The Landmark Trust

# ASCOG HOUSE

# History Album

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**Reviewed 2015**

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## KEY FACTS

| | |
|---|---|
| **Original building** | **c. 1600** |
| **Acquired by Landmark** | **1989** |
| **Architect for repair & conversion** | **Stewart Tod and Partners, Edinburgh** |
| **Contractors** | **A Robertson and Co., Greenock** |
| **Work started** | **1990** |
| **Work interrupted** | **June 1991 when a fire gutted the house** |
| **Work completed** | **1993** |

Contents Page

Summary 5

Introduction 7

The Owners 9

The House 19

The Landmark Trust restoration 27

The Garden 46

Article by John Ferrier – *Robert Thom's water cuts* 52

Bibliography 63

**Ascog House**

## Summary

The history of the Ascog demesne goes back further than either of the two houses on it, Ascog House and Meikle Ascog. In 1312 Robert the Bruce is said to have given Ascog to the Bute family of Glass. In 1594, the estate, including a mill, Loch Ascog and Nether and Over Ascog, was bought by John Stewart of Kilchattan, a distant kinsman of the Stewarts of Bute who became Earls and later Marquesses of Bute.

John Stewart may have built the first house at Ascog, replacing an older tower. Despite the date of 1678 above one of the dormer windows, the original Ascog House was earlier than that. With its stair tower and cap-house, it is of a type commonly built around 1600. Moreover, in the wall of the present kitchen is part of a grand chimneypiece. This belonged to a great hall whose floor and ceiling were both at a higher level than today. In 1673 John Stewart of Ascog, grandson of the first John Stewart, married Margaret Cunningharn and it is their initials that are engraved on the house. They must have carried out a major reconstruction, lowering the floors to create two main storeys, and adding the dormer windows. John Stewart was rich enough to lend the Earl of Bute £9,385 to help re-build Rothesay Castle after damage in the Civil War. He was also crowner or coroner of Bute from 1666-98.

During the eighteenth century, the original mullion windows of Ascog House were enlarged and fitted with sash and casement frames. In 1773, another John Stewart, who had no children, made a complicated will intended to ensure that Ascog would always be owned by a Stewart. His heir, a cousin named Archibald McArthur, had therefore to change his name. Archibald Stewart was said to both mean and eccentric -he kept pigs in his drawing room in Edinburgh -but he helped pay for a road from Rothesay to Ascog in 1813. He too had no children. The next heir was a distant American cousin, Frederick Campbell. He tried to sell Ascog but the terms of the old will defeated him. His brother Ferdinand, a professor of mathematics in Virginia, succeeded where he had failed and sold Ascog in 1831 to the eminent engineer, Robert Thom. Robert Thom is best known for designing the Greenock water supply. He also revived the Rothesay cotton mills and, after buying Ascog House with its estate of 420 acres, planned the development of elegant villas there. One of these was Meikle Ascog.

Ascog passed through various hands until in 1939 it was bought by the Earl of Dumfries, later 5th Marquess of Bute. Meikle Ascog was lived in by Lord Rhidian Crichton Stuart, then let to a Mr Collins and finally to Patrick Crichton, who left in 1988. Ascog House was divided into several dwellings for estate employees, but structural problems began to appear, and the house gradually emptied. To secure its future, the late Lord Bute approached the Landmark Trust, a charity which rescues and cares for historic buildings. In 1989, Ascog House, its gardens and Meikle Ascog, were placed in Landmark's care.

When the Landmark Trust acquired the Ascog demesne, Meikle Ascog was in good condition and needed little more than redecoration before being ready for visitors in 1990. Since 2013, it has been in private ownership.

Ascog House needed complete restoration. This was done under the supervision of Stewart Tod and Partners of Edinburgh, architects with long experience of working for the Landmark Trust. The builders were A Robertson and Co. of Greenock. Work started in 1990 but tragically, when it was nearly completed in June 1991, an unexplained fire gutted the house. After inevitable delays, work started again and Ascog House was finally furnished in June 1993.

