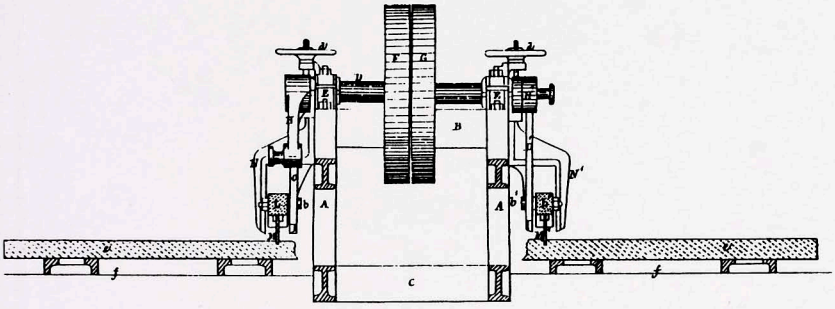
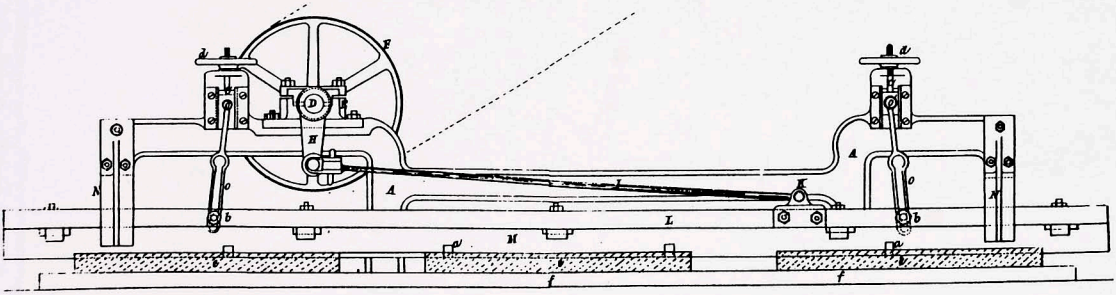
VERNACULAR BUILDING 24

Scottish Vernacular Buildings Working Group

2000





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Cover illustration: Cutting machine, patent number 3022 of 1857, used at Harrow pavement works, Caithness.

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PREFACE

The Year 2000 edition of *Vernacular Building* has breadth, both geographically, travelling from Orkney via Italy to Pakistan, and in social scale, ranging from plans for a gracious Edinburgh tenement residence for the Clerk of Penicuik family, via the Edinburgh Colonies, to humble stone 'igloos' for Orcadian pigs.

I must confess to editorial subjectivity with regard to Rose Pipes' article on the Edinburgh Colonies: these have fascinated me for many years, yet I knew nothing about them despite having lived and worked in Edinburgh. So to be able to ask all the questions to which I wanted answers, then read this comprehensive, well-illustrated and illuminating response, has been pure pleasure. Harry Gordon Slade's article on plans for an 18th-century exercise in 'Changing Rooms' in one of Edinburgh's High Street tenements makes an interesting contrast, not least in social scale. Yet the space deemed adequate for each end of the social scale does not differ so very much over a 150-year timespan; just imagine the contrasts which would be apparent today. Both papers draw attention to the forthcoming SVBWG Conference in association with the School of Scottish Studies, University of Edinburgh, on 3 November 2001, entitled 'Towns and Traditions: urban building in Scotland'.

Paul Humphreys' research on a 19th-century flagstone pavement works at Harrow, Caithness, reminds us of an earlier Conference, that of spring 1999 in Caithness, during which the importance of the flagstone trade both in buildings, and in the work provided in quarrying, processing and exporting this dramatically handsome material, became apparent to all. (I especially remember watching 30 square metres of 'solid' flagstone pavement undulate, as one man applied gentle pressure with a crowbar - an extraordinary sight.)

But at the heart of SVBWG and of *VB*, for many members, are farm buildings, which this year go international: the articles constitute an important record of the buildings themselves, of agriculture and its changing history, and of those who farm. And how very small the world really is: the same problems, and similar or even identical solutions, crop up in Shetland and in Pakistan, in Italy and in Aberdeenshire.

Once again, thanks are due to Veronica Steele for her interesting selection of book reviews. The publication on the slate industry of the Glens of Foudland (just up the road from my own vernacular home) in particular shows that seemingly very small, 'unimportant' buildings, forgotten industries, or lost communities can be a rewarding focus even for the 'amateur', whose role in documenting details of working and living patterns before they vanish completely may be crucial.

Articles on all aspects of 'vernacular buildings' (widely interpreted) are welcomed for possible inclusion in the next issue of *VB*, and should be sent to: Beth Ingpen, Editor, *Vernacular Building,* 10 The Square, Fochabers, Moray IV32 7DF (by June 2001 for inclusion in VB 25, or at any time). We also welcome publications for review, which should be forwarded to: Veronica Steele, Reviews Editor, SVBWG, c/o RCAHMS, John Sinclair House, 16 Bernard Terrace, Edinburgh EH8 9NX.

Beth Ingpen

EDINBURGH'S COLONIES

Rose Pipes

In Edinburgh, there are several groups of 19th-century cottage-style housing which, due to their unusual architecture and layout, stand out and demand attention. It is these clusters of two-storey stone terraces, arranged in parallel rows, that are generally known in the city as 'Colonies', most of which were built by The Edinburgh Co-operative Building Company Ltd. (ECBC) (Fig. 1).

Figure 1 This aerial view of the Stockbridge Colonies clearly shows the parallel layout which is typical of all the Colonies developments in the city.

Colonies-style housing is not unique to Edinburgh; isolated examples can be found in several Scottish towns including Perth, Stanley, Dundee, Cupar in Angus, and Rutherglen, and some of these (those in Perth and Stanley, for example) were built earlier than those in Edinburgh. However, in none of these places do the houses occur in the form of clustered settlements, as they do in Edinburgh.

In seeking explanations for the model chosen by the ECBC, it is essential to look first at the context out of which the Company emerged: one of acute housing

shortage in a city which, since early in the 19th century, had experienced a huge growth of population. At that time, most working-class families were housed in the Old Town, where the already overcrowded tenements had been divided again and again until many homes consisted of no more than one room and few had sanitation, light or ventilation. In such conditions both disease and depravity were rife, yet little was done to address the problem on any significant scale.

Among those who actively campaigned for an improvement in living conditions were social reformers, and ministers and others in or associated with the recently formed Free Church (1843). It was their firm belief that no significant advances could be made in terms of people's physical, moral, economic or social welfare unless they were provided with adequate housing. To the church people, in particular, 'adequate housing' meant more than simply a dwelling place which had light, air, space and sanitary facilities - it also meant a 'home' - somewhere in which a family could live 'respectably' and in comfort, thus increasing their chances of 'improvement'.

Given these aims, and the pressing need for a solution on a large scale, it must have become obvious to the reformers that the best way forward was to form an alliance with those who were in need and who were also in a position to do something to meet that need - namely building workers. Edinburgh stonemasons, joiners, plasterers and others in the building trade were impatient to improve their lot. In particular, they wished to reduce the number of hours worked from ten to nine per day and, in early 1861, a number of them wrote to their employers requesting such a reduction. The request was refused, and over 1,200 masons and joiners were 'locked out'. It was during this time of forced unemployment that some of the masons, encouraged by Hugh Gilzean Reid (local secretary of the Nine Hours Movement, and editor of the *Edinburgh Weekly News*) and others, decided to form their own building company.

The result was The Edinburgh Co-operative Building Company Ltd, formed in 1861 under the Joint Stock Companies Act. The co-operators had ambitious aims: they resolved to raise a working capital of £10,000 through the sale of £1 shares, and to build houses for people to buy, with the assistance of loans from Property Investment Companies. The plan was for people to become shareholders of the Company and, in the case of building workers, to become Company employees, as well as the owners of its houses. This principle of 'mutuality' was not unlike the 'stakeholder' concept of today, with people being directly involved in the business of the Company while at the same time benefiting from its output, in this case in terms of share dividends and houses that they could buy and live in themselves.

The ECBC was extremely successful; it raised the capital it needed, and succeeded in finding sites on which it built over 1,000 homes for a population of more than 7,000 people in the first twenty years of its life. Although not all of the houses were owner-occupied they were, as originally intended, mostly lived in by what the ECBC Manager described as 'the better class of working man'.

When considering a design for its houses, the challenge for the ECBC was to find a model that enabled it to balance a number of requirements: the cost of building had to be commensurate with selling prices that working-class families could afford, and the houses had to be large enough, and contain the necessary facilities, to enable families to live healthy, comfortable and respectable lives. Given that the feu duty per dwelling was based on the proportion of the ground it occupied, it was also important to find a way of accommodating several houses per acre whilst also maintaining privacy and avoiding the negative aspects of high-rise tenement living.

In trying to find a design solution to these needs, the ECBC must have been aware of the various 'model dwellings' built by philanthropists, industrialists, charitable organisations and others in Edinburgh and elsewhere. The main purpose of these 'models' was to provide both an architectural and an economic template for others to follow on a larger scale, and as such they served a useful purpose. Of the model dwellings that had been built in Edinburgh before the ECBC was formed, those at Fountainbridge (Rosebank Cottages) and at Pilrig (Pilrig Model Buildings, now named Shaw's Place, Street and Terrace) are the ones most likely to have influenced the Company in its choice of design. In both these cases the houses were two-storey flatted cottages, arranged in terraces with gardens attached to each house. At Pilrig the upper houses were entered by means of internal stairs, but at Rosebank an external stone stair led to a pair of upper houses (Fig. 2).

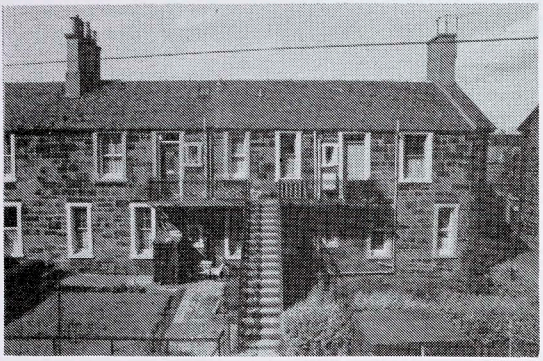


Figure 2 One of the three terraces at Rosebank Cottages, built and designed in the 1850s by James Gowans and his architect Alexander MacGregor.

The unusual nature of Rosebank Cottages attracted the attention of *The Builder* in 1857, which reported that:

> [the houses have] a distinct and independent entrance; secondly a plot...for bleaching or for flowers; thirdly a water-closet; fourthly a scullery with washing tubs, bath and hot-water; fifthly a separate access to each apartment from the lobby; and sixthly, ample provision of ventilation and for warming small bedrooms, which have no fireplace.

While the houses at Rosebank and Pilrig were always fully let, and certainly provided accommodation superior to that of the Old Town tenements, they were

criticised by some contemporary commentators for being too cramped and, in the case of the Pilrig houses, of being 'not very substantially built', draughty and poorly ventilated.

For the ECBC, the challenge was to improve on these earlier models and to provide housing on a much larger scale, for purchase rather than rent. The design it finally chose is shown in Figure 3. The external stone stair leading to a pair of upper houses is one of the most distinctive features of the early Colonies houses, and had two clear advantages over an internal stair: it was cheaper to build (it saved £42 on the selling price of a house), and it saved space inside the houses. It also provided external storage space for coal etc., and by separating one garden from another it afforded a degree of privacy. Within the houses, the basic floor plans were as shown in Figure 4, though there were small variations over time. What all the earlier houses had in common was: a parlour; at least one bedroom (more in the upper houses); a WC; a kitchen/sitting room with a bed recess and a range for cooking and heating water, plus a sink and wash tub; a closet or coal store; fireplaces and presses in the parlour and bedrooms; gas lighting.

As with the houses at Rosebank, those built by the ECBC also attracted the attention of contemporary commentators, some of whom were clearly impressed by their unique qualities:

> the arrangement of separate entrances on opposite sides is an exceedingly novel yet simple contrivance for securing absolute completeness and privacy to the occupants of the two parts of the tenement, and for solving the difficulty of providing house room for two families under the same roof, without the possibility of their interfering with each other's comfort, or even coming into each other's way, and yet giving to each family its own garden and a different roadway in front. (*Building Society and Lands Companies Gazette*, 1871)

For the first two decades of its existence, the ECBC continued to build houses based on the original design, though it abandoned external in favour of internal stairs in the 1870s and twice departed from the cottage-style model: once, spectacularly, at Trafalgar Street/Henderson Place (now part of Ferry Road) where, in 1865, it built a row of three-storey tenements fronting on to the main road, and again in 1878 when it built a row of large continuous villas to complete a terrace already started by another builder at Barnton Terrace (now part of Craigleith Road). The decision to build the tenements at Henderson Place may well reflect the difficulties experienced by the fledgling Company in finding land at suitable prices to enable it to built at lower densities. As an experiment it was not a success, since the flats took a long time to sell or to rent, and it was never repeated except on a small scale at Abbeyhill where the last houses on the site were built as tenements rather than two-storey terraces.

By the 1880s, the ECBC had changed its character and was beginning to build on a grander scale. The early cottage-style was abandoned for ever, the

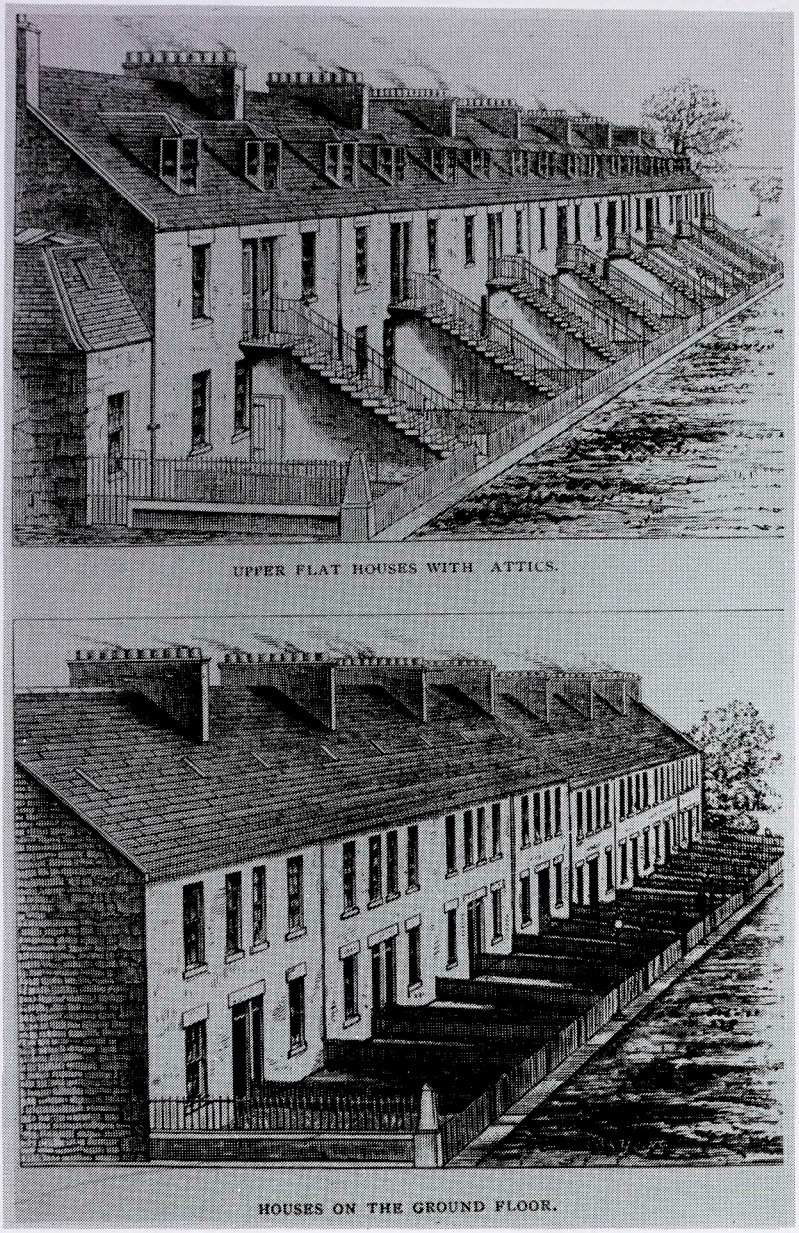


Figure 3 Victorian etchings showing the model chosen by the ECBC for its first Colonies-style houses. The lower storey of each terrace comprised ground floor, or 'low doors' houses, entered from one side of the terrace, and the upper storey comprised houses entered from the other side of the terrace by means of an external stone staircase. The upper, or 'high doors' houses usually had two floors with dormer windows on both sides of the attic floor. Each house had its own small garden, complete with iron clothes poles, and the terraces were separated from one another either by a narrow roadway (often a cul-de-sac) or a footpath.

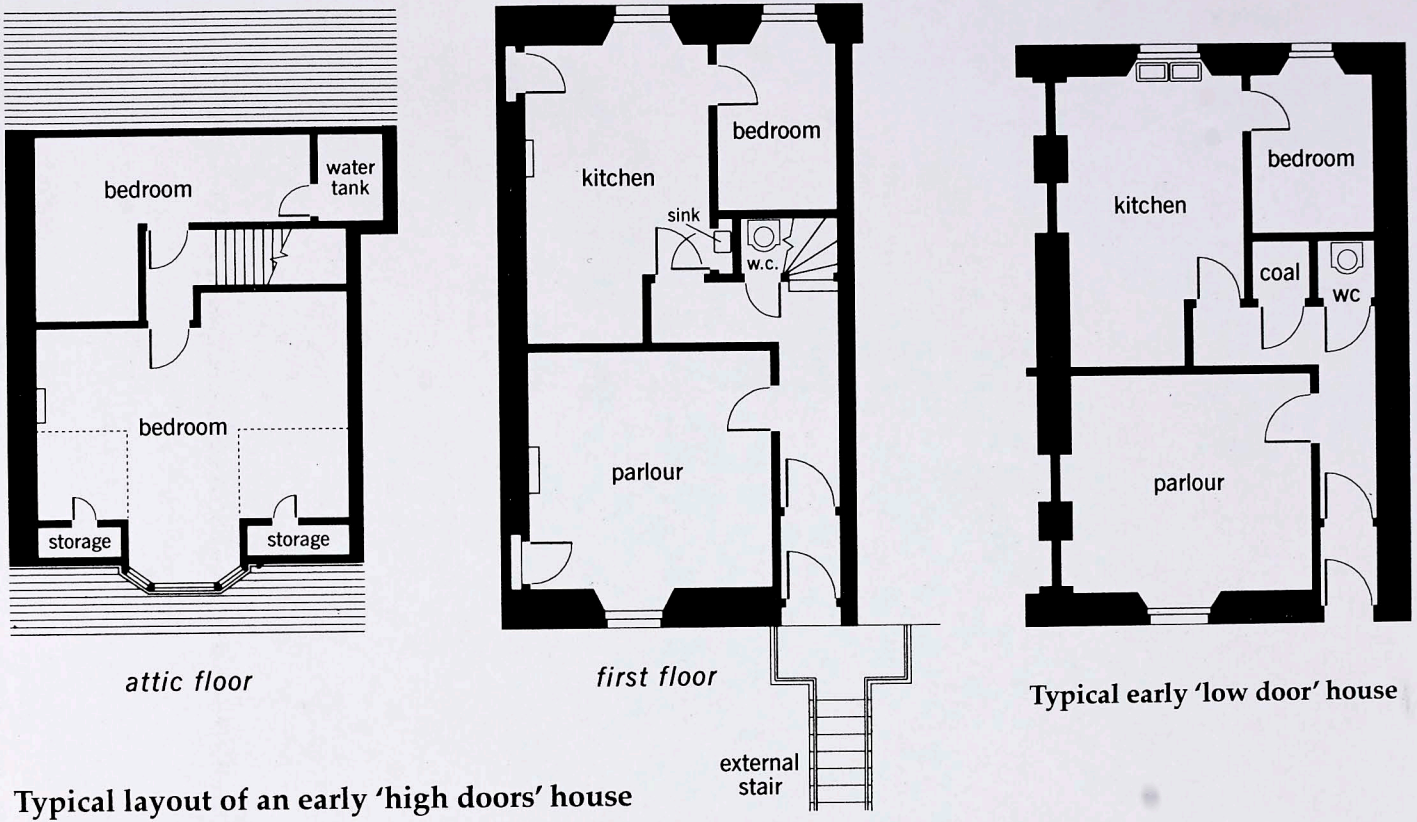
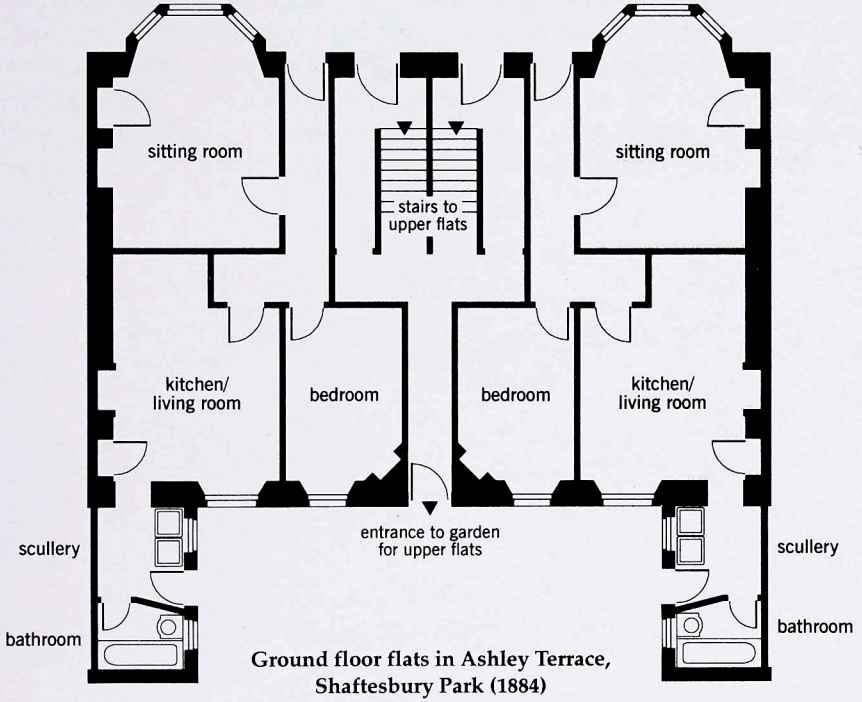


Figure 4 Floor plans showing the model chosen by the ECBC for most of the houses built during the 1860s and 1870s.

