwards and the desire for a higher standard of domestic comfort amongst the landowners and merchants provided opportunities for good quality house carpentry. Excellent examples are found in the merchants' houses in Findhorn, which was the port of Forres and the entrepot for the immediate neighbourhood, notably at Kilravock which has a wide wooden staircase leading to the panelled first floor parlour. Elegant slender turned balusters grace the curved stairwell and landing of 124 Findhorn. In Forres



*Fig.12.19 Easter Claggan, Inveravon. Blacksmith crafted iron door handle (probably late 18th or early 19th century).*

itself the domestic quarters of John Cumming, merchant and banker, are 'over the shop' in his fine High Street premises built circa 1820. The public rooms have good decorative plaster ceilings, beaded and sometimes bowed panelled doors, reeded dados and panelled window shutters.<sup>38</sup> Fochabers exploited the raw material that was logged downstream past the village from the Duke of Gordon's forests in Rothiemurchus and there is an overall high standard of house carpentry in the village. In mansions built by landowners in the neighbourhood, such as Cairnfield<sup>39</sup>, Orton<sup>40</sup> and Arndilly<sup>41</sup> the panelling and carved overdoors achieve an elegance equal to many a metropolitan counterpart.

In the late 19th century and well into the 20th, increasing prosperity in the Banffshire seatowns encouraged house building; many of these gaily painted homes are fitted with good panelled front doors, some with a characteristic convex centre rail (Fig.12.18). Weatherboarded fishing stores and fish curing kilns are also a feature of the coastal villages. Hexagonal wooden paving blocks, sawn to reveal the grain, were manufactured at Urquhart's saw mills (Mills of Forres). Besides local demand they found a market in London in the 1840s.<sup>42</sup> The pend at 94 High Street, Forres is still paved with these attractive and serviceable blocks.





*Fig.12.20 South Lodge, Ballindalloch Castle, 1850. Ornate wrought-iron door hinge. (Crown Copyright: Historic Scotland)*

## Iron

As elsewhere, wrought-iron fittings such as yetts, window bars, door handles and hinges, were used in Moray. An early dated example of local blacksmith's work is the 1739 door latch fitted to the plank and stud door at the Peterkirk, Duffus. Iron was mined during the 18th century at the Lecht, near Tomintoul and a bloomery, to process the ore, has been identified at Ballindalloch.<sup>43</sup> Possibly it was this local source of iron that generated characteristic hand wrought door handles found in Strath Avon between Tomintoul and Ballindalloch, with a heart shaped plate at each end of the curved handle with which to attach the fitting to the door (Fig.12.19). At Scalan, in the Braes of Glenliver (just over the hill from the Lecht mine) the 1767 former Roman Catholic seminary has a neat door latch with a cross cut in the simple traceried door plate. This tradition of crafted door fittings continued into the 19th century; the South Lodge at Ballindalloch Castle<sup>44</sup> has a studded plank door with long ornate strap hinges on which the blacksmith has incised a diamond pattern to match the diamond-headed fittings (Fig.12.20). In the main, however, iron would have been brought in by sea or carrier from the south for the use of blacksmiths<sup>45</sup> and also cast-iron goods from such well known sources as the Carron Iron Works. Some local blacksmiths combined 'imported' cast items with their work; for instance the spearhead railings enclosing the garden at The Cottage, Archiestown, were locally made but the urn finials





*Fig.12.21 Aberlour House, 1837. Fine Moray sandstone in Speyside. (Crown Copyright: Historic Scotland)*

capping the intermediate stiffeners were cast and purchased elsewhere as a component part.

Though Carron and Banff are outside the scope of this paper, it is worth noting that the products of James Fraser's blacksmith's shop and foundry in Banff found their way to prestigious locations in Moray, notably the steel fire grates in the dining and drawing rooms of Letterfourie House.<sup>46</sup> Besides being of shapely and cunning design, these are decorated with incised flowers and one is signed by Fraser. The same firm designed and made carriage gates for the Quarry Gardens entrance to Gordon Castle in 1825.<sup>47</sup>