Ascog House now looks as it should, the house of a Scottish gentleman of the seventeenth century, a typical laird's house with steep roof and crow stepped gables. What is fortunately not now obvious is that the house was greatly and badly enlarged in the mid nineteenth century. Servants' quarters were tacked onto the back, almost doubling the size of the house. Then in about 1900 a drawing room and staircase were added to the right of the front door. With these additions, the house was far too big for modern use. Moreover, to build on at the back, the ground had been dug away behind the house, exposing the foundations and leaving the back wall extremely insecure. The ground had been lowered in front too, to make what had been a half-basement into a full ground floor. If the building was to survive, the ground would have to go back to its original level. All the additions were therefore removed by the Landmark Trust except for the staircase which remains, as a tower, separate from the main house.

The walls of the old house were reinforced and later windows and doors blocked for the same reason. The old door into the stair turret was reopened, with the ground level outside it restored. The walls were then harled with a mixture of lime and sand in the traditional manner. Inside, everything you see is new apart from the stone treads of the turnpike stair and the stone fireplace surrounds which survived the fire. The new work, however, and particularly the joinery, is based on clues found in the building and evokes the appearance of the house in the eighteenth century.

If the appearance of Ascog House has changed dramatically since 1989, so too has that of the garden in front of it. This was entirely overgrown, but Mr Ian Chisholm, the gardener, gradually cleared it, reclaiming paths and steps from the tangle of undergrowth. It is now possible to see the late Victorian layout, but the character of a wild woodland garden remains. Mr Chisholm also worked on the water garden, discovering the old pipes for the ponds and water works with the help of water-diviner's rods. The water comes from Loch Ascog and drains away into the sea. The wheels operating the 6in. valves had not been turned for fifty years or more and were entirely rusted up, but they were all carefully cleaned, and in 1993 there was a dramatic moment when the fountain spouted again.