Company believing that it was no longer appropriate for the class of homeowner it was hoping to attract. Thus, in its development at Shaftesbury Park, off Slateford Road, although the Company maintained the upper/lower model, and a parallel layout for the two-storey terraces, the houses were larger, with back extensions, and were all entered from one side, with internal stairs leading to the upper houses whose entrance to the garden was through a door at the back (see Fig. 5). This model was repeated at a site off Restalrig Road in Leith, and later at a site in the Saughton area (Glendevon Place, Terrace etc.).

Returning to the traditional 'Colonies' developments of the ECBC, it is fascinating to trace the ways in which the houses and their occupants have changed over the 100 and more years since they were built. For example, in the 1860s, a typical Colonies household might comprise a young married couple with between 4 and 6 children. The husband probably worked in the building trade (possibly for the ECBC itself), and the wife looked after the home and children. Some houses were owned by single women (many of them widows), and a few were single-person households. Thus, in the Stockbridge Colonies, out of a total population of 1,768 in 1881, 671 were children under the age of 16, 79 were over 60 and only 15 households were single-person. By 1978 the proportions had

Figure 5 Floor plans for a pair of houses at Shaftesbury Park.



Ground floor flats in Ashley Terrace, Shaftesbury Park (1884)

changed dramatically: the total population was 713 of which only 79 were aged under 16, 167 were over 60 and 139 households were single-person.

The proportion of single-person households and houses with only two occupants is even higher today, clearly reflecting the way that expectations have changed with regard to space requirements. Changes to the arrangement of rooms also reflect shifts in taste: closets and WCs are often combined to make shower rooms or bathrooms, and walls have been removed in many properties to open up spaces and create multi-purpose rooms; the variations are enormous. Although some of the original ranges and sinks still exist, most have been removed, as have (in many houses) window shutters, fireplaces and other original fittings and features.

Externally, the buildings have suffered from an absence of regulation in many of the developments: new dormer windows have destroyed the unbroken rhythm of the roofscapes, and modern doors and windows have been fitted in many houses. Only at Stockbridge and Dalry, where the buildings are B Listed, are the exteriors relatively unchanged and secure from damaging alterations in future.

At the Stockbridge site, arguably the most attractive (and the first of the ECBC's Colonies), the popularity of the houses is reflected in the selling prices which, for upper houses, are now often in excess of £160,000 (in 2000). Although space is an issue, the possibility of owning a house with its own garden, close to the city centre and with an absence of through traffic on the streets is just as attractive today as it was to the early occupants in the 1860s. Indeed, a good many houses at Stockbridge and all the other Colonies sites are still owned and lived in by people who were born in them, and whose parents or even grandparents lived there before them. The result is highly mixed communities, with long-term elderly residents living alongside the new 'colonists' who are generally young people with white-collar occupations and, usually, few or no children.

TWO DESIGNS FOR A LODGING FOR SIR JAMES CLERK OF PENICUIK AT THE HEAD OF THE BLACKFRIARS WYND, EDINBURGH

Harry Gordon Slade

Two drawings of an unidentified town lodging, one from the Urquhart of Craigston Castle, Aberdeenshire, archives, the other from the Clerk of Penicuik papers, would appear to be of Blackfriars Wynd in Edinburgh, dating from the first half of the 18th century. The plan from the Clerk of Penicuik papers would seem to be of the building as it existed; that from the Urquhart of Craigston archives appears to be a design for an improvement of the lodgings, which would have involved a major alteration, if not a complete rebuilding of the whole block.

Introduction

In the Clerk of Penicuik papers is a plan identified only as *A Principal Floor Plan of a House* (UND/81/2). This is inaccurate in that it tries to combine an upper floor with the ground-floor entry. At that period it would be most unlikely that the lower ground and ground floors of a tenement would be occupied by living quarters. There is nothing further on the drawing to give any clue as to its location or for whom it was designed. That it is among the Clerk papers is not proof, although it might allow a reasonable assumption, that it was commissioned for a member of that family.

Among the Urquhart of Craigston papers is a drawing which shows two plans of lodgings which are clearly variations of the Clerk drawings, and the foregoing assumption substituting Urquhart for Clerk should be equally reasonable. Fortunately, the Craigston drawing contains two clues which make identification possible. The plans are described as *Plan of the Upper Storie with Garret rooms above for Family Lodgeing* and *Plan of one of the Floors Serv'd by the Wheell Stair From Black Friar Wynd.* These plans, with their principal rooms fronting on to a main street (it is described as *ffore Street* on the Clerk drawing) which runs at right angles to Blackfriars Wynd, can be identified as being in Edinburgh. When old plans of the centre of Edinburgh are examined, it is clear that a plot matching the outline of these plans is situated on the south side of the High Street at the head of Blackfriars Wynd on its eastern side. The pend leading into the wynd passes under the much higher adjoining tenement known as Lady Lovat(s) Land, a name derived from its having been the home of the widow of Simon Fraser, Lord Lovat (Fig. 1).

The clues to the intended owner lie in the *Plan of the Upper Storie...* : one room is designated *Barrons Dressing room,* and another *Bed Room for on of the*

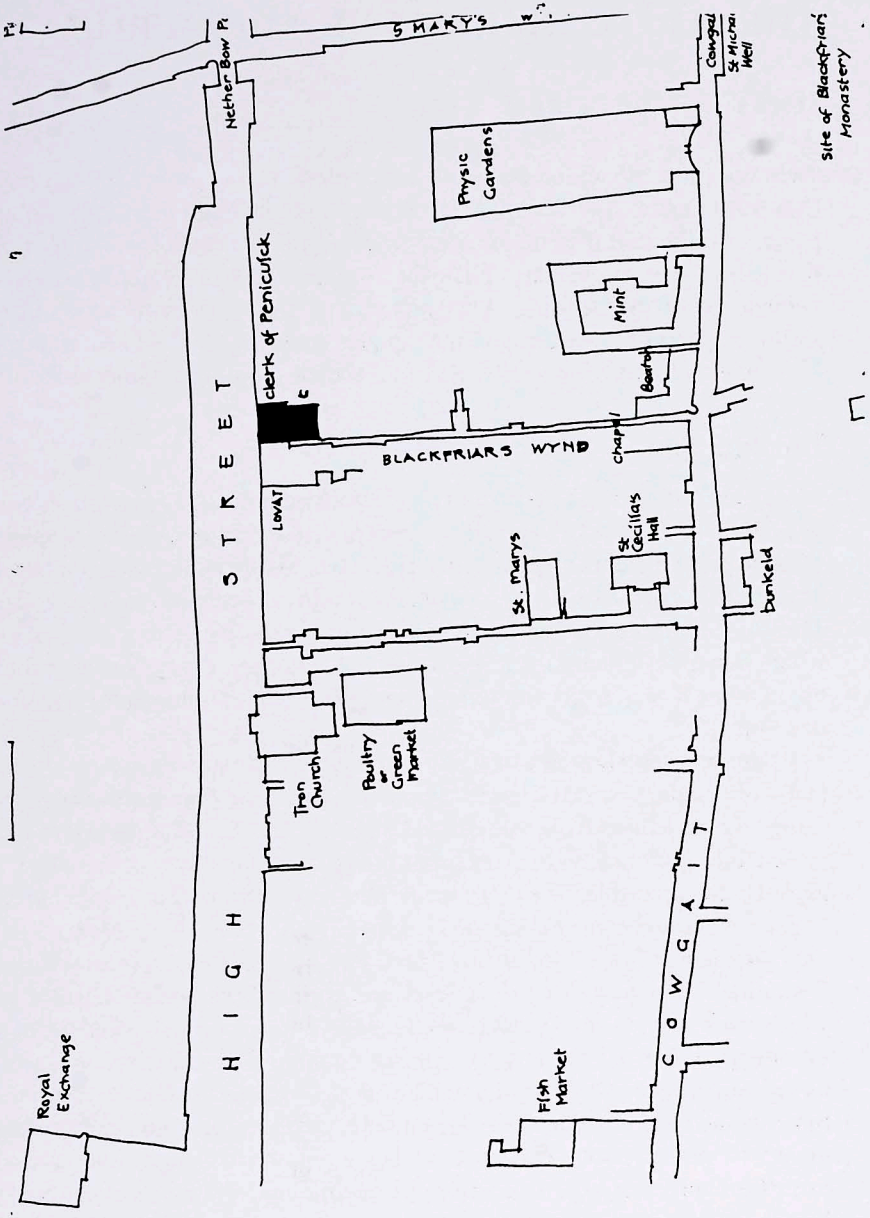


Figure 1 Location of the Clerk of Penicuik property at the corner of High Street and Blackfriars Wynd, Edinburgh.

Young Lady's. Sir John Clerk, Second Baronet of Penicuik (1676-1755) had been appointed a Baron of the Exchequer in May 1708, and was particularly well-supplied with daughters, seven in all, of whom six survived infancy and would, in the eyes of the world, have merited the denomination of Young Ladies.

The Clerks had held a property on this site in the 17th century, for in a disposition dated 23 June 1697 John Clerk, as he was then, with the consent of his father, Sir John Clerk, First Baronet of Penicuik, conveyed a lodging to Andrew Paterson, Wright [and]Patrick Steel, Vintner, for the sum of 6000 merks Scots and five guineas in gold: it is described as *All and haill that lodging lying on the south syde of the high street of Edinburgh at the head of the Blackfriars Wynd*. This property seems to have come to John Clerk from his grandfather, Dr Henry Hendersone, under the terms of his mother's marriage settlement. In his edition of the *Memoirs of the life of Sir John Clerk of Penicuik*, prepared for the Scottish History Society in 1892, John Gray assumes that this lodging constituted the whole of the Clerk property in the wynd, and that when, in 1710, Sir John wrote of living in 'My own house at the head of the Blackfriar Wynd' the lodging had come back into his possession. This, I think, is a mistaken assumption. Sir John refers to the house having been built 'anno 1552 by Thomas Hendersone, merchant and cadete of the Family of Fordel, and my mother's grandfather'. Clearly this means that he had built the whole tenement, and that the lodging which had been disposed of to Andrew Paterson and Patrick Steel formed only a part of the whole. This is confirmed in the inventory of the accommodation contained in the disposition:

> ...at the head of the Blackfriars Wynd, presently possessed by the Lady Susanna Campbell, consisting of ane outer roome, kitchen, and dining roome, bed chamber and closet, and one fore chamber toward the high street of Edinburgh, all in the third storie from the street, with two bedchambers above the sd. Dining roome and laigh chamber, with ane closet in the fourth storrie, with ane cellar at the foot of the turnpick, belonging to the sd. Lodgeing.

In addition, in the conveyance there is mention of a small lodging:

> ...presently possessed by me, the sd. Sir John, consisting of ane large room towards the sd. High Street of Edinburgh, ane little bedchamber with three closets in the fourth storrie, and two garrets above the same...all which are pairt of that tenement of land sometyme waist and burnt by the Englishmen.

The burning would have happened in the destruction of Edinburgh during Hertford's invasion of 1544, which would support Sir John's story of his grandfather's building of the house in 1552.

It is clear that by the end of the 17th century the house at the head of the wynd was divided up - to the profit of the Clerks - among a number of tenants, but whether this reflected the original plan, or whether it was the result of later alterations, is not certain. Sir John's garrets above his flat in the fourth storey, and Lady Susanna's cellar at the foot of the stair, are what would be expected in a

Figure 2 The fire at the head of Blackfriars Wynd, 22 February 1825, as depicted by James Skene (reproduced by courtesy of the City of Edinburgh)

flatted house (a number of the older apartments in Paris still retain separate servants' rooms on the attic floor) but Lady Susanna's closet in the fourth storey introduces an element of confusion.

This building was not replaced, and although much altered, seems to have survived until the night of 22 February 1825. Edinburgh was still recovering from the shock of the fire in the previous November, when a large number of buildings in the High Street and on the east side of Parliament Square, among them some of the highest in the city, had been destroyed. The *Edinburgh Evening Courant* records that at 8 o'clock on the evening of Tuesday 22 February, or according to *The Scotsman* about 7.30 pm, the fire bell at the castle gave the alarm of a fire, which had broken out in a high tenement at the head of Blackfriars Wynd immediately behind the line of the High Street. The fire was at first contained in the rear jamb, but crossing the common stair it consumed the front tenement known as Lady Lovat's Land. This high block was entirely gutted. Fortunately it was higher than the blocks to the east and south, and the firemen, by directing their hoses from these lower roofs, were able at considerable risk to themselves to contain the fire (Fig. 2). Unfortunately, according to the *Edinburgh Advertiser*, these adjoining blocks were severely damaged by collapsing walls. Whatever remained of the Clerk house eventually disappeared when Blackfriars Street was cut through from the High Street to the Cowgate later in the century.

David Allan's *View of the High Street in 1793* (Fig. 3) shows the Clerk lodging as it appeared at that date. It consists of four stories, one of which was approached from the street by a forestair; the garret is contained in two parallel roofs, the gables of which front the street. It is perhaps only half the height of its late 17th and 18th-century neighbours, which tower above it. The disposition of the floors tends to confirm the arrangements described in the 1697 lease; what is shown is probably largely the house built by Thomas Hendersone in 1552.

Another and more detailed illustration of the High Street front of the same building, made at the height of the 1825 fire by James Skene, shows that considerable alterations had been made since 1793 (Fig. 2). The most obvious change is that the attic has been lost, and that consequently the two gables have disappeared. In their place is a flat wallhead, upon or behind which are the figures of firement playing their hoses on the blazing building, the upper floors of which are an inferno. The chimneys stand awkwardly above the flats, denied the roofs which formerly hid their lower stages. The Skene drawing shows clearly that, although standing within a single curtilage, the house is of two distinct and separate parts, with the chimneys built on a central dividing spine wall, and the upper floors on separate levels. The elevation is unified by the common wallhead and by the treatment of the windows of the second storey. These are seven in number, and appear to be divided by pilasters supporting a continuous entablature, which takes a segmental form above the second and sixth windows. Whether this is an enrichment dating from the 16th century, or a baroque refacing of the late 17th century, is impossible to say. It is not shown on Allan's drawing, but as the

Figure 3 'View of the High Street of Edinburgh from the East 1793', by David Allan (reproduced by courtesy of the City of Edinburgh)

perspective is so acute, and his treatment of the facades schematic, this is not necessarily evidence that it is an addition after 1793. Indeed, it would be unlikely for such an enrichment to be added to an old building when, because of the movement of the better class of inhabitants to the New Town and the suburbs, the High Street was in a state of decline and decay. In spite of the common treatment of the window heads right across the elevation, Skene's drawing shows the cills to have been at different levels, reflecting the different floor levels within the two buildings. In neither Allan's nor Skene's drawings is it clear if the house rose four stories directly from the pavement, or four above a half cellar or series of laigh shops. From Allan's drawing, it could be argued that it did, but in Skene's picture the dense crowds in the High Street hide the lower parts of the front and the pavement.

The unexecuted designs

That there should be a plan for rebuilding their town house in the Clerk of Penicuik papers should not be a cause for surprise, but what a second and more finished version should be doing in the Craigston archives raises an interesting line of speculation. Before Craigston had been bought back in 1739 by Captain John Urquhart, it had been in the hands of Patrick Duff, uncle to Lord Braco, and of three of his sons, James, Thomas and Archibald. In 1733 a scheme for the layout of the gardens about the house had been prepared for James by William Adam. This drawing, together with a set of plans and elevations of Lord Milton's house in Edinburgh, a design for a large country house after the style of Haddo and attributable to Adam, and a subscription in 1732 to *Vitruvius Scoticus,* suggests a Clerk-Adam-Duff connection in which the link is Adam.

What may have happened, and this is admittedly controlled imagination, is that Adam, knowing of Sir John's intention to rebuild his Edinburgh property, and of his wish to let some of the flats at a profit to suitable tenants, showed a copy of the proposals to James Duff, who was looking for a lodging in the capital. That Adam should so conveniently have a set of plans to hand is to be accounted for by the fact that his office had prepared them. More has been made of less, and no doubt will be again. What is certain is that this drawing was found among others of an Adam provenance.

The other matter in question is the date of the drawings, and the period in his life when Sir John might have had such a project in mind. The widest timespan is between 1708, when he became a Baron of the Exchequer, and 1755, the year of his death, but this can be narrowed down. On the Craigston drawing is the room designated *Bed Room for on of the Young Lady's*. Sir John had, by his second wife Jennet Inglis of Cramond, seven daughters. Three, Anne, Betty and Jean, born in 1712, 1713 and 1717 respectively, were one group; Joanna, Babie and Jennet, born in 1724, 1725 and 1727, were another. Mary, who was born in 1720, died young and does not come into the story. By 1732 Sir John had three daughters ready to

make their entry into society; one of them was to be married in 1737 and another in 1740. In the years between 1730 and 1740 two chambers would have been needed for the three elder daughters who were at home and 'out', and their father would no doubt have borne this in mind in any house he was planning. His three younger daughters would not have been looking to their coming out until the 1740s and, by that time, the Adam-Craigston connection was over. If there is any significance in the drawing being at Craigston, it must be that it was there in the time of James Duff (1731-34) and that it was the result of Sir John's intention to build in the early 1730s, probably in the years 1732-33.

Description

The site was rectangular with a frontage of about 46 feet (14m) onto the High Street and a depth in the region of 70 feet (21.3m). The west side looked into the wynd, and therefore was a narrow close, perhaps 7 feet (2.1m) wide on the east side entered by way of a pend from the High Street. Either there was an open close between the south gable and the next property in the wynd, although none is shown (Fig. 1), or the adjoining building was very much lower, since the Craigston plan shows windows in this wall (Fig. 5).

Clerk of Penicuik plan

The Penicuik plan (Fig. 4) shows one of the letting flats. The entry is from a common stair approached from the wynd across a small court. This court, which measures 18 feet (5.4 m) by 10 feet (3m), admits some light to the core of the building. The staircase, a scale and plat with a solid masonry core, is well lit by two windows on each landing. The flat provides generous accommodation, but is excessively badly planned, being divided into two parts by the common stair. In the front of the flat are an entrance lobby and bedchamber looking into the court, a kitchen and pantry lit from the narrow side close, and a *Drauing roam, Dynning roam* and *Bed chamber* fronting on the 'ffore', or High, Street. On the opposite side of the common stair landing to the principal entrance, another door leads to the back part of the flat where there are four bedchambers, two on either side of a central corridor, each with a fireplace and a closet taken out of one corner. This splitting of the flat is an inconvenient arrangement, and is only alleviated to a certain extent by the awkward dog-legged passage from the kitchen to the bedchamber corridor round the back of the common stair.