## **Conclusion**

The early 19th century improvements in communications, canal, road and rail, brought changes in the distribution of building materials, very slowly at first but in due time sufficient to eliminate the use of nearly all local fabrics. The effect of the opening of the Caledonian Canal in 1822 in relation to the movement of slates from west coast quarries has already been mentioned; conversely Moray sandstone made an appearance in Fort William by means of this waterway.<sup>48</sup> Roads improved and bridges were built (the bridging of the River Spey at Fochabers in 1810 was of particular importance) so horse drawn transport could cover wider distances. By the 1850s the railway network reached Moray, its own pioneer line from Elgin to Lossiemouth linking with the trunk route between Aberdeen

and Inverness. The much prized Moray sandstone, which had previously mainly been exported by sea, was now beginning to be used further inland. In 1833 William Robertson, architect, hoped that Bishop James Kyle might find sufficient funds to use this material on the entrance porch and baroque belltower that fronts the Roman Catholic Chapel at Huntly, a town where the local building stone was a hard grey granite.<sup>49</sup> Four years later the same architect used his favourite 'white freestone' for the austere classical mansion of Aberlour House commissioned by a Jamaican nabob, Alexander Grant (Fig.12.21). After the Highland Railway penetrated Speyside in 1863, quite modest houses could have decorative cast-iron balusters fitted to their staircases (chosen from catalogues) rather than locally turned pine — but the use of the same pine spread wider throughout Moray and in the late Victorian period was the fashionable wood for house carpentry in the increasing number of villas in the expanding suburbs of Forres and Elgin, and the substantial new farmhouses in the countryside.

Concrete and paint, already cited, proliferated in the growing seatowns, where new houses were roofed with lighter Welsh slates coming from the south by rail. Stone continued to be used for walling until well into the 20th century, though the skills that quarried, tooled and carved this fine material gradually diminished as demand slackened. By the last quarter of the 20th century the concrete block and roofing tile, aluminium window frames and plastic rainwater goods had arrived to stay, by the expanding road and shrinking rail networks, putting an end to the general use of local building materials and traditions.

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### Notes

1. Alec Clifton-Taylor, *The Pattern of English Building* (1962, revised ed. 1972).
2. *An Account of the Familie of Innes* ed. C Innes (Spalding Club 1864) 166-172; R G Cant, *Old Moray* (1948) end cover page. Innes House was designed by 'William Aitoun Maister Maison at Heriott' who was paid £26.13.4d (Scots money) for 'drawing the forme of the house in paper'. Sir Robert Innes kept precise accounts of the building of his house in Moray from 1640-1653; these included stone from Covesea which was transported by sea to Speyslaw, the nearest point to Innes, at between three and four times the price of the stone

- itself. Iron came from Leith, wood from Glen Moriston and 'twantie two thousand skleatts' from Caithness. The slater was paid for 'theaking' (thatching) 'my houss', the verb being then synonymous with slating. I am grateful to Dr R G Cant for drawing my attention to these accounts.
3. Alec Clifton-Taylor, *Pattern of English Building* 28.
  4. *The Statistical Account* [*Stat. Acct.*] (1792-3; edd. Witherington and Grant, 1982, xvi) 493. I am grateful to Mr Sinclair Ross for information on the number of mid-18th century quarries between Burghead and Hopeman and for evidence of stone being transported from the Moray coast to Dunrobin, Sutherland. See also note 2 above.
  5. Archibald Simpson, architect, 1828-9.
  6. Arndilly House, circa 1770; additions William Robertson, 1826; remodelled by Thomas Mackenzie, 1850.
  7. Considerable use of this building practice is to be found in Aberdeen.
  8. Robert Adam, architect, 1773. Charles McKean, *The District of Moray, An Illustrated Architectural Guide* (1987) 124-5.
  9. *Pattern of English Building* 53.
  10. For detailed coverage of clay building and clay thatch see Alexander Fenton 'Clay Building and Clay Thatch in Scotland' in *Studies in Folklife presented to Emyr Estyn Evans* ed. Desmond McCourt (1970) 28-51. Also Bruce Walker, *Clay Buildings in North East Scotland* (1977).
  11. Thomas Dick Lauder, *An Account of the Great Floods of August 1829* (1830, 3rd ed. 1873) 241.
  12. D Souter, *General View of the Agriculture of Banff* (1812) App., 9-11.
  13. *Elgin Courier*, 28 May 1830.
  14. Alexander Fenton 'Clay Building and Clay Thatch' 40-41. Until the cottage finally collapsed circa 1980, there was an example of clay thatching at Fernyfield, Urquhart.
  15. Pers. comm. the late Miss Isobel Brown, Dipple, 1977.
  16. *The Wilsons, a Banffshire Family of Factors* ed. Andrew Cassels Brown (1936) 58-9.
  17. *Elgin Courier*, 31 December 1847.
  18. *Elgin Courier*, 13 and 27 December 1850.
  19. Scottish Record Office GD 44/51/389/11.
  20. 1830 datestone was mistakenly re-cut to read 1630 circa 1975. The 1830 date was noted by the Inspector, Historic Buildings, during his survey in 1965. In any case the date 1630 is too early for commercial salmon fishing on the scale operated at Tugnet.
  21. Alexander Fenton, *Scottish Country Life* (1975) 18-20.
  22. Scottish Record Office GD 44/51/39. Discrepancies in cost per footage of walling are probably due to variable carriage costs of material according to distance from source of rubble stone.
  23. Bruce Walker, *Clay Buildings* 10, 16, 17.
  24. Duff House (Montcoffer Papers), MS 3175/vol. 11, Aberdeen University Special Collections. Letter from John Lawson, Elgin, to the Earl of Fife, 18 June, 1822. At this date Pluscarden Abbey was owned by the Earl.
  25. Anon. *Survey of the Province of Moray* (1798) 163.
  26. *New Statistical Account* [*NSA*] xiii (1842) 242.