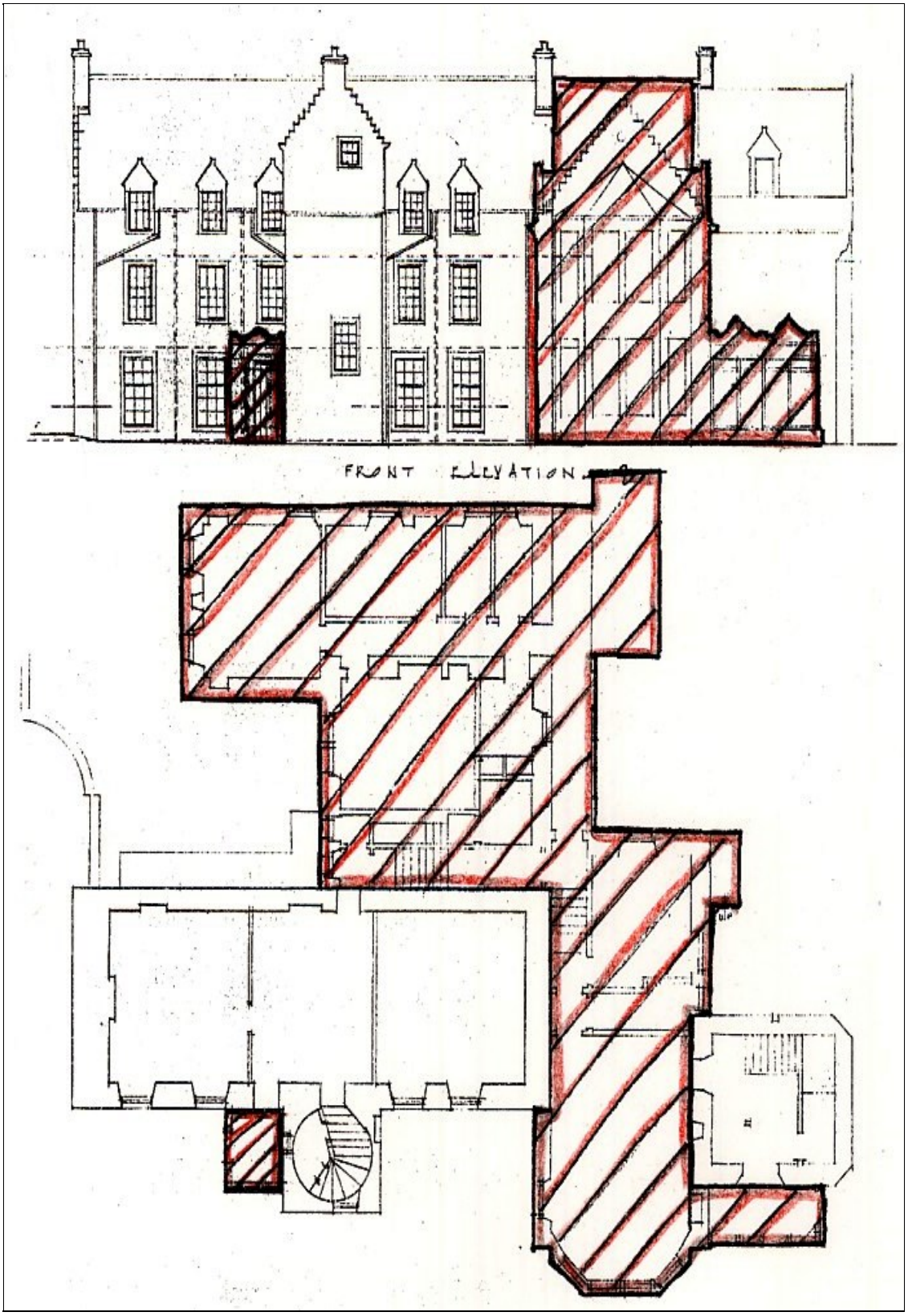
## Introduction

Ascog is the house of a Scottish gentleman of the 17th century - a typical laird's house. It is high, narrow, plain on the outside, with a steep roof and crow stepped gables. Below one of the dormer windows is the date, 1678, though the original house was probably earlier than that. It is obvious looking at the entrance front that it has been frequently altered, the windows moved around and the level of the floors changed.

What is fortunately not now obvious is that the house was greatly and badly enlarged in the mid nineteenth century, with servants' quarters tacked onto the back, almost doubling the size of the house; then about 1900 a drawing room and staircase were added to the right of the front door. All this was removed by the Landmark Trust except for the staircase which remains, as a tower, separate from the main house.

In 1939, Ascog was acquired by the Bute estate. Meikle Ascog was lived in for some years by a relation of Lord Bute's, but Ascog House was divided up into several dwellings for farm workers. When the Landmark Trust took it over in 1989, most of these were empty and parts of the house were in a near derelict state.

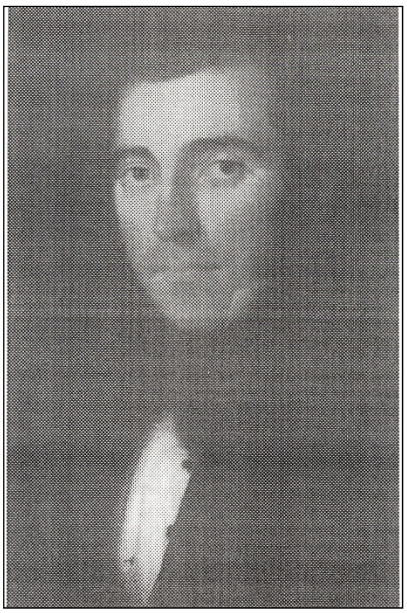
Work started on the remodelling and repair of Ascog House in 1990, under the supervision of Stewart Tod and Partners of Manor Place, Edinburgh, architects with long experience of working for the Landmark Trust. The builders were A. Robertson and Co. of Greenock. After a long delay caused by a fire that gutted the house in 1991, just as work was nearing completion, Ascog House was furnished in June, 1993.




**Plan of the house dated 3 February 1989 - parts of the house that have been demolished are hatched in red.**

## The Owners

### The Stewarts of Ascog



**The last Stewart of Ascog, Professor Ferdinand Stewart Campbell**

The history of the Ascog estate goes back further than the house. In 1312 Robert the Bruce is said to have given Ascog to the Bute family of Glass, in return for their help with the taking of Rothesay Castle. It remained the property of the Glasses until the middle of the 16th century when most of the estate was sold to the McLachlanes.