The main entry to the fore part of the flat is set back in the thickness of the wall so that it does not open directly off or block the landing. It opens onto an entrance hall between the kitchen and a bedchamber. Facing the entrance is the door to the *Dynning roam,* which looks out onto the High Street. Three corners of this room are canted, one to take a corner fireplace, one to accommodate a cupboard, and one to provide for a lobby set diagonally to the corner of the

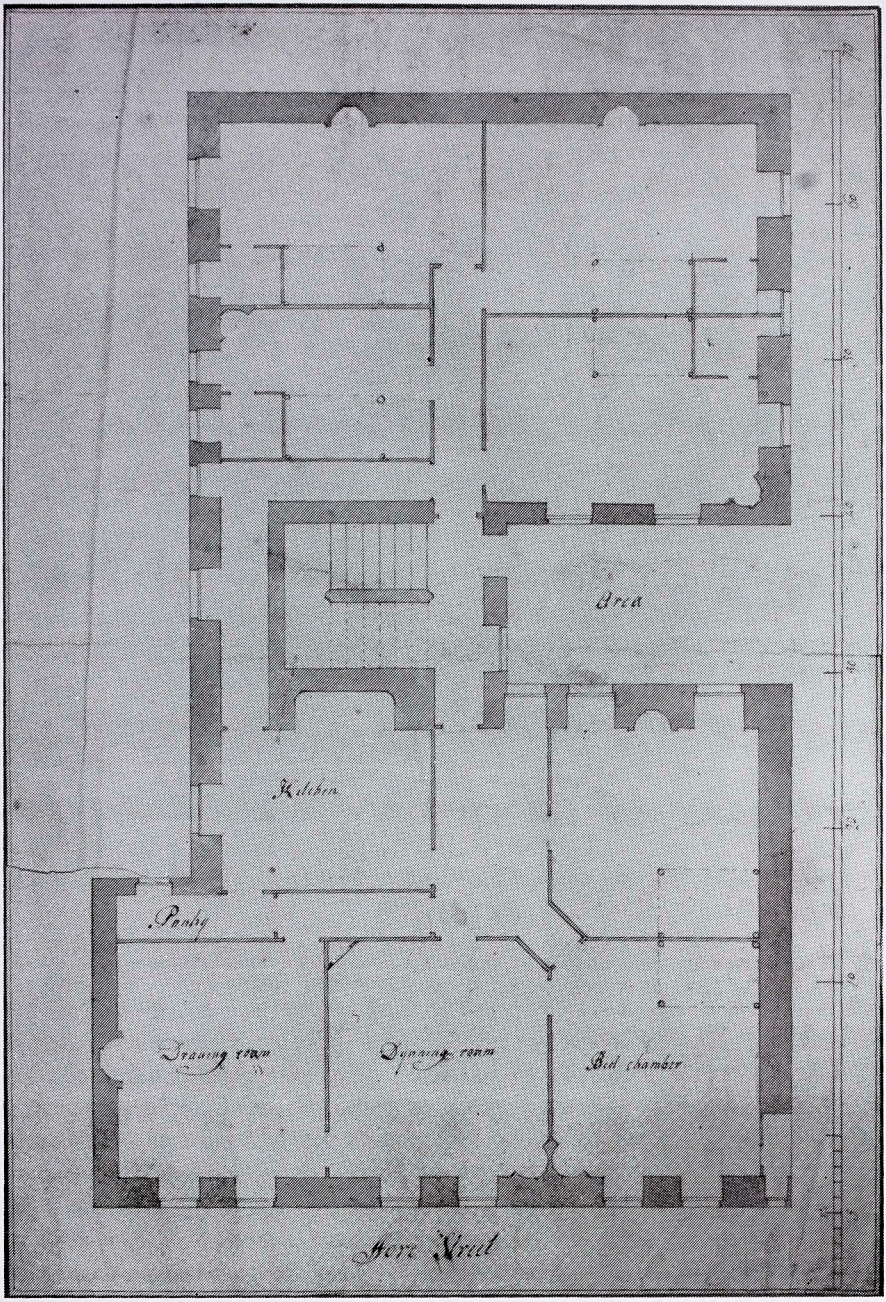


Figure 4 'Principal floor plan of a house': the Penicuik plan, probably showing the lodging as it existed (reproduced by courtesy of Sir John Clerk of Penicuik and RCAHMS)

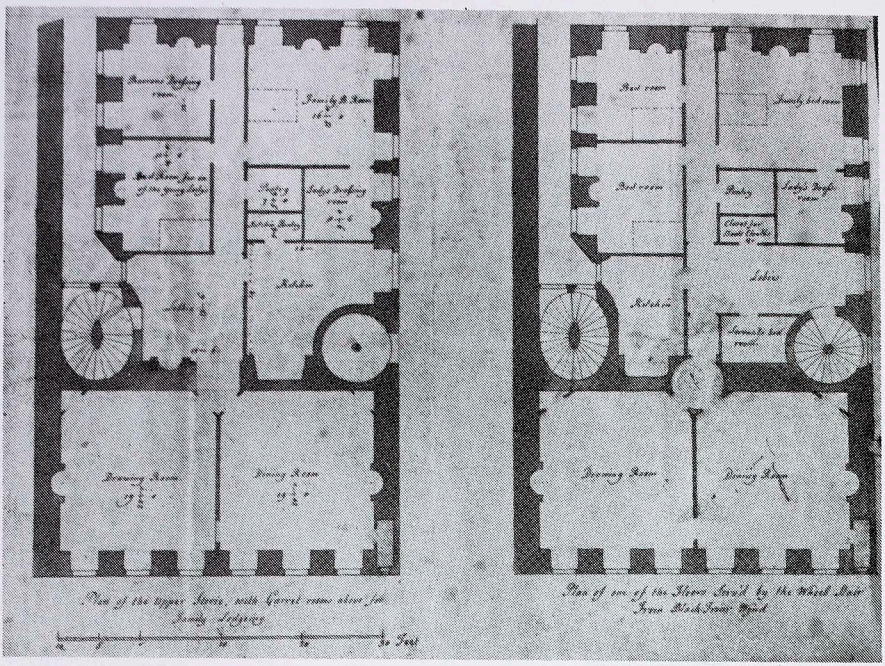


Figure 5 'Plan of the Upper Storie, with Garret rooms above for Family Lodgeing' and 'Plan of one of the Floors Serv'd by the Wheell Stair From Black Friar Wynd': the Craigston plans (reproduced by courtesy of Bruce Urquhart of Craigston).

entrance hall giving access to the *Bed chamber*. This is the principal bedchamber and has a door in the partition between it and the dining room. It also has a small closet in the north-west corner formed in the thickness of the wall with a little window. The *Drauing roam* lies on the other side of the dining room, with which it communicates. It can also be reached from the entrance hall by way of an unlit passage to the *Pantry* and *Kitchen*.

There are a number of disadvantages in this plan: the division of the flat caused by the setting in of the common stair produces awkward internal passages, and gives it the air of an inn; the closets break awkwardly into the bedchambers; the three principal rooms in the fore part of the flat are not well integrated; the drawing room only has secondary access; and there is no provision for a servant's room, although one may have been available in the garret. A further disadvantage is that Sir John's flat on the upper storey would have been served by the common stair and suffered the disturbance of the servants in the garrets above.

The fenestration of the High Street elevation expresses the internal arrangements of the rooms, with the windows grouped in three pairs on each floor. The formality of this arrangement is unfortunately lost to a certain extent, as the corner fireplaces in the dining room and bedchamber mean that the chimney stack

has to rise from the wallhead, giving an asymmetrical composition and unbalancing the facade.

Craigston plans

In the original version in the Penicuik papers, access to the upper floors was by a scale and plat staircase entered off Blackfriars Wynd. In the Craigston rebuilding proposal, two new staircases were provided. One was a wheel stair from Blackfriars Wynd serving the flats on the second and third floors; this may have ascended to the garret floor, but it bypassed the fourth floor flat. Entry to the fourth floor flat was by an oval wheel stair entered from a passage through the shop floors, or by the rear wynd. The former is more likely.

The *Lobie* is entered directly from the stair and is lit by a window overlooking Blackfriars Wynd. Opening off it are the *Kitchin*, a *Closet for Boots, Cloaths etc* and a *servants bed room,* unlit and unventilated. On the north of the lobby, and apparently separated from it by a framed opening, which may have had a door, is a small square vestibule. This in turn leads to a slightly larger circular vestibule with doors into the *Drawing Room* and *Dining Room*. Both rooms measure 19 feet by 20 feet (5.8m by 6.1m), and each has three windows overlooking the High Street; the fireplaces are central in the side walls, and the doorways, which because of the circular vestibule are canted, have matching corner cupboards, There is a doorway between the two rooms, and the small closet set in the wall thickness of the *Bed chamber* in the Penicuik plan is repeated in the dining room.

The bedrooms, which have been reduced in number to three, occupy the rear part of the flat, divided by a central corridor lit by a window in the south gable. To the left of the corridor are two moderate sized chambers, 14 feet by 11 feet (4.3m by 3.3m), and to the right the *Family bed room*, measuring 16 feet by 15 feet (4.9m by 4.6m), with the *Lady's Dress: room* within. The *Pantry* opens off the bedroom corridor.

The differences between the Clerk lodging and those on the lower floors are brought about by the separation of access. Instead of the common stair from the Blackfriars Wynd, the family have use of an elliptical stair, private to this floor, access to which must have been obtained either from the pend off the High Street, or from the first floor level. Because of this, the *Lobbie* and the *Kitchin* have to change place. In the course of this, the lobby gains a fireplace but loses the servant's bedroom and the boot closet. This latter is transmogrified into the *Kitchin Pantry*. The servant's room has vanished, probably to be found in the *Garret rooms above for Family Lodgeing*. The planning of the bedroom accommodation remains the same although, of the two smaller rooms, one is described as *Bed Room for on of the Young Lady's* and the other as *Barrons Dressing room*. The dining and drawing rooms remain the same as those on the lower floors, except

that the circular vestibule leading to them disappears; the small wall closet remains in the corner of the dining room.

It is likely that the existing outer walls had to be retained as far as possible in the proposed rebuilding. This may have been on the grounds of cost, but in the case of the wall separating the Clerk house from Lady Lovat's Land, there may have been no choice. Even had two separate walls been involved, there must have been a fear of endangering the stability of the much higher building: if the gable of its three upper walls had been built on an earlier common wall, then that wall could not be taken down. In this case the walls are probably part of the 1552 Hendersone house, and the small closets at this point on each floor may have been a series of garde-robes, containing latrines opening into a shaft, which discharged in the kennel, or closed stools. The retention of the closets may have been for the same purpose: it is not without significance that in the Penicuik plan this closet serves a bedchamber, and in the Craigston version the dining room. A closet off the dining room is preferable to a 'chuntie' in the side-board.

Although Sir John was never to rebuild his Edinburgh tenement, the idea may not have died with him. In 1756, his son, Sir James Clerk, Third Baronet of Penicuik, who still had his lodging at the head of the wynd, was causing a search to be made for any encumbrances on the property. Gray believes this to show that he had in mind to purchase. A more likely explanation is that, with a view to carrying forward his father's intention, he needed to know his liabilities towards his tenants and his powers of dispossession.

The scheme came to nothing; the tide of fashion was setting away from the Old Town, and the man who was to build Penicuik House would not have been long content with a town house neither Palladian nor Ossianic.

Conclusion

The two Craigston plans discussed are designs prepared for Sir John Clerk, Second Baronet of Penicuik, for the rebuilding of his tenement at the head of Blackfriars Wynd in Edinburgh. The Clerk of Penicuik plan is probably of one floor of this tenement as it existed, which incorporated substantial remains of the 1552 Hendersone house. The scheme was never carried out. From circumstantial evidence it would seem that the scheme was prepared *c.* 1732-33, and that the Craigston plans at least were the work of William Adam, elder, or of his office.

Acknowledgments

I am most grateful to Sir John Clerk of Penicuik for access to the Clerk of Penicuik papers, and to the RCAHMS for permission to reproduce the plan. Once again, Bruce Urquhart has allowed me to draw on the immensely varied material in the Craigston papers, and to use the plan found in that collection. James Skene's drawing of the 1825 fire, and David Allan's *View of Edinburgh in 1793*, are

reproduced by permission of the City of Edinburgh, in whose collections the originals are to be found.

Finally, my thanks are due to James Hope, who because of my blindness has had to knock the whole of this into shape.

References

Clerk of Penicuik papers
Urquhart of Craigston papers (Craigston Castle)
Gray, J.M. (ed.) *Memoirs of Sir John Clerk of Penicuik, 1676-1755* (Edinburgh: Scottish History Society, 1892).

NEEDLED ROOFS IN ORKNEY IN 2000

P. I. Newman

P. and A. Newman wrote an article entitled 'Simmens and Strae: Thatched Roofs in Orkney' which was published in *Vernacular Building 15, 1991.* Following references to needled roofs in Fenton's *Northern Isles,* the authors went in search of examples of this distinctive type of Orcadian thatching. The main features of a needled roof are shown in Figure 1.

The article identified twelve sites in various parts of Orkney where evidence of needled thatch could be seen, even if it was only a vestige of this type of thatching. There were three buildings where more or less complete needled roofs existed and the survival of the older part of the roof at Gimps in South Ronaldsay. This roof had existed since a time when the dwelling had had a central hearth, as the inner surface of the thatch was caked in soot and the blocked-up smoke hole was identified.

It is nearly ten years since these buildings were examined and it now seems appropriate to review the present situation and what has happened in the interval. Some additional sites are identified where remnants of needling have been seen or where it is known that needled roofs once existed (e.g Greens - photograph in Fenton's *Northern Isles*). Also noted are buildings which incorporate *flackies* (straw mats).

Some buildings have vanished completely (e.g. Howes with its heather simmens, and the Knowes). Much damage was done to the best remaining examples in the winter gales of 1999/2000. In particular the roofs of the Derby and Gears sites, which were the best surviving examples of needling, have suffered badly. The roof of the dwelling at Derby has largely fallen in. The roof of the barn has deteriorated greatly in the last few years and the thatch is now falling away from the gables. The central section of the byre at Gears recently collapsed. Recent listing of these buildings has probably come too late to help in reinstating these roofs.

Gimps was identified in the 1991 article as being of particular interest because of its evident age, the unique method of securing the needling, and the existence of features such as a smoke hole. The dwelling was intact and occupied up to 1989. When the authors first saw the building in 1991 much of the dwelling roof had collapsed due to nails perishing in the joints of the roof couples, however the old part of the roof had survived as the couple joints had wooden pegs. Some of these old couples are now failing and the thatch on the remaining section of roof is in a very much poorer state (see Fig. 2). It is unlikely that the roof will survive another two winters.

In 1996 Historic Scotland had a sample of thatch taken from the Gimps roof and the results of the analysis were reported in *The Archaeology of Scottish Thatch*

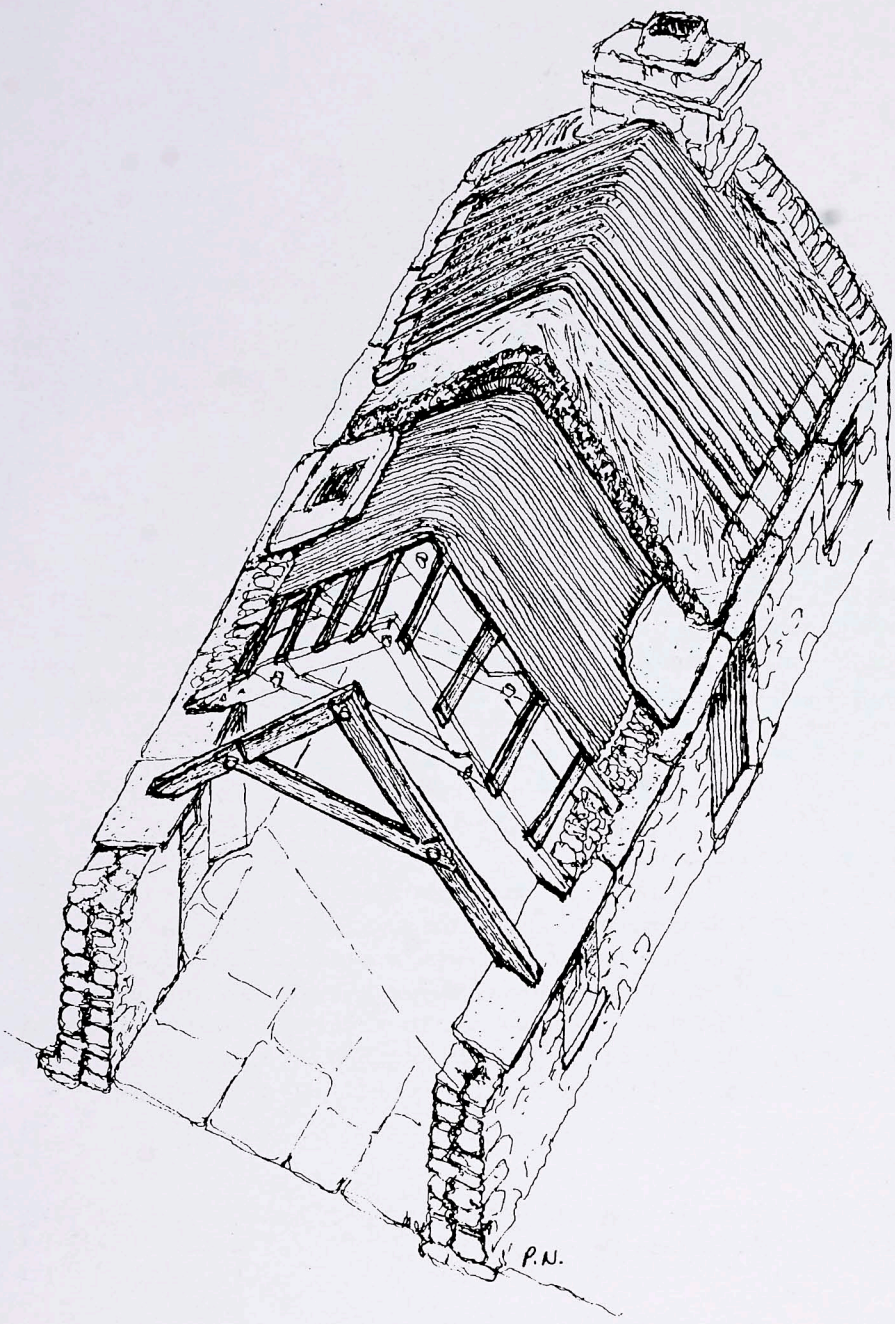


Figure 1 Main features of a needled roof.

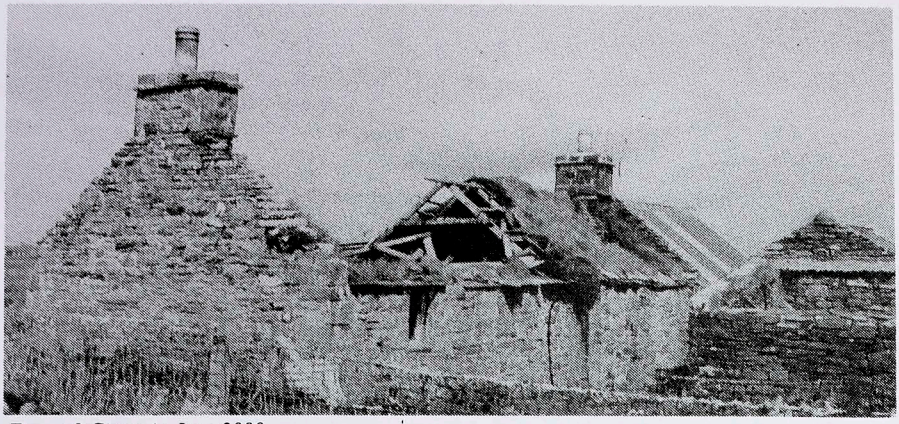


Figure 2 Gimps in June 2000

- *Technical Advice Note 13, 1998*. The thatch consisted mostly of oat and bere straw with evidence of some other materials such as rushes.

The presence of a smoke hole in the roof of the Gimps dwelling was noted in the 1991 paper and the conclusion drawn that the central portion of the dwelling with its needled roof was a survival from a time when the dwelling had a central hearth. Further examination revealed that the pauntree, or beam, which would have supported links and cooking pots, had subsequently been incorporated into the timber partition of the kitchen. Thus the location of the earlier central hearth at Gimps is now known.

The present situation is that the number of sites where needled roofs have been identified has increased. Twelve were noted in the 1991 article and the following list and map (Fig. 3) identify 18 known needled roofs and two possible sites. Also listed are two sites where flackies (straw mats) were used in the construction of thatched roofs. Two of the sites had needled roofs made with heather simmens. These are distributed over five islands. However some of the buildings listed are now gone and the rest are deteriorating significantly and it seems unlikely that there will be any original needled thatch left in a few years time. Perhaps the only way a tangible record can now be kept of needled thatch construction is by careful reconstruction of needled roofs on suitable buildings.

Reference

Alexander Fenton, *The Northern Isles: Orkney and Shetland*, Edinburgh 1978, reprinted Tuckwell Press, East Linton 1997

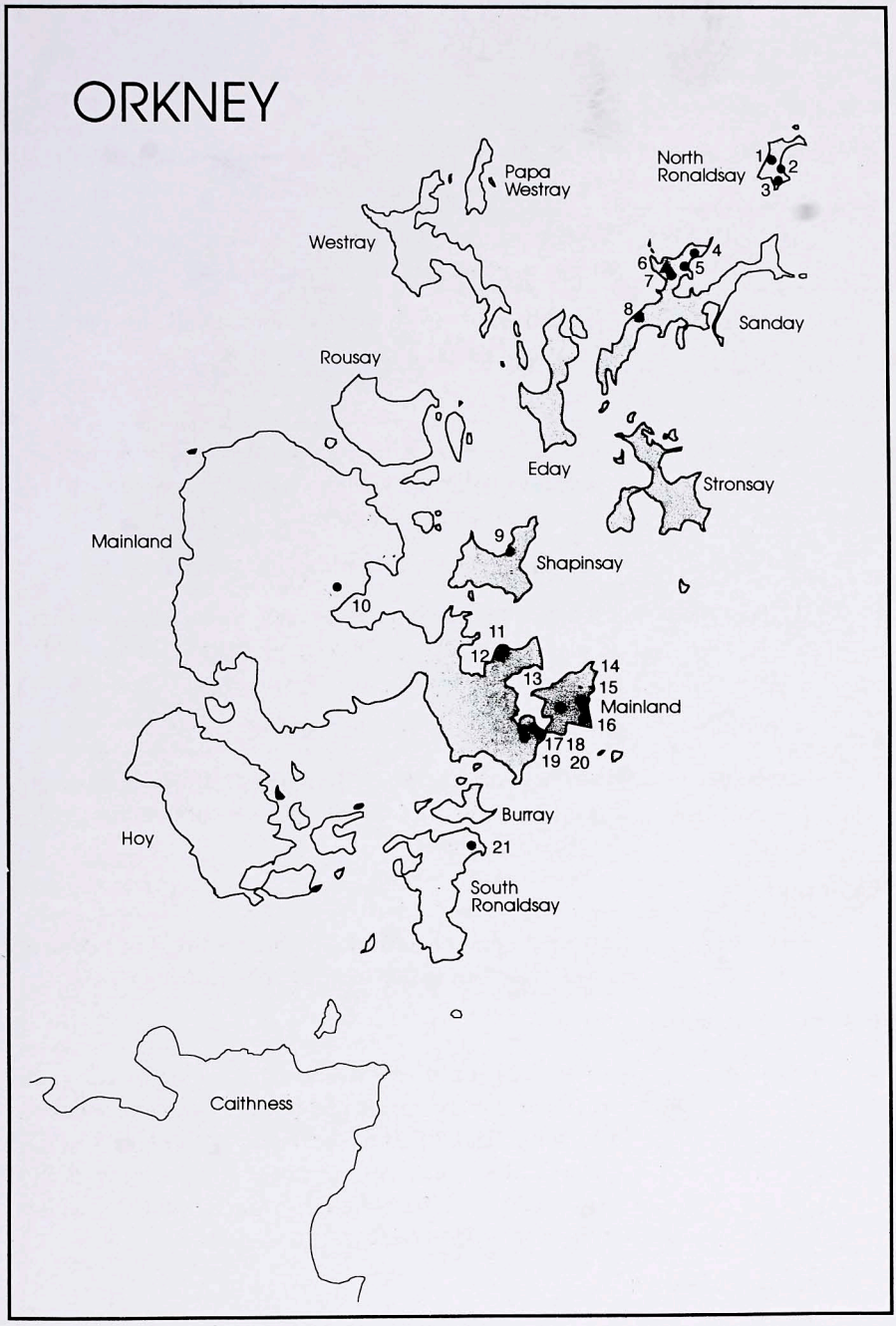


Figure 3 Locations of known needled roofs in Orkney

KNOWN NEEDLED ROOFS IN ORKNEY AND ROOFS INCORPORATING FLACKIES.