27. *Northern Scot*, 2 May 1914.
28. *Stat. Acct* xvi, 116.
29. *NSA* xiii (1842) 229.
30. James B Dunn, Architect, 1930-32, though the design of this house was largely that of the owner, E S Harrison, who directed the building after the death of the architect prior to completion.
31. *NSA* xiii (1836) 107. Dufftown slates are more calcareous and therefore slightly softer.
32. *Ibid.*, (1842) 248.
33. Scottish Record Office GD 44/37/39. The architect was probably William Robertson.
34. National Register of Archives (Scotland), Gordon of Cairnfield Papers, bundle 150. William Robertson, architect.
35. W Douglas Simpson, *Duffus Castle and Church*, HBMD Guide (1951).
36. Thomas Dick Lauder, *Account of the Great Floods* pl.34.
37. Elizabeth Beaton 'Cruck Blade, Elgin, Moray' *Vernacular Building* xii (1988) 14-15.
38. 107-111 High Street, Forres. Besides being a successful merchant John Cumming was agent for the British Linen Bank. Premises appear on Wood's map of Forres, 1823.
39. Robert Burn, architect, 1799-1804; wing, William Robertson, 1825; minor additions, R B Pratt, circa 1930. National Register of Archives (Scotland), Gordon of Cairnfield Papers, bundles 131, 150, 185, 211.
40. Dated 1786 and 1848, drawing room and dining room wings by William Robertson, 1826. Though the mansion is mostly gutted internally the drawing room retains its fine dado, overdoors etc.
41. See note 6 above.
42. *NSA* xiii (1842), 172. No evidence of the use of 'oaken splinters or spoors' (shingles) has been identified in Moray, but as with paving blocks, the raw material was locally available. Balnagown Castle, Ross-shire, was roofed with these in 1668 (W MacGill, *Old Ross-shire and Scotland* (1909-11) 123, 192). Many building traditions in Easter Ross have similarities with those in Moray.
43. Information per Mr Ian Keillar, lecture SSNS, Forres, 1987.
44. Thomas Mackenzie, architect, 1850.
45. See note 2 above.
46. See note 8 above.
47. Scottish Record Office GD 44/51/391/100. The bill for 'ornamental gates' was £68.19.11d. There are no longer gates at the Quarry Gardens Lodge.
48. The former Ben Nevis Low Level Observatory, Achintore Road, Fort William (now Glentower) has tooled sandstone margins and dressings, most of which have been painted. These dressings are said to have come from Moray via the Caledonian Canal. Sidney Mitchell, architect, 1889.
49. Scottish Catholic Archives IM 18/3/5 and IM 18/2/8 (both 1833).