N Ronaldsay		
1	Verracott	Needled roof photographed being re-thatched in mid 20th C roof completely demolished by 1991
2	Hooking Mill	Vestige of coir lashing round lower lath indicates former needled roof. Vestige now gone.
3	Greenwall	Needled roof to house at Greenwall in perilous condition in 1991
Sanday		
4	New Ortie	Vestige of coir lashing round lower lath and remnant simmens indicate former needled roof in 1991. Remains no longer visible.
5	Skithow	Dwelling and barn with remnants of needled thatch.
6	Hyndgreenie	Thatched roof with underlayer of flackies (straw mats) in place of needling. Threatened demolition in 1991 - thought to have gone now.
7	Clickimin	Small area of needling in thatched barn.
8	Boloquoy	Thatched cottage near Boloquoy farmstead may be needled (interior not inspected) but other buildings are thatch on flagstones.
Shapinsay		
9	Skenstoft	Barn with partial roof of which a portion has needled thatch. Needled thatch identified by Sheila Garson.
Firth, W Mainland		
10	Estabin	House has been renovated and modernised - it previously had remnants of a heather simmens needled roof with flackies over the ridge. Remnants visible under a flagstone roof in 1991. Roof surveyed by RCAHMS in 1968 when it was reasonably intact (Fenton: Northern Isles).
St Andrews, E Mainland		
11	Scarpigar	Barn/byre with needled roof. Collapsed in winter of 1999.

12	Scarpigar	Thatched house which may have a needled roof - interior not inspected.
Deerness, E Mainland		
13	The Knowes	Old dwelling at the Knowes completely demolished in 1998 had a needled roof with large amounts of boss (eelgrass - *Zostera marina*) in middle layer of thatch.
14	Howes	Howes completely demolished since 1991. Byre had heather simmens needling with quantities of boss in middle layer of thatch.
15	Cutpool	Barn/byre roof completely demolished in 1998 had a needled roof.
16	Netherby	Largely roofless ruined farmstead had vestiges of coir lashing on lower lath when visited in 1991, indicating a former needled roof.
St Andrews, E Mainland		
17	Gears	Byre had roof with three different types of thatched roof in the one building - needled roof, thatch on feals (turf), thatch on flagstone. The middle section collapsed in winter gales in 1999.
18	Derby house	Large part of this needled roof collapsed in 1999 gales.
19	Derby barn	In 1991 this roof was intact and in reasonably good condition. It was an excellent example of Orcadian needled thatch. The interior has deteriorated considerably in recent years with the roof disintegrating at the gables. Derby has recently been listed but probably too late to save the building.
20	Greens	The needled roof of this building was illustrated in Fenton's *Northern Isles* but had been completely demolished by 1991.
S Ronaldsay		
21	Gimps	In many ways the most important survival of Orcadian needling because of its age and quality of construction, the roof continues to collapse and has deteriorated substantially since 1991. Remaining roof unlikely to survive another two or three winters.

STONE IGLOOS: CIRCULAR PIG HOUSES IN ORKNEY

Paul Newman

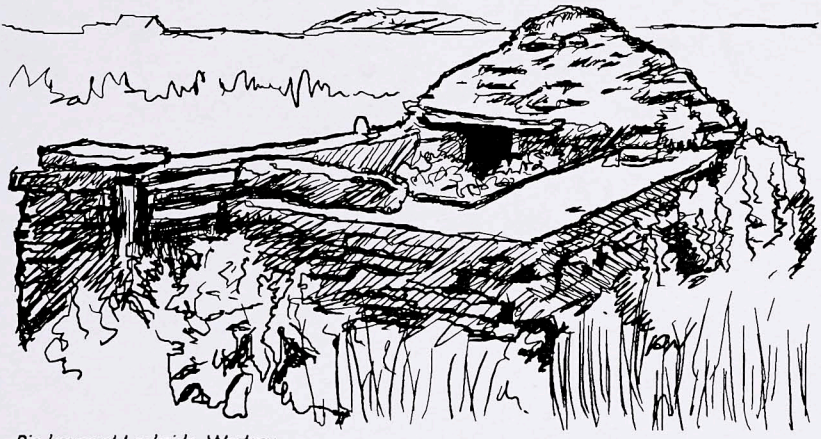
When Orcadian farmsteads have been described, it is usually the main buildings which receive attention, such as dwelling, byre, barn and kiln. According to Fenton (*Northern Isles*), pigs, along with calves and poultry, were sometimes accommodated within the dwelling. However, larger traditional farmsteads often have smaller buildings such as lambie houses, pig houses and occasionally poultry houses. Pig houses are usually rectangular and may also have a run attached. Such a pig house can be seen at South Hamar, the farm acquired by the Westray Buildings Preservation Trust (see article in *Vernacular Building 22, 1998*).

In 1991 I first visited the farm of Gimps in South Ronaldsay. I was puzzled that there was no barn and kiln alongside the dwelling and byre, and asked the owner, Mr Sandy Scott, if he remembered a circular building when he was a child. He did not know of a kiln but there had been a circular building where pigs were kept. I had wondered whether this was the remains of a kiln adapted as a stye. There is no sign of the building now.

In 1998 I ran an Aberdeen University Local Studies course on the traditional farm buildings of Orkney. During the course, Mrs Hazel Foubister showed me a photograph of a curious structure I had earlier noticed in the Sourin district of Rousay. The Swandal farm had belonged to her family and the structure in question was a circular stone pig house. Subsequently I had a telephone call from a man who was about to take over the Myre farm in South Walls, Hoy, asking me what three igloo-like structures in the yard might have been used for. It was interesting to hear that there were more circular pig houses. Since then I have seen another at Crowtaing in South Walls, and Mr Tom Muir of the Orkney Museum Service has given me photographs of another one at Lochside, in Westray.

The illustrations are of circular pig houses at Crowtaing, three at Myre, at Swandal, and at Lochside. The drawing of the Swandal pig house is based on a photograph taken by Mrs Hazel Foubister and the Lochside drawing is from photographs of the pig house given me by Mr Tom Muir. The pig houses may have an adjacent walled run though this is absent at Crowtaing. The pig houses at Myre are built against yard walls or other buildings. The internal diameter is about 1.5 m and the circumference about 7.5 m. The height is about 1.5 m. The roof is corbelled and at Crowtaing the roof is closed with segmental flagstones as can be seen in the detail. Pig house C at Myre has a turf cap while the Lochside pig house has been rendered. It may be that the other pig houses were originally capped with turf, as I think most circular kilns were so capped. The constructional problems of closing over a corbelled structure are the same for both circular building types.

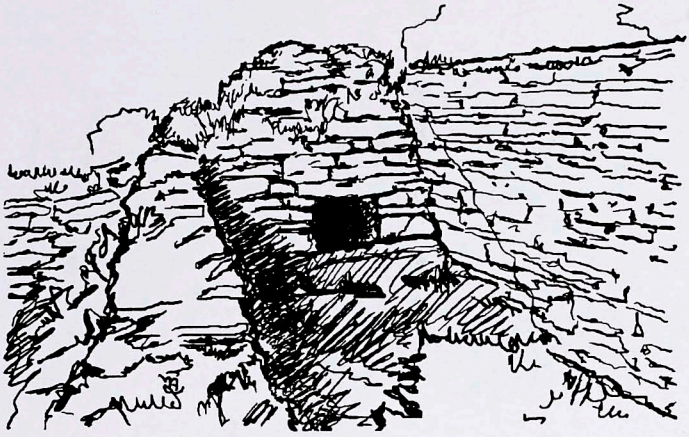
Pig house at Swandal, Rousay



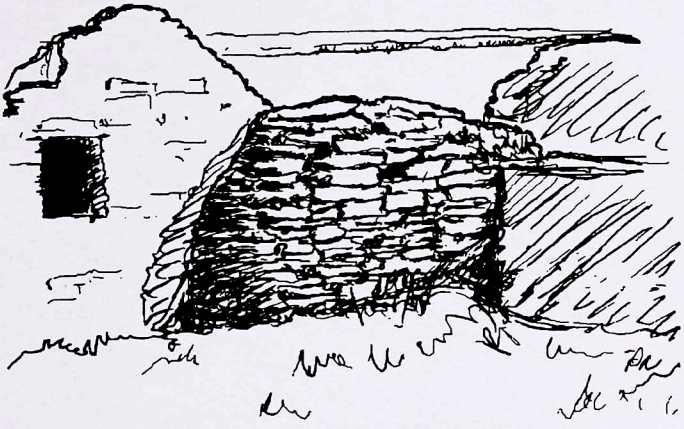
Pig house at Lochside, Westray.

Pig house at Crowtaing, South Walls.

Crowtaing - top.

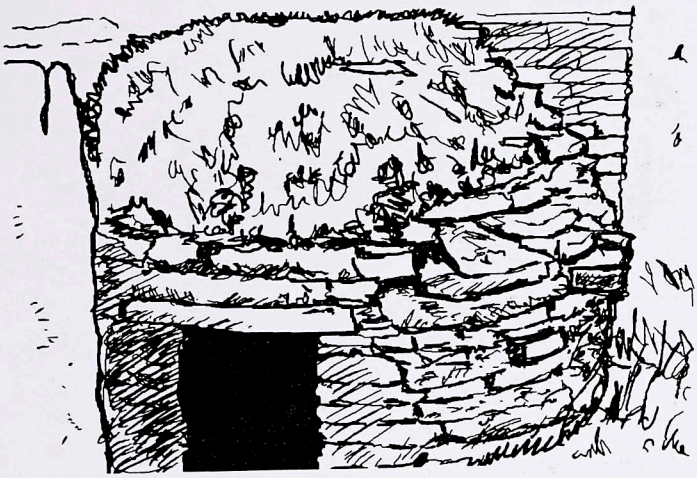


Pig house A and run at Myre, South Walls.



Back of pig house A at Myre, South Walls.

Pig house B at Myre, South Walls.



Pig house C at Myre, South Walls.

If there was a circular pig house at Gimps, we have evidence of them in South Ronaldsay, in South Walls, in Rousay and Westray. This distribution suggests they may have been more common in the past and that they should be regarded as a recognised type of small farm building within the Orcadian vernacular building tradition. There are probably other examples of circular pig houses in Orkney and maybe elsewhere. If so, I would be grateful for any information about them - paul.newman@norsecom.co.uk or at Sandesquoy, Tankerness, Orkney KW17 2QT (01856) 861400.

Reference

Alexander Fenton, *The Northern Isles: Orkney and Shetland*, Edinburgh 1978, reprinted Tuckwell Press, East Linton 1997

CLICK MILLS EAST AND WEST

Jocelyn Rendall

The small horizontal water mills such as SVBWG members saw in Shetland in 1997 were formerly widespread in northern and western Scotland. Sir Walter Scott estimated that there were 500 in Shetland in 1814; they were less common on Orkney due to the lack of suitable burns, but also found in Caithness and Sutherland, the Western Isles and the west coast down to the Isle of Man. Professor Alexander Fenton suggests that the horizontal mill was in use in the Mediterranean in the first century BC and reached Ireland from there by the third century A.D.[1] The question of diffusion or independent evolution is speculative, but it may be interesting to note that horizontal mills are still in common use in many of the mountainous areas of Asia such as the Himalayas, Karakorum and Pamirs, where the altitude is too high for rice cultivation and the main crops are wheat or barley. The characteristic "click" sound draws one's attention to a working mill, and the interiors so closely replicate our "Norse" mills that it is easy to imagine oneself in the Northern Isles a few generations ago.

The examples in the illustrations are from Chitral province in NW Pakistan. The construction technique is the same as that of the local houses: walls of layered

Figure 1 Horizontal mill at Lasht, NW Pakistan.

Figure 2 Interior of mill at Darkot, NW Pakistan.

drystone and dried mud, with a flat mud roof supported on logs resting on the wall heads. The buildings are roughly 2.1m x 3m by 1.8m high and without windows. There is no shortage of fast-running water – as there usually was in Shetland and Orkney – so there is no need of a mill-dam, but the milling of all the grain needed for the winter has to take place before the rivers freeze over in November. The flow of water into the lade is controlled by a wooden sluice-gate sliding in grooves[2] and the flume directing the water onto the paddles of the horizontal wheel is made from a hollowed tree-trunk.

Hoppers are often a plank-built, triangular box like those found in Shetland or the restored mill at Dounby in Orkney, but the Chitral versions are carved from a log, and suspended from a beam resting on the wall-heads by a hook cut from a curved branch. A wooden clapper attached to the hopper and bouncing on the millstone as it revolves shakes the hopper to release a steady flow of grain, making the characteristic sound of the "click" mill. Exactly as in the Dounby example, the front of the shoe can be raised or lowered to regulate the rate of feed into the mill-stone by a cord running to a pin in the hopper.[3] The upper mill-stone is connected directly by a wooden spindle to the wheel below. In these mills there is no nether stone, the upper stone grinding directly on to a flat stone base, from which the meal was funnelled into a stone *bing* or trough.

Horizontal water wheels are sometimes put to purposes other than grinding grain. In Nepal I came across a neat row of mills on a burn; but on closer inspection

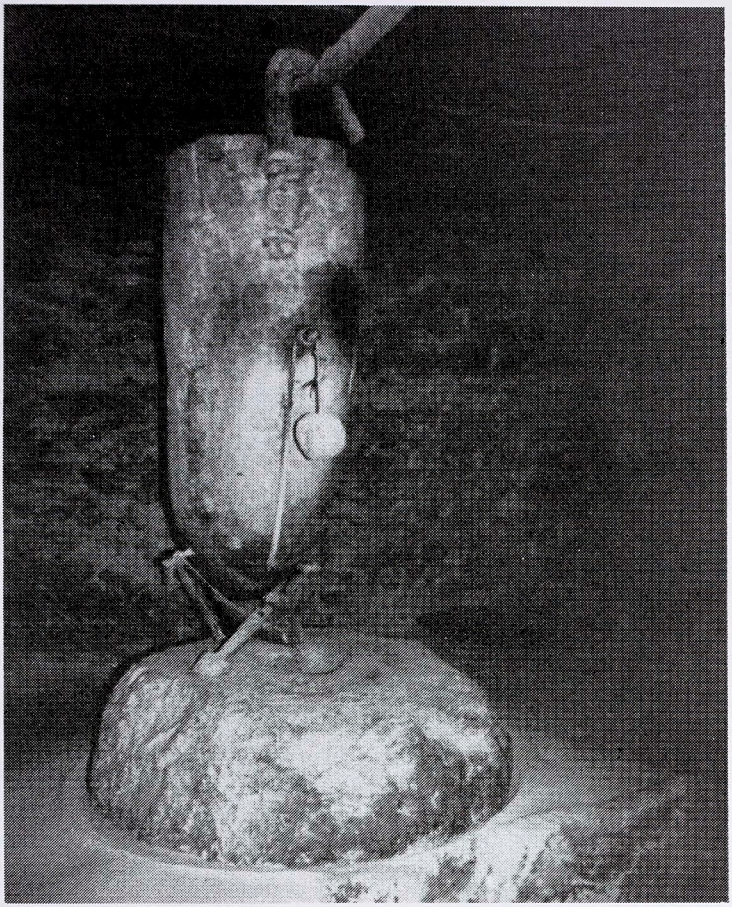


Figure 3 Detail of Darkot mill.

I realised that the paddles were turning not millstones, but huge wooden prayer wheels!

References

Alexander Fenton, *The Northern Isles: Orkney and Shetland*, Edinburgh 1978, reprinted Tuckwell Press, East Linton 1997, pp. 396-410
1. Fenton, p. 396
2. Cf. Fenton, p. 405
3. Cf. Fenton, p. 400.

THE KILN BARN, ROTHIEMAY, BANFFSHIRE

Elizabeth Beaton and Harry Gordon Slade

This contribution to VB falls into three sections. Firstly an introduction to the kiln barn at Rothiemay, Banffshire (Grid ref NJ 551 484), secondly Harry Gordon Slade's article devoted to this building, reprinted from *Vernacular Building* 4 (1978) and thirdly transcriptions of original documentation relating to the building of the barn in 1742-3.

Section 1: Introduction

In the damp Scottish climate, grain, particularly oats, had to be dried before grinding, otherwise it would not granulate properly. It was not so necessary to dry harder grains such as bere or barley, though when used for ale, these were dried to prevent shoot growth. Stone-built kilns, usually circular, with a drying floor above a round, bowl-shaped drying chamber, served families or small settlements throughout the north and north-east. In *long houses*, combining dwelling, byre and barn under a single roof, they sometimes terminate the linear building with a bowed gable end. Similarly when kiln and barn are parallel but with access to the dwelling, as in South Mainland, Shetland, the vertical circular kiln is a characteristic feature of the complex.

These smaller complexes seldom have documentary record, but there are references to kiln barns and drawings in estate papers and in the early 19th–century *Agricultural Reviews*. These were large and well built, the internal kiln identified by a ridge chimney stack and sometimes by a piended roof at the kiln end but gabled at the other. Some examples survive, particularly in Caithness and Banffshire, both counties with a tradition of arable farming. Estate kiln barns appear to have been constructed (or re-built) in the mid-18th century, a time when the increased production resulting from farming improvements generated the need for processing larger quantities of grain, either grown on the mains (or home) farm or delivered by tenants as rent in kind. They accommodated most of the processes associated with corn after harvest and before grinding, from storing unthreshed sheaves, threshing by flail, winnowing, sacking, and grain storage. As mechanical threshing came into use after the invention of the threshing drum by Andrew Meikle, East Lothian in 1786, coupled with greater use of kilns in corn mills, these substantial kiln barns associated with mains farms gradually lost their importance. This decline coincided with the change from payment of tenants' rent in kind to cash.

As with most redundant farm buildings, surviving kiln barns have been altered, adapted for different use and often had the kiln gutted or demolished. It is therefore of considerable interest that the kiln barn associated with the Rothiemay

estate survives. Equally unusual is that it was recorded before the roof collapse set in *c.*1990 and that original documentation is now available.

Rothiemay was purchased in 1741 by William Duff, Lord Braco, later First Earl of Fife; he immediately set about an improvement programme, particulars of which are revealed in the voluminous and recently catalogued Fife (Montcoffer) Papers (MS 3175) deposited in the Special Collections, King's College, University of Aberdeen since the mid 1990s. Amongst these papers is bundle 648 relating to building work undertaken in the policies and the Mains of Rothiemay in the 1740s and 1750s, including the kiln barn, revealing a construction date of 1742-3, and the masons' contract besides some accounts. In the late 19th century, the storage area at the east end of the barn was converted as a gardener's cottage and game larder, but without marked alteration to the main structure. Other than this intrusion, the building was in reasonable condition when, in 1974, Harry Gordon Slade, English Heritage architect and inspector with long-standing north-east Scotland affiliations, measured and drew up the building, publishing his drawings[1] and findings in *Vernacular Building* 4 (1978).

I first visited the kiln barn by chance. In the summer of 1974 I called at Rothiemay House for permission to view the doocot in a nearby field and was warmly welcomed by Dr Ramsay and Mrs Katherine Traquair (also a retired doctor of medicine). Not only did they encourage me to visit the doocot but suggested that I looked over their kiln barn and stay to lunch. In no time at all I was garbed in an old coat belonging to Dr Traquair and, clutching his torch, pushing my way to the barn through a jungle of head-high Giant Hogweed and crawling inside the kiln basin. The barn was then intact though long disused, with winnowing floor with opposing doors, kiln, sack shoot, etc. all clearly revealing the multi-functional nature of the work space. Over a hospitable lunch, I learnt something of the estate and the recent visit by Harry Gordon Slade.

Mrs Traquair was born Miss Katherine Forbes, whose family had owned Rothiemay after the Fifes. She and her husband re-purchased the neglected property, hoping to restore the mansion. When this proved impossible and demolition inevitable, they built the present Rothiemay House on the site and tackled the rest of the policies as they could. Dr Traquair did his best for the kiln barn but financial aid proved unforthcoming.

In 1989, during the Historic Scotland re-survey of Listed Buildings in Moray, the kiln barn was raised to category A. From about this time the roof showed signs of weakness and has progressively deteriorated. Sadly, Drs Ramsay and Katherine Traquair are now dead; Rothiemay belongs to their son Ian, who has investigated various schemes for the regeneration of the policies and alternative uses for the barn.

Harry Gordon Slade's article on the Rothiemay kiln barn is as valid now as when published 22 years ago and his dating remarkably accurate despite having no recourse to the Fife papers. With permission, his article is re-printed here. Copies of VB 4 (1978) are still available. In the light of recent research and field work I

have contributed some footnotes to Harry's text, and with the Fife papers now readily available at King's College, Aberdeen, I have also researched the subject further. The third section of this contribution is a transcript of the mason's contract for building the kiln barn and some other papers. Together they reveal much about 18th-century practices of hiring masons, measuring masonry and costing work.

Section 2: Harry Gordon Slade, ROTHIEMAY – AN 18TH-CENTURY KILN BARN (1978) (footnotes contributed by Elizabeth Beaton)

At the Mains of Rothiemay there is an unusually complete kiln barn. Spalding makes two references to such a barn at Rothiemay in 1634. There is no evidence, however, to show that this barn is the one now standing.[2] In 1741, William Duff, Lord Braco bought Rothiemay. On his way from Banff to Rothiemay, on all sides he saw smoke rising from the small kilns of the crofts and farms, and said: 'I will mak a' these lums reek through ane lum' (*anglice* 'I will make all these chimneys smoke through one chimney'). It is said that the little barns were destroyed and the tenants were forced to bring their grain to be dried at Lord Braco's fine new barn.

The 1740s is an early date for a farm building of the sophistication of the Rothiemay barn, but Lord Braco was dead by 1763 and the tradition is strong that he built the barn soon after acquiring the estate. Nor is this the only formal estate building intended in the north-east of Scotland. Among the drawings at Craigston, near Turriff, is the design for a new poultry house which dates certainly from before 1756 and possibly as early as 1746. A date as early as the 1740s may therefore be possible.

The barn is a slate-roofed stone building measuring 78ft 4ins by 20ft 2.5ins externally, with walls of slurry-harled field rubble, or *heathens,* with granite dressings.[3] In the 19th century, when it went out of use as a kiln barn, a gardener's cottage was formed on the ground floor at the eastern end, and part of the same floor was partitioned off to form a game larder, but otherwise there has been little change.

The barn is divided into two floors, with a granary and threshing or winnowing floor below and a storage loft above, and the kiln. The kiln rises the full height and occupies a quarter of the area of the barn, being 24ft square overall.

There are doors in the north and south walls, and the loft is reached by an internal staircase, originally of stone, and by a door in the east wall. Other original openings on the ground floor are four air slits, but the loft has eight windows, four in each of the long sides. In the upper walls of the kiln are three ventilation openings, 12ins square.

To the east of the ground-floor doorways is the granary and to the west, where the floor is some 12ins lower, is the working area associated with the kiln. The space between the doors was no doubt used for winnowing. The only original

feature in the eastern half is an aumbry-like recess, 13ins wide by 19ins deep, in the north wall between the door and the ventilation slit. Its purpose is not clear, but it may have been used to hold a lamp.[4] The ventilation slits are 9.5ins wide by 9ins deep, the embrasures with canted jambs widening to 1ft 6ins on the internal wall. There is no rebate and the openings, which are 3ft 10.5ins high, do not appear to have been secured by shutters. Each one was however protected by a vertical iron bar.

The two doorways are 6ft 2ins high and 3ft 6ins externally widening to 4ft on the internal face. The external lintels are granite but the wall above each door is carried chiefly on three timber lintels. The doors, of which the one on the north side survives intact, are single-hung double leaf doors hung on the west side on iron pins and each can be opened for its full width as a single leaf. If this is not necessary then the larger leaf, which is 2ft 2ins wide, can be folded back, presumably to obtain some measure of draught control for winnowing. Of the south door, only the ironwork survives. The doors were secured by wooden draw bars, which however, pre-supposes that there was someone inside the building to operate them. There is no evidence of the original nature of the floor in this or the western end of the barn.

The working area in front of the kiln is divided in half. On the south side is an open space in front of a stone paved recess in the eastern wall, while on the north side are the stairs and the *kiln-ring* or *kiln-ingle*. The recess is 3ft deep and 7ft 3ins wide with an arched stone roof. Inset 4ins from the face of the arched opening is a 12ins square chute of sandstone slabs to run the grain from the kiln floor into the barn.

The present rough timber stairs are clearly an insertion. Originally the stairs were of stone, 3ft 5ins wide; on the north side they arched over a 2ft deep recess, for the peat fuel. A peat was found under the debris on the floor. There was then left a space 4ft 6ins square in front of the fire – the *kiln-ring*.[5] The openings to the kiln, one above the other, are 2ft 9ins wide. The heat from the fire lit in the entrance to the lower one travelled through the 5ft 6ins wall between the interior of the kiln and the kiln ring along a 6ft 10ins long flue that angled towards the centre of the kiln.

The floor of the upper opening[6] slopes down towards the kiln, and there is a difference of 12ins between the two ends. The outer opening is rebated to take a door, and the iron pins are still in position. The rebate is barely an inch in depth, and so finely cut, that it suggests an iron rather than a timber door.

Internally the kiln is circular. The bowl is 7ft in diameter at the offset but narrows below it. The pit is filled with a mass of peat ash, burnt grain and other rubbish. The offset is at the same level as the floor of the kiln ring, but it is not continuous as it is pierced by the internal opening of the flue.

The drying floor is 8ft 2.5ins above the off-set and is remarkably intact. It consists of *kiln-sticks*, measuring 2ins by 1.5ins, laid on their broad sides, the gaps between them varying from 0.5ins to 1ins. There is a considerable degree of

charring to their undersides. The sticks are carried on six *kiln-simmers* each measuring 6ins by 9ins at 2ft 3ins centres.[7] It has survived because in the 19th century a boarded floor was laid over the *kiln-sticks,* and the drying chamber was put to other uses.[8]

The diameter of the kiln at the level of the drying floor is 14ft 6ins and the space is lit by three small openings, each 12ins square, in the three external walls. All these openings are rebated and would have been secured with wooden shutters, although now they have fixed glazing. The embrasures, which are 2ft wide and 4ft 9ins high, are totally at variance with the tiny openings just under the eaves but their purpose is to spread the light as much as possible.[9] Although they would have helped to draw the fire, this was not their main purpose as this service was performed by the flue in the neat little chimney which rises above the roof between the kiln and the barn. The opening for this flue is in the east wall of the drying chamber, 7ft 9ins above the floor. The opening measures 1ft 10ins by 1ft 9ins and is rebated to take a shutter. At the head of the window embrasures, that is 6ft above the floor level, the diameter of the kiln is reduced to 9ft 10ins.

In the east wall of the drying chamber are two openings: the kiln door, 6ft by 3ft 3.5ins, facing the head of the stairs and the chute opening 3ft 4ins by 3ft 9ins. Both openings are rebated on their western sides for doors.

The loft, which measures 55ft 7ins by 16ft 5ins, is (apart from the late wooden partition around the stair opening, and the free-standing chimney stack of the 19th-century cottage) largely as it was built. The walls are covered with a rough lime plaster, and the eight windows, with splayed and rebated jambs, average 3ft 4ins in height and 3ft in width, with the internal openings 3ft 10ins wide. The sills are all at floor level, and the openings are checked with 1.5ins rebates to take the wooden shutters. In the centre of the east wall is the sack door, 6ft 2.5ins by 3ft, with rebated and splayed jambs. In order to give the door sufficient height the roof timbers have been framed to form a dormer with slate-hung cheeks. The sack door and surviving window shutters are double-boarded – the outer face being vertical and the inner face horizontal – the boards being secured together with iron nails.

To the east of the barn is a much altered 18th-century farm house, which has been built so close as to prevent the passage of carts between it and the barn. This would suggest that the house is later than the barn: it is unlikely that the two buildings would have been planned in such a way as to make the sack door useless. The height above the ground, and the absence of any sign of a hoist, make it likely that the sacks were meant to be loaded directly onto the carts.

The future of this barn must be a matter of concern to all who are interested in the early planned agricultural buildings of Scotland. Although derelict, it is still comparatively sound, and could be restored at comparatively little cost. It has no future other than as a preserved building, for conversion to any other use must of necessity destroy, or conceal, its particular and peculiar qualities. In the great leap forward that the preservationists have made from the middle ages to the industrial

revolution it is unfortunate that the vernacular and more particularly the agricultural vernacular, buildings of the 18th century have been all but overlooked.

I would like to record my thanks to Dr and Mrs Traquair of Rothiemay who made the barn available to me.

Section 3: Contract for Masons' work, Fruit House[10] and Kiln barn, Rothiemay, Banffshire between William Lord Braco and Alex and Geo. Taylors, Masons in Aberdeen, dated 1742 and 1743. Also details of measuring and 'Accompts' for work together with the *Generall Discharge*

(Fife (Montcoffer) Papers, MS3175/648 Special Collections, King's College, University of Aberdeen)

There are two copies of this contract, one dated 1742 and one 1743, both on 10d stamped paper. That dated 1743 has DISCHARGED superimposed on the outside fold; presumably it was exchanged or filed after the work was completed and the *Generall Discharge* drawn up and signed on 31 October, 1743. Both contracts are written in the same hand and appear to contain the same text though there are small discrepancies in mode of abbreviations.

The copies are worn and torn. I have found them difficult to decipher and at times have had to draw on both copies. Where words are indecipherable, then ..?.. represents a single word. Original spelling has been copied and punctuation (or lack of it) retained.

Besides the contract, other documents in the same bundle of papers cover the final formal documentation of measuring, accounts and *Generall Discharge;* they are reproduced in that order. I have found details of neither slaters' nor joiners' work, so the final cost of the kiln barn cannot be calculated. Some payment was made in kind, as 'meall' measured in 'bolls' and 'firlots'. Contract, Measurements and Discharge are witnessed by both parties, once by Lord Braco himself but mostly on his behalf by Alexander Stronach or William Anderson. Though Stronach and Anderson refer to themselves as respectively 'servant' and 'gardner', both appear to have played supervisory roles at Rothiemay, the former probably as agent and the latter combining the functions of master-of-works besides responsibility for policies, woodland and garden. Anderson designed both fruit house and kiln barn: though both were of a traditional nature and undoubtedly familiar structures, both were prestigious buildings on the estate. Bundle 648 also includes a page of payments in kind to the masons apparently for various other building works in Rothiemay over the same period, including the fruit house, washing house and public house.

Contract between William Lord Braco and Alex and Geo. Taylors[11] *masons in Aberdeen* (dated 1742 and 1743)

It is agreed and ended betwixt the Right Honourable William Lord Braco on the one part and Alexander Taylor Mayson in old Aberdeen and George Taylor mayson there his father on the oyr[12] part in manner following. That is to say the afs[13] Alexr and George Taylors hereby bind and oblidge themselves conjunctly and severally to build a house for the holding of fruit and any oyr Conveniencys that shall be thought as proper to the said Lord Braco at Rothiemay conform to a plan and directions made out by William Anderson Gardner thereby by his Lordship's orders there anent. And further the said Alexander and George Taylors Bind and Oblidge themselves to build a Kiln Barn at Rothiemay Conform to a plan & direction made out there anent by the sd William Anderson AND ALSO to furnish for carrying on and finishing the afs mentioned fruit house six sufficient laying Masons and six sufficient laying masons more for the afs mentioned kilnbarn and to enter to ye different works against the second day of February or how soon thereafter the weather will permitt and to carry on and Finish the same with all Convenient Speed and likewise to make the work of both these houses as sufficient as the West side or either of the Gavels[14] of the Courthouse lately built in Milntown of Rothiemay by John Chrysty and notwithstanding the afs Alexander and George Taylors are impowered in manner aforesaid to furnish twelve laying masons of their own choosing for ye above different works yet if the Lord Braco shall think proper to nominate one or two of that number the afs Alexander and George Taylors hereby oblidge themselves to accept of and Imploy them in the afs works providing they be as Capable and reasonable in their Hyre as the afs George and Alex Taylors can be served by others and as obedient and Discreet at their work for which Causes the afs William Lord Braco Binds and oblidges himself to furnish upon by own proper Charges and Expenses all kinds of Materials necessary for carrying on and finishing the two houses a/mentioned and to lay the same as near the work as the same can conveniently be done with carts and likewise to make payment and satisfaction to the afs Alexander and George Taylors of the sum of tenpounds Scots for each rood[15] of mason work (barrowmen and all other workmen included) Item three shilling and six pennies Scots for each foot of hewn[16] work that will be necessary for finishing the afs two houses the afs payments to be made as ye work advances AND LASTLY both parties bind and oblidge themselves to perform the promises h/in made to each other under the penalty of Twenty pound Sterling money by and ..?.. performance consenting to ye Registration hereof in the books of Councill and Session or oyrs Competent that all ..?.. necessary may ..?.. ..?.. in form as ..?.. & to that Effect they constitute their promise in Witness whereof their presence are written on this and the two preceding pages of stamped paper by Alexander Stronach servant to ye Lord Braco and subscribed by the aforesaid parties as follows viz by the afs Wm Lord Braco and Alexander Taylor at Rothiemay on the nynth day of December ..?.[17] and

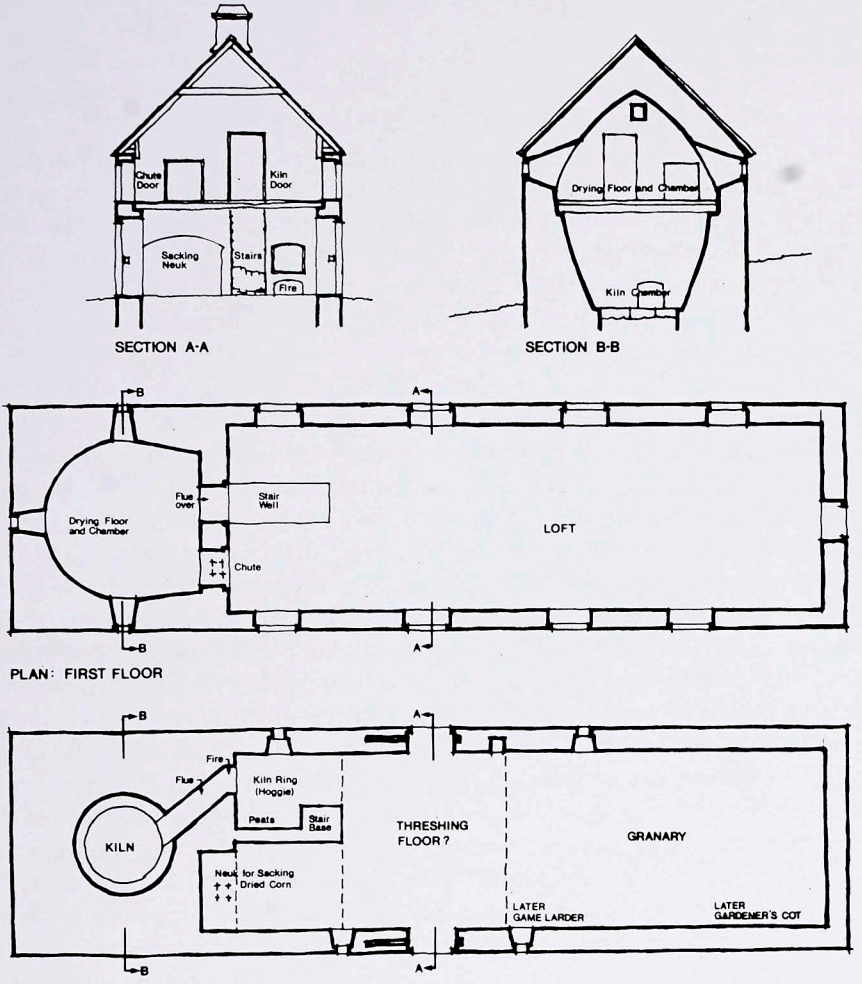
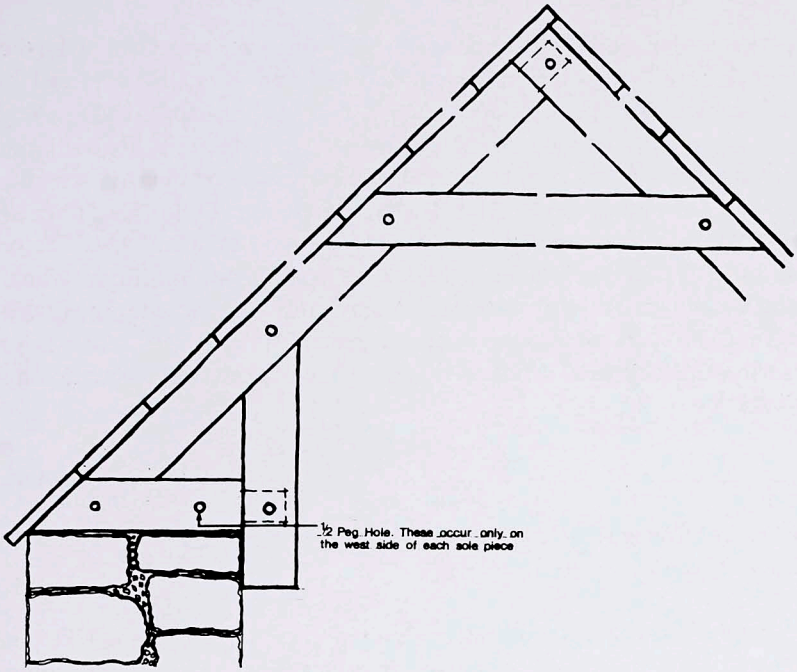


FIG. 1.
ROTHIEMAY: KILN BARN

Figure 1 The kiln barn, Rothiemay (all drawings by Harry Gordon Slade).



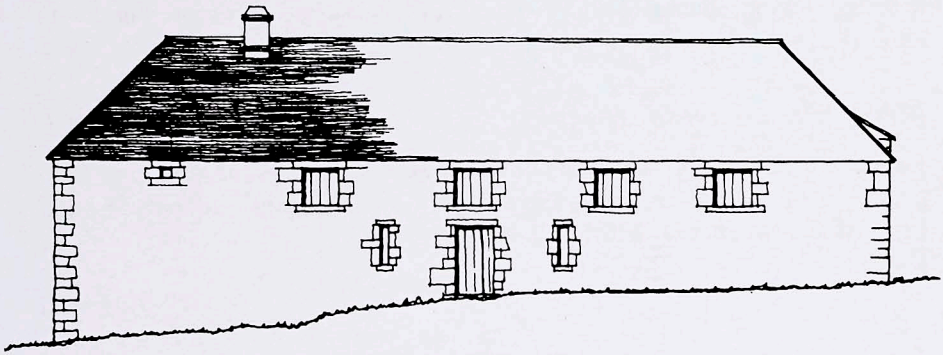


FIG.2.
ROTHIEMAY: KILN BARN

Figure 2 South elevation and detail of barn roof. The triangulated method of securing rafters to wallhead with sole plate or sole piece and ashlar post was common in superior buildings at least in the 17th century and well into the 18th century, e.g. The Palace, Culross, Fife, 1611; The Old Red Lion, 42-46 High Street, Elgin, Moray, 1688.

forty two years Alexander Taylor mason in old Aberdeen and George Leslie mason in Inchcorsie[18] on the one (?hand) and the other party have agreed in manner following that is to say the afs George Leslie has become Bound as party contractor for and with the aforesaid Alex Taylor to ye effect mentioned in the contract (with respect to the fruit house and kiln barn) entered into between the Right Honble Lord Braco and to Alex Taylor and George Taylor his father as contained in ye two preceding pages and the afs George Leslie and Alex Taylor hereby bind and oblidge themselves ..?.. & ..?.. to perform and fullfill the whole clauses and conditions therein contained ..?.. by Alex and George Taylors in witness whereof this present are written by Alexander Stronach Sert[19] to afs Lord Braco and subscribed by the afs party as follows: By Wm Lord Braco in testimony of his approbation.

Braco

Before
Alexander Stronach
Patrick Wilson

After completion, the mason's work was measured three times, twice in October and again on 11 November 1743, witnessed on each occasion and all with slight discrepancies. That of 29 October for masons' work (i.e. rubble masonry) accords with the 'Scroll of Accompts' and is quoted below as an example. Measurements for 'masons' work' are given in roods and/or ells; for hewn work in feet. From the accounts I have identified and extracted, the masons' expenses amount to £368.11s.1d (Scots). This may not be the complete figure.

Measuring the masons' work

Rothiemay 29 Oct.1743 The measurement of the Mayson work of the kill Barn (sic) built by Alexander Taylor and George Leslie maysons Amounts to eight hundred and twenty four Ells OR Twenty four roods ten Ells measured date as above

Will Anderson
John Chrysty[20]

Extracts from 'Scroll of Accompts' for various building works relating to expenses of Kiln Barn, Rothiemay

Scroll of Accompts of Charge and Discharge between Rt. Honble the Lord Braco and Alexander Taylor in old Aberdeen and George Leslie Mason at Rothiemay

George Leslie and Alexander Taylor Discharge themselves by the sum of Two hundred and forty three pounds two shillings Scots money for the mason

work of the Kiln barn built by them being twenty four Roods ten Ells at ye rate of ten pound a rod (sic) confrom to contract and attestation of ye measure signed by Wm Anderson and John Christy £242.15.00

and by five hundred and nynty feet of Hewn work in ye Kiln Barn at three shillings six pennies Scots per foot Conform to contract and attestation of ye measure extending to £103. 5. 00

and with half a Boll[21] of meall from Alex Stronach on my Lords acct £2. 3. 4

And with two Bolls of meall
And one boll one firlot one
Peck of meall from James
Cruikshank on my Lords acct £15. 13. 4

and with one boll two firlots
of meall received from Wm Brown
Millner on my Lords acct 6. 10

The following items appear elsewhere:-

To drains at the Kill Barn	£8. 16. 0
To slaping (sic)[22] the old Kill Barn	15. 00. 0
To rough Avochie ston (sic) Thirty seven load	8. 6. 6
	£396. 6 .2
Less advances between June 19-Sept 19,1743	£25.14.11
Total (Scots)[23]	£370. 11s 1d

General Discharge

Alexander Taylor and George Leslie, Masons to Lord Braco, 1743.

We Alexander Taylor mayson in old Aberdeen and George Leslie mayson in Inchcorsie do hereby Acknowledge and Declare that we have received from William Lord Braco and from others in his name and on his account full payment and satisfaction of all the mayson and other work done and performed by us or any other person hired and imployed and paid by us to

his Lordship preceding this date and therefore we hereby discharge the afs William Lord Braco of all the mayson work done and performed by us or any person imployed by us to his Lordship preceding the date of this present and of every thing we can ask or crave of him there anent in any manner of way and we shall (here follows undeciphered phrase)..... In witness these present are written upon this page by Alexander Stronach Servant to ye afs Lord Braco and subscribed to by us at Rothiemay the thirty first day of October (1700) and forty three years before these witnesses Andrew Hay of Montblairy writer to the signet and the said Alexander Stronach

Andrew Hay, witness — Alex. Taylor

Alexander Stronach, witness — George Leslie

Conclusion

Kiln barns are of considerable interest in their own right and, large or small, a traditional feature of Scottish farm buildings, particularly in the north. It is unusual that original documentation of the Rothiemay barn should survive from the mid-18th century together with mid-20th-century recording of the fabric. Despite its present poor state of repair, the importance of this substantial and interesting building should be recognised, both for its own intrinsic interest and its place in Scottish agricultural archaeology.

Acknowledgments

Elizabeth Beaton is grateful to Harry Gordon Slade for permission not only to reprint his timely article on the kiln barn at Rothiemay but also for his forbearance that she add footnotes in the light of recent research; to Captain Ramsay of Mar for permission to reproduce from the Fife (Montcoffer) Papers; to Mrs Myrtle Anderson-Smith, Senior Curator, Special Collections, University of Aberdeen; and to George Watson, Thurso, for his advice on measuring masons' work.

Notes

1 Drawings deposited in Historic Collections, Special Libraries and Archives, King's College, University of Aberdeen (MS 3127/3/1-2).

2 Probably the 'old kill Barn' [*sic*] demolished in 1742 to make way for the new.

3 Avochie granite for the door and window dressings etc., presumably purchased roughly hewn and dressed on site. Avochie is approximately two miles south of Rothiemay, its pale grey granite much used locally. There is plenty of evidence on the estate and the surrounding area of field stone clearance (locally *heathens*), providing walling material. See also the large boulders utilised in the dry stone dykes enclosing the fields on the Rothiemay estate. Information regarding Avochie granite, pers. comm. Dr Katherine Traquair, *c.* 1980.

4 To accommodate the *crusie lamp* giving light when threshing by flail on dark winter days. Alexander Fenton, *Scottish Country Life* (Edinburgh, 1976), p.81.
5 *Kiln-ring* or *Hoggie*: the fireplace of a kiln (*Scottish National Dictionary* V, 1960, p.74).
6 The upper opening is uncommon and probably intended for kiln inspection/cleaning: yet another sophisticated feature in this superior kiln barn.
7 These substantial *kiln sticks* and *kiln simmers* (simmer = beam) were smoke blackened when I saw them in 1974.
8 Floor laid *c.* 1948: pers. comm. Dr K. Traquair, *c.* 1980.
9 Also probably to allow moisture to escape: I have noted them in similar kilns elsewhere.
10 The *Fruit House* (also known as a *Fruit Room*), was, according to a 17th-century description, 'a close but cleanly and wholsome Room floored, lyned and fitted with boards and shelves of the same round' for fruit storage, particularly apples and pears. John Reid, *The Scots Gard'ner, Published for the Climate of Scotland* (1683, Edinburgh 1988); Susan Campbell, *Charleston Kedding: A History of Kitchen Gardening* (London, 1996), pp. 242-5.
11 The added 's' rendering Taylors plural is not unusual at this time, e.g. mural memorial, Cabrach Parish Church, Banffshire:'George and John Gordons' dated 1771.
12 'other'
13 'aforesaid'
14 Gables
15 Rood: not the usual standard measurement of land where the rood equalled a quarter acre, but a builder's measure. In Caithness (Henderson, *General View of Agriculture of the County of Caithness*, 1812, p. 30) the builder's rood equalled 36 square yards. Thirty and a quarter square yards seems more usual: see A. C. Simpson and R. D. Connor, 'Interpreting Scots Measurement units' in Glen L. Pride, *Dictionary of Scottish Building* (Edinburgh, 1996), pp. 104-105.
16 Dressed (smooth) masonry for door jambs, etc.
17 Abbreviation apparently meaning 1700.
18 Inchorsie, close to Rothiemay House, NG ref.NJ557 487.
19 Servant (in a supervisory role).
20 John Crysty; apparently a mason, whose name crops up in other contemporary Fife documents.
21 On average, a boll equalled 140 pounds or 63kg; a firlot was a quarter boll. Payment in meal was common in many spheres. George Watson, Thurso, has found a reference to masons having grazing for a milking cow near a site, besides meal, as payment in kind.
22 Slapping, or demolishing.
23 The Scots pound was worth one-twelfth of £1 sterling.

THE 19TH-CENTURY PAVEMENT WORKS AT HARROW, CAITHNESS

P. D. Humphreys

Introduction

The story of Harrow pavement works has its origins in 1853, during the time of Alexander the 13th Earl of Caithness, and owner of the Mey Estate. It appears that the Earl was interested in exploiting any reserves of flagstone on the estate and was preparing to issue a 21-year lease to a group of entrepreneurs to prospect for, quarry and export pavement. In return, the Earl was to receive a royalty based on 7.5% of all stones quarried and squared. The pavement was to have been exported from a harbour to be built at Gills Bay at an estimated cost of between £600 and £700.[1] Harrow had been considered, but was rejected for being too small. Flagstone samples were taken for evaluation of quality, and a suitable quarry site identified one mile east of the Earl's family seat, Barrogill Castle (now called The Castle of Mey). However in 1855 the 13th Earl died, and his son James the 14th Earl inherited the Mey Estate.

The 14th Earl

The 14th Earl had a passion for science and invention. He would later be elected Fellow of the Royal Society (20 November 1862) and already held patents in the paper and textile industries. He also had a keen interest in electricity and steam power. It is not surprising, therefore, that the 14th Earl decided to set up in business on his own account, rather than lease quarrying rights to others. He wasted no time, and opened up a quarry at East Mey, most probably at Glenyra, in 1856. A tramway was installed to transport waste, known as *tirr*, away from the workings in horse-drawn, self-tipping wagons. A windmill-driven pump was employed to keep the workings dry.[2] The 14th Earl rejected Gills in favour of Harrow, where he set about building a pavement works and harbour.

In November 1860 the 14th Earl acquired a steam carriage (Fig. 1) which he drove up from Inverness, consuming over a ton of coal in the process. When not in use on road, the machine was put to good use at the quarry, where its power take-off could either power the crane or pump water at 3,750 gallons an hour, reportedly at a cost of 6 (old) pence-worth of coal for a 10-hour day.

The pavement works

The traditional method of squaring off the edges of flagstones was by hand hammering; this method gave a rather rough finish and was also relatively slow.

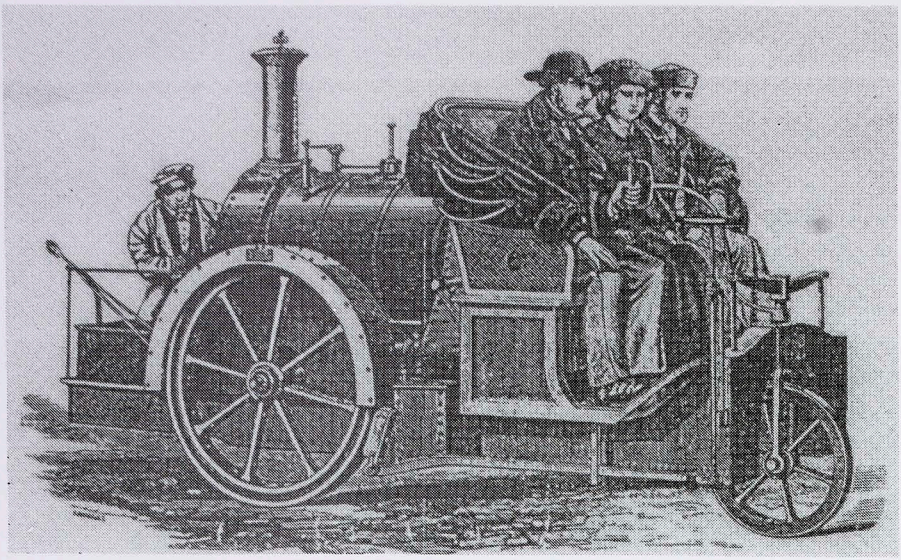


Figure 1 The 14th Earl's steam carriage, 1860.

Later flags were sawn by hand using a toothless saw blade and a particularly abrasive sand lubricated with water. The stone was only cut partway through, after which the waste material would then be snapped off along the line of the cut. The first mechanised saws, used by Traill at Castlehill for example, were driven by water wheels; these required a lot of water, a consequence of which was that production sometimes had to stop during dry periods.

Harrow was to use steam power to drive the machines, an innovation to be seen at James Sinclair's Hill of Forse works in the summer of the same year, 1858. This used much less water than a water wheel and allowed production to continue during dry periods.

The construction of the pavement works and harbour at Harrow probably started in 1856, in the same year that the quarry was opened. The harbour, referred to locally as Harrow Harbour, was originally called Philips Harbour, after Sir George Philips, its possible financier and father-in-law to the 14th Earl of Caithness. Two workers' cottages were also built, possibly to house the works' engineer and the superintendent.

The works was in production by March 1858, although the pier was apparently not completed until 1861.[2,3] The steam engine and its associated boiler were housed in an engine house, which also contained a forge for sharpening stone-working tools. A dam was constructed to supply water to the boiler and also to the stone-cutting machinery. A covered culvert carried waste water down to the beach. The steam engine, manufactured by Messrs. Forrest & Barr of Glasgow, was rated at 10 horse power.[2] Its design has not yet been determined; it could have been a small half beam engine, known as a grasshopper engine, or a single cylinder

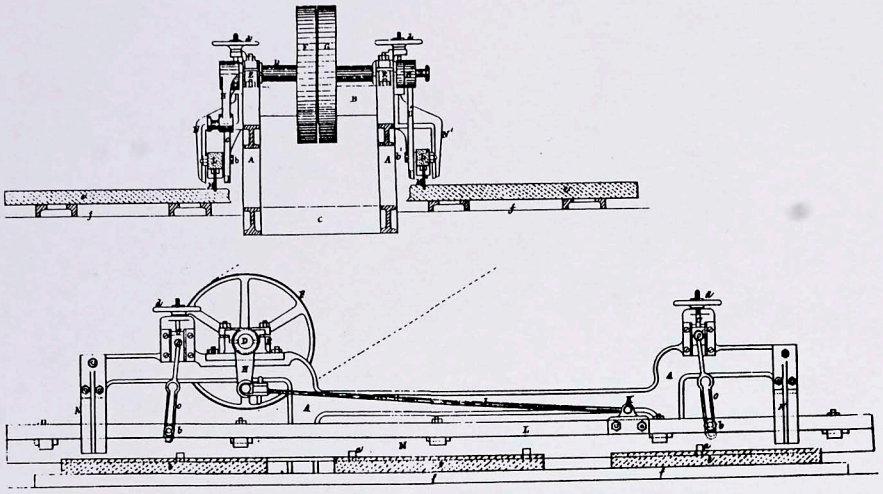


Figure 2 Cutting machine, patent number 3022 of 1857.

vertical. However, the archaeological evidence suggests that a horizontal cylinder design is more likely.

The detail of the type of boiler is also unknown, but the archaeological evidence suggests that a simple horizontal shell boiler was used. If this is the case, it would have consisted of a cylinder, approximately 1m in diameter by approximately 3m long, possibly with hemispherical ends, constructed from riveted wrought iron plates. It would probably have been fitted with a sight glass to indicate water level and a pressure relief valve. A feed pump would have supplied the boiler with water. The boiler would have been fired from below by coal or peat burnt on fire bars.

The machinery, which comprised three-flagstone cutting machines, a dressing machine and three rubs or polishing machines, was housed in an open-fronted dressing shed which was divided into five machinery bays by four masonry pillars. Power was transmitted from the steam engine to the machines by a single drive shaft that ran along the front of the dressing house. The shaft bearings were mounted on iron brackets that were clamped to the masonry pillars. Structural evidence suggests that the dressing shed had a sixth bay added on at a later date. It is not clear when this was done but an invoice from George Ross, a local mason, tells us that he 'built in a scuffing machine' on 14 March 1862, though this could have been an existing machine rather than a new one.[1]

The cutting machines were patented by the 14th Earl (Pat. No. 3022 of 1857). Each machine had two saw blades approximately 15 feet long, driven back and forth by a pair of crank shafts. A mechanism permitted the blades to be lifted slightly from the cutting slot to admit fresh water and sand to aid the cutting process. Each machine was capable of cutting between 300 and 500 running feet of

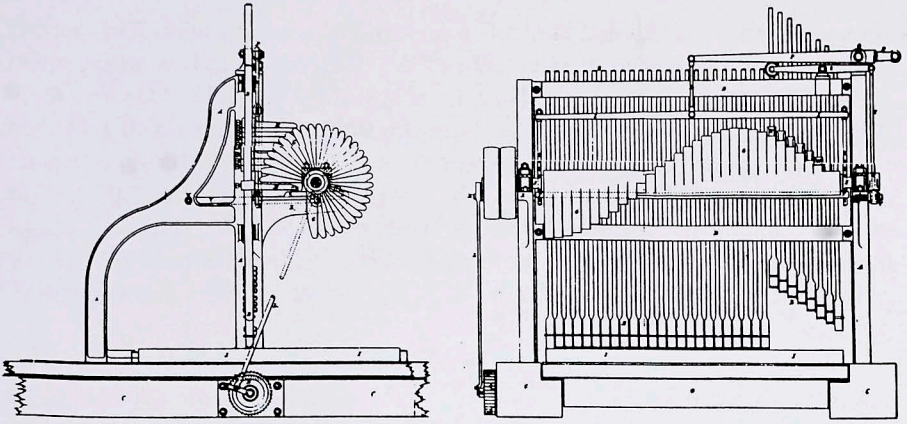


Figure 3 Dressing machine, patent number 1989 of 1856.

stone per day dependent upon the hardness of the stone and the skill of the operator (Fig. 2).

The dressing machines, also patented by the Earl (Pat. No. 1989 of 1856), were designed to roughen the surface of the paving to increase grip. They consisted of a set of parallel vertically mounted metal rods with sharpened tips, mounted in guides within a frame. From the top end of each rod there protruded an adjustable arm or cam follower. A horizontal shaft carried a row of cams mounted helically around the shaft. As the shaft rotated, each cam in turn would first lift and then drop one rod onto the flagstone thus pecking a chip from the surface. As the shaft rotated, each rod would be dropped in succession. After one full rotation of the cam shaft a row of chips would have been produced. The flagstone was then indexed automatically to produce further rows of chips (Fig. 3).

The rubbing or polishing machines were used to produce decorative flagstone for the building trades. These machines accommodated four flagstones at a time mounted in a square pattern on a horizontal platform and equidistant from the centre. Each stone had another smaller stone on top of it. Each of these top stones was clamped to the end of a long steel arm that extended out from the centre of the machine. The arms were connected to a central crankshaft. Rotation of the crankshaft caused the top stone to be rubbed back and forth over the bottom stone; water and sand lubricated and accelerated the polishing process.

If a higher degree of polish was required then a further polishing machine was used. In this machine cast iron laps were used in place of the top rubbing stone and a special polishing abrasive substituted for sand. No patent or drawing has been found by the writer for this machine.

The flagstones themselves were moved from one machine to the next using wagons running on a system of rails. The undressed flagstone was transported from the quarry to the pavement works by horse-drawn road wagons. The stone was first sorted for quality before being placed on a low wheeled wagon. This

wagon was then placed on a turntable mounted on a second wagon. This second wagon ran on rails set in a pit in front of the dressing shed. This arrangement allowed the stone to be positioned in front of any of the bays; the stone on its low wagon could then be turned on the turntable through 90 degrees. It was then pushed into the dressing shed on further sets of rails that ran into the shed beside each of the machines.[2] The stone could be moved from one machine to the next in this way, minimising manual handling. When each stone was finished, it was transported down to the harbour and along the pier on yet another railway. This last railway was not completed in March 1858 as construction of the pier was still in progress.

Brief trading history

The flagstone was exported directly from Harrow by boat. Documentary evidence records that until 1862 vessels were chartered for the purpose, but in 1862 a sailing vessel, the *Bessie*, registered as 75 tons, was purchased by the Earl. On return journeys, the *Bessie* would import cargoes of coal, lime and land drainage tiles and domestic goods for Barrogill Castle.

Trade appears to have been successful through most of the 1860s. However, in November 1867, the *Bessie*, carrying a cargo of flour from London, collided with the brig *William* of 269 tons off Scarborourgh, and from then onwards there were problems meeting deliveries. Letters tell of customers complaining of late deliveries, and of a request, presumably from an agent, that Lord Caithness consider obtaining another vessel. Trade using the *Bessie* continued until 1868, though no references to her continuing to carry flagstone have been found; she may no longer have been fit for such a demanding cargo. This view is supported by a letter from her master, Captain Barnesson, on the strictness of her last inspection, pointing out that she was unlikely to pass. He recommended that she be painted up and sold.[1]

It appears that the flagstone works probably closed in 1870 after only twelve years operation. The reason for this is not certain, but we know the harbour was severely damaged during a great storm probably on 10 February and certainly before 18 February 1870.[5] We also know that the Earl's wife Louisa was very ill at that time and died later in the same year aged only 43.

Evidence for the closure is supplied by a letter dated 6 April 1870 from W. Reid of Spittal Quarry thanking Peter Keith, the 14th Earl's factor, for passing on Harrow's old customer list so that Spittal Quarry could secure their custom. In a letter dated 12 December 1870, J. Saunders of Clapham offers to 'sell flag on commission' or to 'operate the quarries on a royalty basis', suggesting that the quarry was no longer being operated by the Harrow company. Further evidence comes from letters of January 1871 referring to the sail and shipping of the steam engine, rockers, gearing and pumps to The Morayshire Brick and Tile Works. This

letter expresses concerned over whether the engine would fit through the hatch (8'-3" x 5') of their vessel the *Freedom.*[1]

Though the works was closed, the harbour was repaired and a coal store was built onto the engine house possibly in 1871, and the sixth bay of the dressing house was converted into a lime store. The harbour continued to be used for the import of coal, lime, land drainage tiles and domestic materials for the Castle of Mey.[1]

The products and prices in 1860

Class I	from 2 1/2" to 3" thick	1 ton covers 63 sq. ft.
Class II	from 1 3/4" to 2 1/4" thick	1 ton covers 83 sq. ft.
Class III	from 1 1/4" to 1 3/4" thick	1 ton covers 105 sq.ft

Prices

Class I	sawn edge natural faced	4 pence per sq. ft.
Class II	sawn edge natural faced	3 3/4 pence per sq. ft.
Class III	sawn edge natural faced	3 pence per sq. ft.
Tooled stone	4 shillings & 6 pence per 100 sq. ft. extra	
Half rubbed	4 shillings & 6 pence per 100 sq. ft. extra	
Full rubbed	10 shillings per 100 sq. ft. extra	
Class II	(1 1/2" to 2") natural faced with hammer dressed edge	1 shilling & 3 pence per sq. yard
Class III	(1 1/4" to 1 1/2") natural faced with hammer dressed edge	1 shilling & 1 penny per sq. yard

The possible building sequence

The original building, comprising the engine house and five-bay flagstone dressing shed, was built between 1856 and 1858, as recorded by the only known contemporary photograph (Fig. 4, dated *c.* 1910 but thought to date to the 1860s by the writer). There is some structural evidence to suggest that the five-bay dressing shed was later extended by the addition of a sixth bay, now existing as a shed and known colloquially as the lime store. The north wall of the sixth bay exhibits a continuation of the pillared design and vestiges of a piercing perhaps to accommodate an extension to the drive shaft. A strangely constructed alcove may represent an externally blanked off door.

The Ordinance Survey of 1873 appears to record another structure, now gone. This building may have abutted the frontage of the sixth bay with its long axis parallel to and in front of the original building line. The southern gable of the building would have corresponded with the northern revetment of the pit built in front of the first five bays of the dressing shed. The pit can be seen in the contemporary photograph (Fig. 4), of which an explanatory sketch is given (Fig. 5). The photograph also shows what appears to be a single length of rail in the position of the now-demolished building. The sixth bay and the now-demolished building were presumably built after the photograph was taken but before 1873.

The writer has not found any physical or documentary evidence to suggest the position of the rail track reputedly used to transport bogies loaded with flags

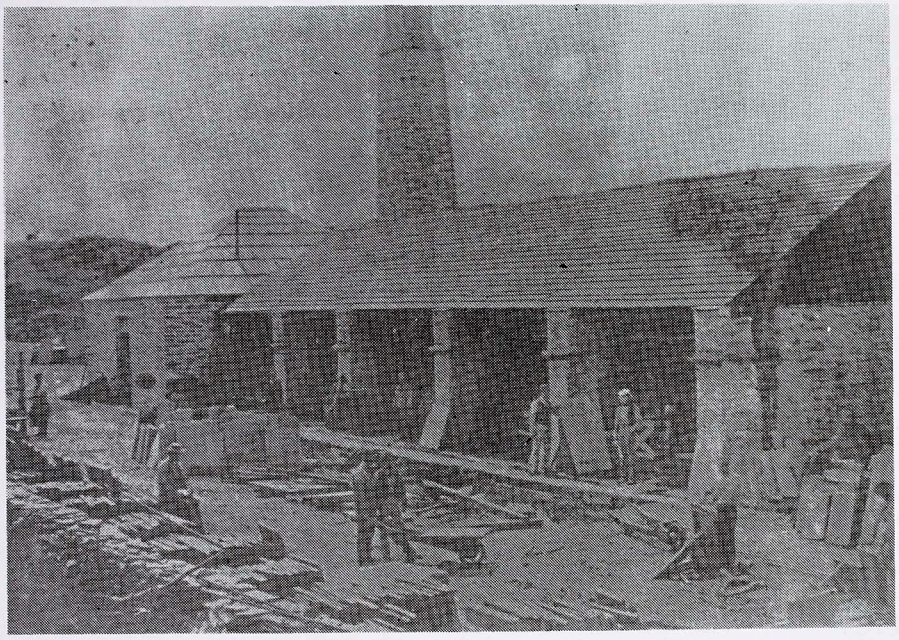


Figure 4 Harrow in the 1860s.

down to the harbour for export. Tradition has it that the rail ran on top of the revetted bank still visible to the east of the modern road. The contemporary photograph indicates a small section of this area but shows a free-standing wall rather than a revetted bank. The writer's view is that it followed the path of the modern road.

A second phase of construction appears to date to *c.*1871, after the flagstone works' apparent closure in 1870. The dating of this phase is suggested by the date stone on the building commonly known as 'the coal store' that abuts the south wall of the engine house. The dating of this phase is based solely on an inscription 'R C 1871' on the doorway facing. The inscription may have been carved by Robert Carswell, the son of Baird Carswell, the works' engineer; however, he would only have been 14 years old at the time.[4] The new coal store appears to have been extended before 1873 on the evidence of existing building and also the First Edition OS map. Some time before 1873 the sixth bay was walled off to form a shed used as a lime store. Some time after 1873 it would appear that the building in front of bay six, the then lime store, was demolished. It is likely that these later modifications were to provide storage for coal, lime and land-drainage tiles which continued to be imported to Harrow after the works appears to have closed.

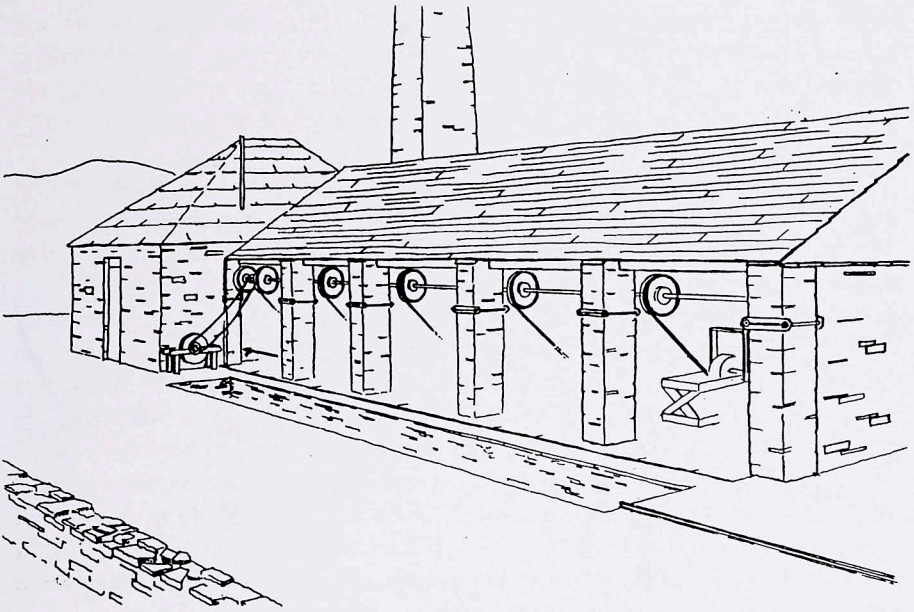


Figure 5 Explanatory sketch derived from the 1860 photograph (Fig. 4)

Harrow Works today

The engine house

The building, built of mortared flagstone, and originally having a pavilion-style flagstone roof, still stands to wall-head height. We know from a bill of 1862 from George Ross, a local mason, that the internal walls were originally plastered and whitewashed. A small patch of plaster still remains on the west wall of the engine support masonry. Entry was via a single width door embellished by red freestone facing, a motif repeated in the doors of the two workers' cottages and the later coal store. The door was later widened, with what appears to be a salvaged ship's timber used as the lintel. The south wall was pierced by an original window, now blocked, and a later curiously angled doorway, apparently knocked through into the coal store. This doorway incorporates sawn flag off-cuts that demonstrate that the flag was only cut partway through, the waste then being snapped off.

The stump of the smoke stack and sufficient of the internal walls remain to allow the positions of the boiler and steam engine to be deduced (Fig. 6). A large block of masonry, in the north-west corner, incorporating a flywheel pit and drive belt slot, suggest the position of the steam engine. A deep socket in the west wall and a slot in the north wall above the flywheel pit may relate to the steam engine mountings. Joist sockets in the north wall suggest that the engine was tended from an operating platform that ran the length of the north wall. The north wall was pierced by two apertures. The smaller of the two may have served to communicate with the dressing shed, or perhaps carried a remote engine regulator control. The larger aperture carried the long drive shaft with its bearing and bearing mounting bracket. The bearing bracket, one of at least six and possibly seven, was clamped to the pillar that can be seen built into the north wall. Long bolts passed through the bracket and a backplate located in a small slot, now blocked, on the opposite (east) face of the pillar.

The boiler position is suggested by the location of the smoke hole in the west wall, and the remaining internal masonry. The boiler appears to have been mounted horizontally, running east:west between the forge and the wall that supported and partitioned off the steam engine. The boiler was supported by a scarcement on the south face of the partition wall and a low wall, the remaining stub of which protrudes from the forge. Fire damage to the masonry beneath the scarcement suggests that this structure also formed the fire box and indicates a simple shell boiler may have been used. The square hole, still to be seen in the partition wall, probably carried the steam line from the boiler to the engine.

The forge appears to have been a contemporary construction, incorporated into the boiler support structure and having its original fume extraction incorporated into the boiler smoke stack. It is known that the forge continued in use after the smoke stack was partially demolished and blocked; a second fume extract was later knocked through the west wall. Over the hearth can be seen two iron hooks that would have supported a fume hood. The forge was blown from the

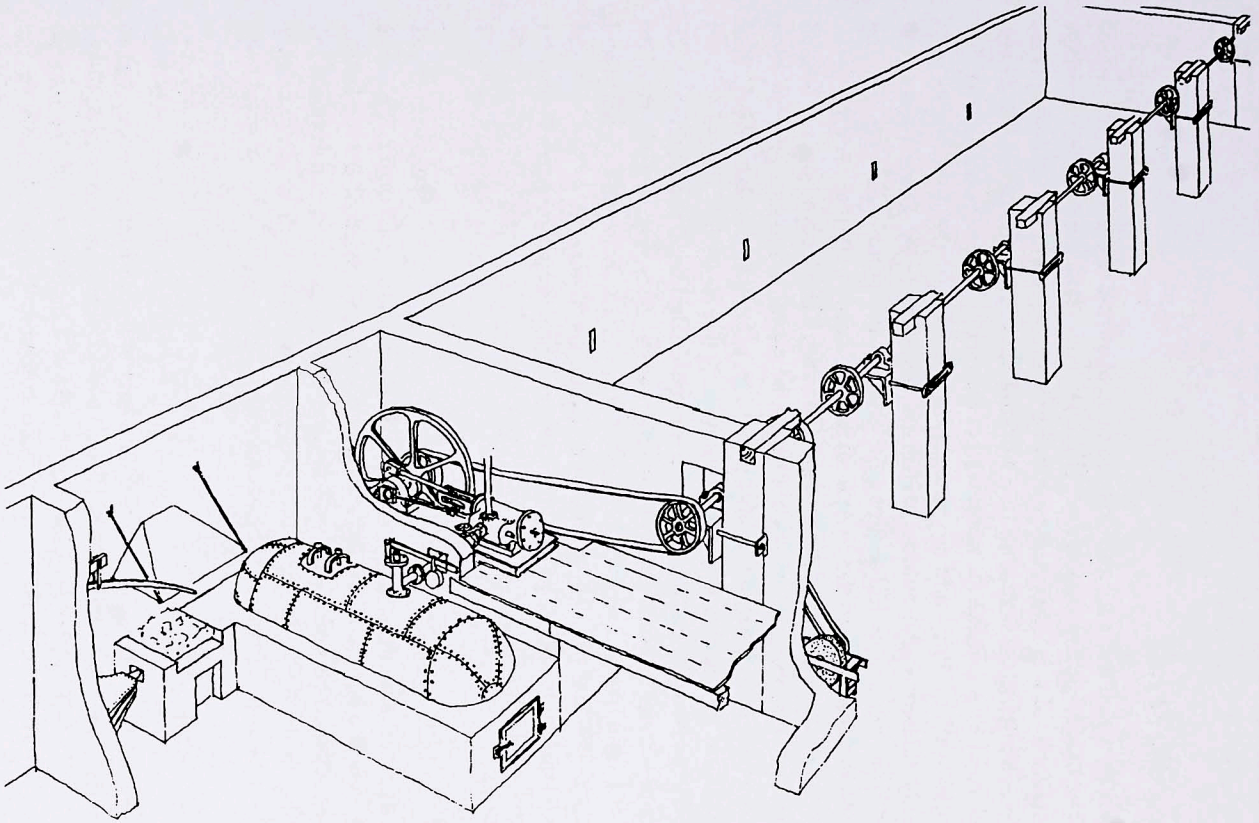


Figure 6 Power plant interpretation based on structural remains.

left; a scoop in the wall indicates the position of the bellows. Above this scoop a wall slot probably indicates the support for the bellows' operating arm. The aperture for the bellows' nozzle (*tuyere*) can also be seen on the left side of the forge (Fig. 6).

The dressing shed

The building, which was originally roofed over, abuts the north wall of the engine house. The contemporary photograph (Fig. 4) shows that the building frontage was open. The roof was supported by a timber beam, which in turn was supported by four stone pillars, thus creating five working bays. The stub of this beam still exists and can be seen inside the north wall of the engine house. Four vertical slots in the rear wall of the building probably aligned with the four pillars and presumably related to the cutting machinery installation. A single drive shaft extended from the engine house along the front of the cutting shop. A slot and aperture on the north face of the pillar built into the north wall of the engine house indicates the position of the bearing support bracket. The slot would have housed one of the long clamping bolts. A circular cut in the pillar indicates the position and approximate size of one of the large pulleys that carried the flat drive belts that powered the cutting machinery. These pulleys can also be seen in Figure 4.

To the north of the cutting shop area is a roofed building. This is recorded as a lime store, but its unusual pillared construction suggests that it may originally have been a sixth bay. An area of the inside north wall, adjacent to the right-hand pillar, has a slot and bricked-up aperture, which looks similar to the slot and aperture on the engine house pillar. This may once have housed a support bracket and bearing block for the end of the long drive shaft.

The dam

The steam plant and cutting shop required a reliable source of water. This was supplied from the dam, a D-shaped structure constructed south of the ice house. Water was retained behind a dam wall apparently built of stone and clay. At the north end, flagstone steps remain that probably gave access from the workers' cottages to a penstock that would have controlled water flow.

Workers' cottages

A pair of workers' cottages, the shells of which remain above the works, appear to have been specially built for the works. Steam would have had to have been raised before the work force arrived for the day's work, and the boiler shut down again after they left at night. It would have been convenient therefore to have the engineer living close by.

Acknowledgements

The writer acknowledges the kind assistance of Barbara Hiddleston, Janet Mackenzie, Anna Rogalski, George Watson, Alistair Ham, Alexander Ham and Isobel Ham, who contributed towards the information used in this article.

References

1 The Mey Papers, Box GD96/682 (Scottish National Records Office, Edinburgh).
2 *John o Groats Journal* 12 March 1858, page 3, column 1.
3 *John o Groats Journal* 29 August 1861, page 2, column 5.
4 1861 Census returns.
5 The Mey Papers, Box GD96/692 (Scottish National Records Office, Edinburgh)

Bibliography

Houston, A. L. (ed.). *Lest we Forget The Parish of Canisbay* (The Congregational Board of Canisbay Parish Church, 1996).
Watkins, G. *The Steam Engine in Industry* (Moorland Publishing, 1979).
Omand, D. and Porter, J. *The Flagstone Industry of Caithness* (Aberdeen University Press, 1981).

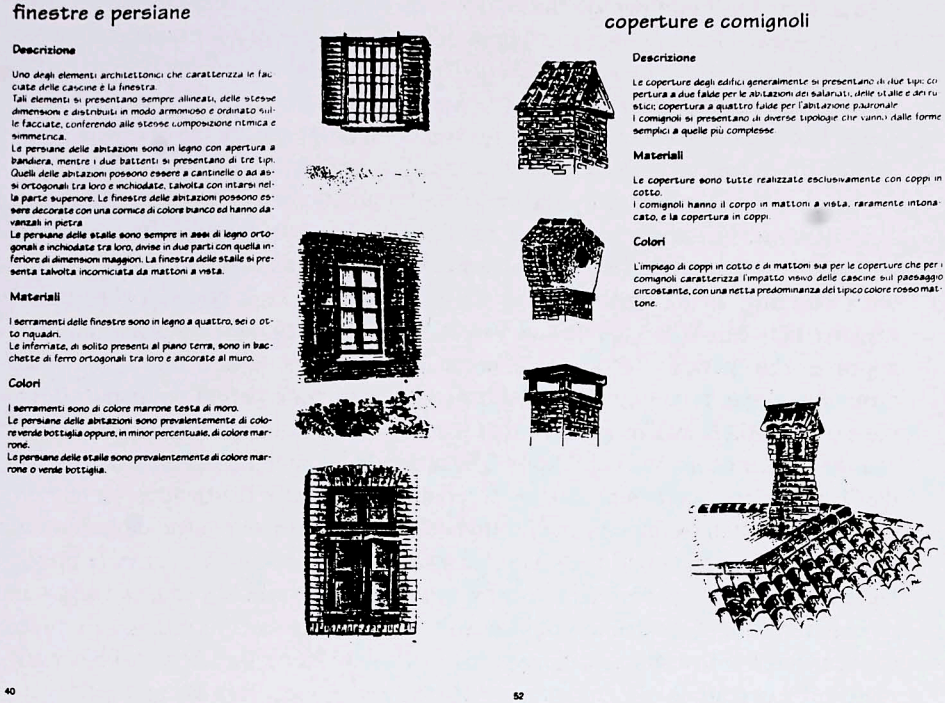
DE RURALIBUS LOCIS: RURALIA's first international workshop 7-9 October 1999

Audrey Dakin

From 7-9 October 1999, I was lucky enough to attend and participate in a meeting organised by a new group in Italy: RURALIA. This group sets out to embrace all those with an interest in farm buildings – farmers, agricultural engineers, landscape architects, architectural and agricultural historians, architects and planners. With such a diverse group of participants (especially when they were mostly Italian) we were in for a lively time.

The opening session addressed the policies that were in place and those that were desirable to protect farm buildings. Darko Pandakovic, a landscape architect at the Politechnico di Milano, was the first to speak, and his message, backed up with images of startling beauty, was that farming landscapes are hugely varied and that modes of protection and support need to be found that are carefully tailored to each landscape. Solutions should also address the whole environment – considering the buildings as integral parts of their landscape. A further point was made that one of the reasons for the importance of these buildings is their close relationship with agricultural production – protection mechanisms that encourage vibrant working rural communities will ultimately be much more successful in preserving the significance of the rural landscape than any attempt to establish 'Museum zones' where buildings and landscapes are treated as artefacts.

While I gave a brief description of protection measures applied to farm buildings in Scotland (in addition to listing, noting the Royal Commission on the Ancient and Historical Monuments of Scotland Farm Buildings Survey, which ensures information about the buildings is retained even where the buildings themselves might be lost), Silvana Garufi, the Soprintendenza ai Beni Architettonici e Ambientali di Milano, described the legal mechanisms currently available to protect Italian farm buildings. Law no. 1089/39 can be used to protect these buildings if they are judged to be of sufficient historical or artistic merit. The Italian Ministry of Artistic and Cultural Activities controls the application of the law, including determining what changes are appropriate for buildings, and the administering of grant aid or tax breaks to assist conservation work. Separate legislation (Law no. 1497/39) protects important landscapes, but within areas designated under this legislation demolition of rural buildings and their reconstruction in new materials to the same form as the original will be permitted. Jeremy Lake of English Heritage described the research and survey work carried out prior to updating the lists of East Anglian farm buildings. While the project had been highly successful, demonstrating the benefits of a thematic approach to listing, it also indicated the current under-representation of farm buildings in lists



Pages from the Guide to Parco di Ticino: Gli insediamenti rurali del Parco del Ticino: Alalisi typologica ed indicazione a scopo agrituristico

and the considerable resources that would be required for a nation-wide thematic listing programme. Finally in this session, Liz Whitfeld described the new Historic Scotland Guide for Practitioners: *Rural Buildings of the Lothians: Conservation and Conversion*. The publication contains information on and illustration of the history of agriculture and rural industry in the Lothians, the traditional materials, forms of construction and farm layouts adopted. Most importantly, the Guide goes on to consider the future for these buildings, describing ways in which conservation or conversion work can be accommodated while maintaining the significance of the buildings.

The next session of the meeting was devoted to various regional research and rescue initiatives in Italy. Thus Massimo Terzi (recording the steadings at the edge of Cremona), Marcello Spigaroli (recording and listing farm buildings for the Urban Development Plan of Parma), A. Monti (Control mechanisms to maintain the landscape value of the Osimo area), Andrea Galli and Paulo Terra (recording the rural buildings of the Communita Montana di Camerino), Beatrice Zambiasi

(conserving the buildings of the alto Garda Bresciano), Isabella Dall'Orto (a typographical analysis of the existing buildings and proposals for their acceptable re-use in the Parco di Ticino) and Uberto Ceriani and Stella Agostini (a strategy for recovering 550 steadings in the Parco Agricolo Sud Milano) all described their work. It was impressive to see so many projects in progress, but the overwhelming impression at the end of the session was one of some bewilderment at the variety of approaches being followed by seemingly fairly autonomous local governments.

It would be impossible to give details here of each of the projects presented, but you may be interested to hear a little more of one as an illustration of the type of work currently being undertaken in Italy: The Ticino Park covers over 90,000 hectares between Milan, Pavia and Varese. In 1980, a regional law was passed to approve the park's Territorial Co-ordination Plan. While the Plan was groundbreaking in its time and established how the park should be managed, by the early 1990s it was recognised that it would need to be revised to respond to changed socio-economic conditions. The revised plan looks at the environment of the Ticino Park more holistically by characterising the landscapes (and their buildings) as well as important wildlife habitats in the region. Particular attention was focussed on farm buildings as important elements in the landscape. Previous legislation that had prevented the conversion of farm buildings to new uses was repealed. Aware of the dangers of insensitive conversion that this opened up, work was carried out to establish the typology of the existing buildings within each region: their material, construction methods and typical details, and to devise schemes for conversion for typical buildings that are offered as examples of best practice.

The third session continued the theme of the previous one with more projects being presented. For me the most interesting speaker here was Ignazio Bonacina of the Federazione Coldiretti Milano Lodi (the local Farmers Union). He passionately argued for agriculture as intrinsically linked to the culture of rural areas, and that support for the whole rural way of life should be considered rather than just supporting the preservation of particular buildings. Other speakers in the session included Tommaso Maggiore (thoughts of an agronomist on conserving rural heritage), Gianni Scudo (the use of earth as a construction material in Lombardy), Carlotta Coccoli (the Pieta farmhouse in San Zeno sul Naviglio: a difficult case of protection), Giorgio Provolo and Elisabetta Riva (conservation and regeneration of the productive function of agriculture), Piero Belli and Alvaro Marucci (saving the function and landscape of country houses: census and survey), Beatrice Bongiovanni (a new idea for saving rural heritage: the widespread hotel), Roberto Chiabrando and Barbera Drusi (initiatives to protect and restore the agricultural landscape and rural architecture of Piedmont), Guido Calvi (the conservation of traditional farm buildings in mountainous areas: an example from Edolo) and Carlo Catacchio (Eritrea 1999: the built forms of Italian colonialism).

After one and a half days of hearing of the work being carried forward in Italy and elsewhere to conserve farm buildings, the final session was a participatory one in which the views of all attending were invited on how RURALIA should be organised in order to facilitate these and future initiatives. Internal communication between members of RURALIA was agreed to be crucial, allowing members to build on the work of others (likely to be more efficient than the current situation of returning to first principles in all cases). While the establishment of a website and e-mail newsletter was agreed upon as ultimate goals, in the interim, the offer from Francesco Tangorra to include RURALIA news in the farming magazine that he currently produced was welcomed.

RURALIA is still a fledgling organisation, but with the enthusiasm and commitment of its organisers (in particular Dr Stella Agostini) driving it forward, it is to be hoped it can indeed develop from its current format of a vibrant forum for the sharing of research findings and ideas into a powerful and active force for the protection and regeneration of rural areas.

If this brief report on the conference has sparked your curiosity, feel free to get in touch with me and I will endeavour to provide you with fuller details (address: Audrey Dakin, Historic Scotland, Longmore House, Salisbury Place, Edinburgh EH9 1SH, Scotland, UK). If you are interested in becoming a member of RURALIA, you should contact Dr Arch Stella Agostini, Instituto di Ingeneria Agraria, Via Celoria 2, 20133, Milan, Italy, e-mail: stella.agostini@unimi.it

PORTERAGE: AN ENGLISH EQUIVALENT TO THE SHETLAND *LUNT STANE*

Elizabeth Beaton

In *Vernacular Building* 23 I entered a short note on the small mural stone ledges or *lunt stanes*, on which sacks of meal or grain were supported prior to lifting on or setting down from the carrier's back, surviving in two click mills at Troswick, Shetland (visited by SVBWG in April, 1997). This was read by Madge Moran, an expert on the vernacular architecture of her native Shropshire, which with neighbouring Cheshire, is at the heart of the timber-frame building tradition of the English West Midlands.

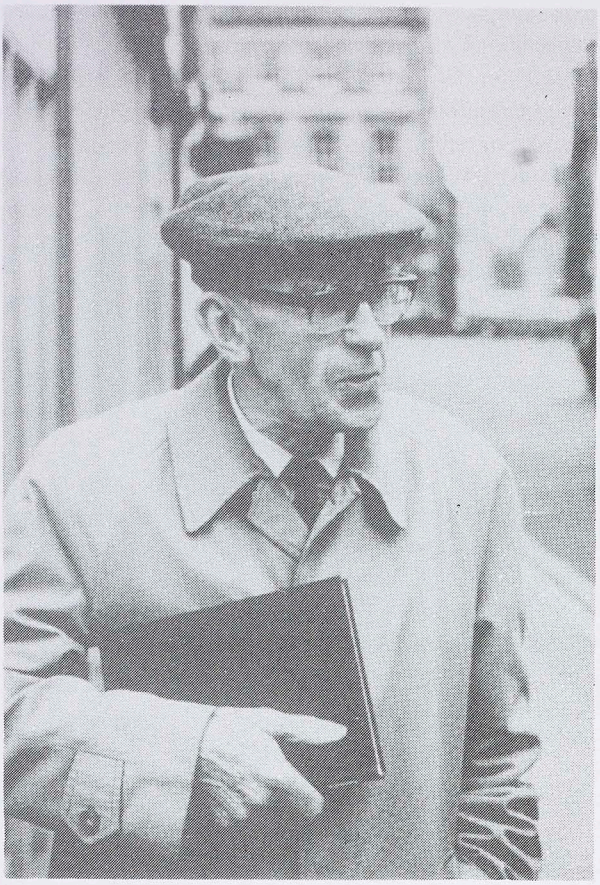
Madge Moran records similar fixtures known as 'porterages'. At 21-23 High Street, Whitchurch, Shropshire, is a 16th-century, two-storey timber-framed building with 'black and white' frontage opening to the principal thoroughfare. These premises have variously served as dwelling house, shop, inn, cooperage and bakery. Though unlikely to be original to the 16th-century fabric, no 21 was fitted with *'two porterages: external shelves at waist height upon which porters could rest sacks of flour, corn and similar goods while loading or unloading*'. These Shropshire examples flanked the shop entrance and are clearly shown in a photograph of *c.*1870 when the premises housed a cooperage. Latterly they served as external display areas but were removed *c.*1970, much to the regret of local residents.

Plus ça change, plus c'est la même chose!.

Reference

Madge Moran, *Vernacular Buildings of Whitchurch & Area and their Occupants* (Logaston Press 1999) pp. 95-100

OBITUARY: RONALD GORDON CANT, 1908-1999



Dr Ronald Cant, Scottish Historian and generous benefactor to many societies and projects, died on 31 December 1999 aged 91. He supported SVBWG publications quite early on, his benefaction as always, anonymous. It is our pleasure and privilege that he was our honorary member. Many other organisations, large and small, benefited from his generosity.

Son of a Church of Scotland Minister, Ronald read history at St Andrews University, graduating in 1928. He proceeded to Oriel College, Oxford, returning to St Andrews where he was successively lecturer, senior lecturer, reader and head of the Scottish History Department, 1936-74, serving also as interim Keeper and Deputy Keeper of University Muniments. Though retiring in 1974, St Andrews was always his home in the widest sense, where he was a *well kent* figure in Burberry and flat cap, discussing history and architecture with equal enthusiasm and at length in lecture hall or on drafty street corner!

Besides medieval and Scottish history, Ronald had a deep interest in the built environment. He was one of the moving spirits in the foundation of the St Andrews Preservation Trust in 1937, and helped to establish the Fife Folk Museum in Ceres and the Scottish Fisheries Museum, Anstruther. He also served on the Boards of the National Library of Scotland, the National Museum of Antiquities and the Historic Buildings Council.

In his youth Ronald spent some summers in Dornoch, Sutherland. A few years ago, when I was preparing an architectural guide to that county, he was my guide and mentor. Ronald communicated the history and architecture of Dornoch

Cathedral in concise, hand-written letters full of information including comparative measurements with Elgin Cathedral, also founded in 1224. In contrast and to clarify the duplication of churches in the north, he recounted the outcome of a House of Lords judgement of 1904 deciding congregational use of Free Church buildings by members of the United Free Church, resulting in yet more church building. The time span from medieval to 20th century was typical, his photographic memory with him to the end.

SVBWG was represented at Ronald's funeral by Marion Wood: I attended the memorial service at St Salvator's, the University of St Andrews Chapel, 17 March 2000.

Elizabeth Beaton

REVIEWS

Veronica Steele

Foudland:Slate Quarriers and Crofters in Aberdeenshire

Ann Dean. Insch. 1998. 72pp. ISBN 0 9534026 0 6. Copies available from the author at West Lediken, Insch, AB52 6LL, price £3.50 plus inland postage £0.50.

This is a very readable record of a community; though essentially unscholarly, it is a prime example of what could be created for many small, unremarkable, but nevertheless extremely interesting, areas throughout Scotland. Through the use of written records, oral tradition and living memory, a picture of ways of life and work now gone can be perpetuated.

The Foudland hills, 30 miles north-west of Aberdeen, form a southern shelter to the Garioch, and are a lesser-known counterpart to the northern shelter, Bennachie. They rise to 467 metres (Foudland Hill itself) and are part of the Scottish slate seam running from Banffshire to Argyll. Quarrying for slate took place until the end of the 19th century, and the huge spoil heaps can still be seen. This book focuses on the history of the slate workings, with descriptions of the methods of slate working, transportation and usage. Also detailed are the lives and settlements of the workers and their families during the 19th century, and their descendants through to the late 20th century. Much use has been made of parish registers, census records, valuation rolls and the *Aberdeen Journal* to make the picture as complete as possible. The book is well illustrated with black and white photographs, and, very usefully, extracts from the 1873 First Edition Ordnance Survey map.

Slate was used primarily for roofing, but its other uses included floor slabs, hearth stones and chimney jambs as well as water cisterns, pantry and milk house shelves, school slates and gravestones. Slate working began in the Foudland area before 1750. Though there are few written records of work in the Foudland quarries, parallels can be drawn with the better recorded industry at Easdale and Balluchulish. Working in the high quarries was hard and exposed to all weathers. Men, women and boys were employed; the best splitters and dressers were those brought up to it. Slates were quarried out by crowbar, or by the driving in of wetted wooden wedges which would swell and crack off a section. Gunpowder was rarely used in Foudland. The slates were then carried (probably by the women) to splitters and dressers. The splitter would produce thin pieces of slate with a mallet and slate chisel, and the dresser used a slate knife to produce the right size and shape. Water issuing from the quarries was used to power a mill which sawed and polished slate into pavement flags and chimney jambs. At the height of the industry in the 1830s, annual production from the Foudland quarries was between

800,000 and 900,000 slates, and they were used for over 50 miles around. The improvement of road systems through the early part of the 18th century greatly assisted the trade, as did the opening of the Inverurie-Aberdeen canal in 1804. The industry also benefited from the Improvement era, when Foudland slate was used in the farm building boom. In the 1850s, Foudland slates were used for the roof of Balmoral Castle, transported by local farmers by cart over 60 miles during the slack period between turnip sowing and harvest. All commercial working had ceased by 1895, the local industry superseded because of the import to the area of lighter, thinner Welsh slates by rail. By the late 19th century, most building was in cities and towns, a market cornered by the Welsh slates, and farm buildings were using corrugated iron for roofs rather than heavy slate.

The people who worked in the quarries were also crofters by necessity, living a life typical of the time governed by the vagaries of seasons, the success of crops and the health of their animals. There was a ring of crofts along the bottom of the hill of Foudland generally each with 2 to 6 acres; these were abandoned after the end of the industry as workers and their families moved to the farms below or out of the area. The book continues the story of the surviving community through the 20th century, telling a story that was mirrored in many rural areas throughout Scotland.

Visions of Scotland's Past: Looking to the Future — Essays in honour of John R. Hume

Ed. by Deborah C. Mays, Michael S. Moss and Miles K. Oglethorpe. Tuckwell Press. East Linton. 2000. xviii + 174pp. £20.00. ISBN 1 86232 072 1.

This festschrift to John Hume OBE contains a wide variety of papers which reflect the wide range of activities with which he was associated over the four decades of his working career. While focussing on his main interest in Scotland's industrial heritage, the range also represents many other aspects of Scotland's built heritage that interested him and benefited through him.

Following a training in chemistry, John Hume joined the Department of Economic and Industrial Heritage at Strathclyde University in 1964; during his 20 years there he founded the Scottish Industrial Archaeology Survey (SIAS) which generated a large archive covering hundreds of Scotland's industrial buildings and structures. In 1984 he moved to the body that is now Historic Scotland, retiring as Chief Inspector of Historic Buildings in 1998. The SIAS and its archive was transferred to the Royal Commission on the Ancient and Historical Monuments of Scotland; in addition John Hume has gifted portions of his own collections to the National Monuments Record of Scotland, and has made available for printing by NMRS a large amount of his negative collection. Miles Oglethorpe stresses the importance to the national record of these archives in terms of visual and written information, including illustrations which demonstrate their value. John Hume's

photographic archive was also of great use to the Inventory of Scottish Church Heritage.

The articles of this festschrift deal with both the history of Scotland's built heritage, and the methods of recording and appreciating it. W. Hamish Fraser discusses the value of personal memory in the presentation of industrial heritage. Many display sites present a sanitised version of working life and it is only through the use of recorded memories of unpleasantness and danger of working conditions, or the privations of child labour, that the imagination can be stimulated to recreate the complete picture. In similar vein, Janet McBain stresses the importance of archive film footage of environments and processes; many records originally intended as entertainment are now extremely important historical records and John Hume was one of the earliest to recognise this fact. He also played a part in the very successful Summerlee site museum which displays and restores most of the important machine tools and process equipment in Scottish museums (many salvaged by the Scottish Society for the Preservation of Historical Machinery), and the revitalisation of New Lanark, both of which are subjects of articles. The range of subjects that reflect his interests are further demonstrated by articles on the developments of British ports; the canals of Scotland's central belt; the roles of Thomas Telford and Alexander Nasmyth in bridge design; the problems and triumphs of caring for Scotland's disused railway viaducts; and the successful reuse of historic buildings. In all, this festschrift will appeal to a wide range of readers and is a fitting tribute.

Ross and Cromarty: A Historical Guide.

David Alston. Birlinn. Edinburgh. 1999. xxi+ 249pp. £7.00. ISBN 1 874744 48 3.

David Alston has set out to 'provide an outline of the history of Ross and Cromarty, setting this in the wider context of Scottish history, but always trying to identify what is special'. As a historian and Cromarty resident he is well qualified and has admirably achieved his goal.

Ross and Cromarty: A Historical Guide is divided into two sections, the first devoted to short, lucid chapters covering historical periods from the Mesolithic era (*c.*7000BC) through to a terminal date of 1850, together with chapters on communications, art, music and literature and suggestions for essential reading (Hugh Miller featuring most prominently) and essential listening. A map of Scotland identifying the location of Ross and Cromarty would have been useful, particularly for those unfamiliar with northern Scotland. The period chapters outline historical events, detailing Ross and Cromarty's place in the bigger picture of Scotland's story. A focus on aspects of social history also encompasses the development of the built environment. From the building of brochs - 'man's greatest achievement in dry-stone building' - to 18th and 19th-century planned

towns, buildings and settlements are examined, and the effects of religious changes on church building are discussed. The 'After 1600' chapter includes useful sections on the industrial history of the area, and the buildings associated with the various activities such as farming, fishing, metal work and textiles. Some building types are examined in depth, for example the ventilated cruck-framed barn in areas of high rainfall such as Glenelg and Applecross. Aligned to the prevailing wind for drying hay, these were constructed for storage until the end of the 19th century.

The difficulty of locating sites and subjects is not of the author's making. *Ross and Cromarty: A Historical Guide* is well researched, compiled and written by an author with a thorough knowledge of his area and subject. The book is an excellent addition to the growing corpus of informed accessible literature on Highland subjects directed at the interested but not specialist reader, but Alston has not been well served by his publisher. For its size, the book is cheap at £7.99. If fully indexed, and albeit a little more expensive, the exceptionally wide range of historical and architectural information packed into the volume could be fully exploited and enjoyed.

Scottish Studies: The Journal of the School of Scottish Studies, University of Edinburgh.

Vol. 32. 1993-1998. Ed. by Daphne Hamilton and Alexander Fenton; assistant editor Ian Fraser. Edinburgh. 1998. ix+166pp. £12.00. ISBN 1 898410 45 3

This volume of *Scottish Studies*, the journal of the School of Scottish Studies, University of Edinburgh, is dedicated to the memory of Eric R. Cregeen (1921-83). Cregeen, from the Isle of Man, was a major exponent and promoter of the use of oral tradition as a source of historical record, and founded the Scottish Oral History Group. With the University of Glasgow's Extra Mural Department, he developed adult education in mainland and island communities. In 1966 he moved to the School of Scottish Studies where he established the Scottish Ethnology degree programme. He enriched the school's archives with more than 500 hours of recordings, as well as films and photographs, which reflected his work on township histories, genealogies, religion, customs and beliefs, material culture, tales, legends, songs, and other aspects of social and economic life. In 1973 he conceived and directed the Tiree Project, a concentrated research programme on the history and traditions of the island and its emigrants. As well detailing his life and work, the journal includes his last article 'Oral Tradition and History in a Hebridean Island' and the themes of the other articles have connections with him and his interests, combining to form a fascinating collection.

Cregeen's article on Tiree can be viewed in a wider context as his statement on the value of recording oral tradition. It also provides a background to his work with people of the island, discusses the methodology and summarises the results

(the project is as yet unpublished due to his sudden death). He emphasises the importance of oral tradition as a historical record, but stresses the importance of using it in conjunction with written sources which can confirm and supplement the information given. Oral tradition deals with that which often has no written record, such as new cultural influences and subtle changes in a township, and can have a vigour that is often lost in print. The combined use of oral and written records helps to complete the picture of family history, personal biography and economic activities. He concludes that it 'would be quite impossible to present an accurate and balanced social history of the island community without drawing upon oral traditions', a philosophy which can be universally applied. Another article by Dr Margaret A. Mackay, Cregeen's collaborator on the Tiree Project, introduces extracts from letters of John Francis Campbell of Islay on his travels to Tiree in 1871 which describe the people, buildings and traditions.

Other articles record a notebook of traditional songs kept by a man from Lewis who taught on St Kilda; sheep farming traditions on Faroe Islands; and community traditions in rural Norway. Short notes, details of current research subjects at the School of Scottish Studies and publication reviews complete this fine journal.

Discovering Local History

David Iredale and John Barrett. Shire Publications. Princes Risborough. 1999. 240pp. £10.99. ISBN 0 7478 0356 0.

Discovering Local History is a tightly packed compendium of guidance and sources for the local historian in Great Britain, with Scotland, England, Wales and Ireland receiving equal coverage. Landscape studies, aerial surveys, getting about (the bicycle is recommended), place names and sources are introduced. Libraries, archives and museums are identified and their functions and resources explained. The three central chapters span 'From Romans to Vikings (410-865)', 'The Middle Ages (865-1529)' and 'The Modern Era (1529 onwards)'. There is an extensive bibliography, lists of 'useful addresses' covering libraries, archives and specialist societies, and the book is fully indexed. It is also generously illustrated with photographs and line drawings, some of the latter gently humorous. The authors are both archivists with obvious interest in buildings, architecture and archaeology for which their selection of plans, maps and local sources are helpful. This is a comprehensive handbook for anyone 'who doesn't know where to look' for guidance. However, the small print demands sharp eyes or good spectacles!

Elizabeth Beaton.

Studies in the History and Archaeology of the Salt and Coal Industries at St Monans, Fife in the 18th and 19th Centuries

Monograph 2. Ed. by Peter Yeoman. Tayside and Fife Archaeological Committee. Glenrothes. 1999. 65pp. ISSN 1360-5550. Available from John R. Sherriff, 21 Burleigh Crescent, Inverkeithing, Fife KY11 1DQ, price £4 plus £1.50 postage and packing.

This monograph is a study of an important industrial archaeological site, in danger of being obliterated by coastal erosion, and then subject to conservation and investigation. In the process, the St Monans coal and salt workings have been thoroughly investigated, and the wind engine has become a visitor attraction with over 5,000 visitors a year. The site has been made accessible for public viewing, and interpretative panels inform the visitors. Conservation and recording work was carried out by, among others, the East Neuk of Fife Preservation Society, and Scotia Archaeology Ltd.

Coal and salt were worked on the coast of the East Neuk from medieval times, with Pittenweem coal being renowned for its quality. Coal and saltworks were often combined as saltpans burned the lowest, unsellable grade of coal, and both works could use the same waggonway. Sir John Anstruther (1718-99) inherited the Elie estate in 1753; he was the largest landowner in the history of the East Neuk, and was a leader of the enclosure movement in Fife. In 1771 during a boom in the salt industry, he established the Newark Coal and Salt Company, which brought economic benefits to the area, including improvements to Pittenweem harbour. The enterprise was initially successful, but this was to be short-lived, lasting only until *c.*1815, probably due to all the accessible coal having been mined and a reluctance to spend capital on sinking new shafts. The ultimate failure of the enterprise and the reversion of the land to agricultural use paradoxically allowed the preservation of the remains of the industry in a way that does not occur where an area continues to be developed for industrial purposes. Thus St Monans is an extremely important reminder of a bygone industry.

The saltpans were excavated from 1990 to 1996; a chapter deals with the information gained, in the wider context of a history of the industry. The recipe for 18th-century foaming agents (which would force impurities to the surface) is given: to 1,400 gallons of brine add the whites of three eggs; alternatively add an ounce of blood for every 800 gallons of water. Strong ale was also used. The excavation yielded information on nine panhouses, and associated structures; a wind engine, water channel, a girnel which would have been under the direct control of a Customs and Excise officer, and housing. Further chapters discuss the economic and social impact of the work of the Newark Coal and Salt Company, and the 18th-century industrial landscape between St Monans and Pittenweem.

The book is lavishly illustrated with survey photographs and drawings; reconstructions; aerial photographs; historic photographs; extracts from historic

maps; distribution maps; and graphs illustrating the economic statistics. This is an excellent volume which demonstrates how a once-flourishing, then forgotten, industry can be brought to back life, both in print, and in the reinterpretation of a site.

CONTRIBUTORS

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Scottish Vernacular Buildings Working Group

The Scottish Vernacular Buildings Working Group was set up in 1972 to provide a focus for all those interested in the traditional buildings of Scotland.

To some, Scottish 'vernacular' may mean cottages, croft-houses and farmsteads; to others, its essence may be urban tenements or terraces, industrial watermills and smithies, or even the older traditions of tower-house buildings. All - and more besides - find a place in SVBWG.

The Group embraces those whose interests are centred on general settlement social patterns, as well as those who have a specialised interest in building function, or in traditional buildings and crafts. The subject brings together architects, surveyors, archaeologists, historians, geographers, ethnologists, and above all, those who simply want to know how and why the traditional buildings of Scotland have such variety and character. The Group thrives on this refreshing blend of interests and attitudes, all of which are clearly evident in its activities.

Members of the Group are invited to attend annual conferences held at different venues, mainly in Scotland, each year. The 28th Conference was held in the Spring of 2000 in Northern Ireland, and the Autumn Meeting was at Charlestown, Fife.

The Group's publications include *Vernacular Building*, an annual miscellany of articles issued free to members, and to which members and interested readers are invited to contribute.

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