In 1594 the Ascog estate, including a mill, Loch Ascog, and Nether and Over Ascog, was sold by the McLachlanes to John Stewart of Kilchattan and his wife, Marion Fairly. John Stewart was a distant kinsman of the Stewarts of Bute who became Earls and later Marquesses of Bute. He and his descendants were part of what we would now call the meritocracy: lawyers and Members of Parliament. He could well have built the first house at Ascog, replacing an older tower which stood on or near Ascog Point.

In 1673 John Stewart of Ascog, grandson of the first Stewart of Ascog, married Margaret Cunningham and it is their initials that are engraved on the house. Presumably they carried out a major reconstruction, including putting in the dormer windows in 1678. John Stewart was rich enough to lend the Earl of Bute £9,385 to help re-build Rothesay Castle after damage in the Civil War.

He was also crowner, or coroner, of Bute from 1666-98. The crowner's job was similar to that of a sheriff and the kind of fees he was paid are an interesting side light on the island at the time, when it was a wholly rural and quite primitive society: "*Out of the feu duties he was entitled to a cow and a firlot of corn and a lamb to every portioner of a ploughgate of the feu- lands, which numbered sixty one*". If a man was sentenced to death his fee was *"all the tamed horses not shod, al the shepe within twentie, al the goats and swyne within ten and the grains and corn lyund in byways and broken mawres, al the utensils or domicil of the house within the crake hangynd upon the fire"*.

John Stewart's son, another John, married Elizabeth Robertson, daughter of John Robertson, apothecary to Charles II and a chirurgeon in Glasgow. In 1707 she and Lady Bute had a row in the kirkyard, during which they called each other opprobrious names and John Stewart's hand was severely cut by one of Lady Bute's supporters. Lady Bute was well known for her violent nature, and had been accused by the cook of tampering with the food of her stepson, so that the boy had been removed from her care to Edinburgh. The strife in the kirkyard was stopped by the provost of Rothesay, David Glass: but Mrs Stewart of Ascog was unrepentant, declaring that she would give the elders a warm reception and harsh entertainment if they came to converse with her.

In the late eighteenth century, the Stewart of Ascog of that time, another John, married an heiress, Miss Murray of Blackbarony in Peebleshire and changed his name to Murray. In 1773 he wrote a complicated will or deed of entail, intended to control the behaviour of his descendants as regards Ascog and his other

estates. He himself had no children and Ascog went to his second cousin once removed, Archibald McArthur, great grandson, through the female line, of the John Stewart whose initials are on Ascog House. On inheriting, Archibald McArthur changed his name to McArthur Stewart.

As described by a contemporary journalist, Kay, in his *Portraits of Edinburgh Society,* Archibald McArthur Stewart was both mean and eccentric. He was unmarried and was too stingy to employ a servant, but used to persuade the wife of a neighbour to do the "drudgery of his house". He kept a litter of pigs in his drawing room and forbade anyone to disturb them. Apart from Ascog, he owned large properties in Argyllshire and near Edinburgh. "He generally wore white clothes and had a peculiar manner of throwing his legs over each other in walking probably owing to his great corpulency." Despite his reputed meanness, he helped pay for making a road from Rothesay to Ascog in 1813.

In 1815 Archibald Stewart died without children and his heir was Frederick Campbell, a distant American cousin living in Virginia, U.S.A. Another cousin was Thomas Campbell, the poet, whom Archibald Stewart knew, and to whom he left a legacy of £4,498. Archibald Stewart made him a beneficiary because Thomas Campbell, though he could ill afford it, had been so generous to his mother and his sisters after his father, who was a merchant in Glasgow, had lost his fortune through the American War of Independence.

Frederick Campbell, the heir, came to Scotland in 1815, hoping to sell his newly gained Scottish estates, but first he had to assume the name and arms of Stewart of Ascog, and before that he had to be naturalised. That entailed a special Act of Parliament, which took ten years to pass. When eventually it came through Frederick tried to sell, but dozens of Stewart relations turned up insisting that by the terms of John Murray Stewart's deed of 1773, as substitute heirs they must have their share of the proceeds. Frederick appealed, but before the appeal came through he died of consumption.

Frederick's younger brother, Ferdinand, a professor of mathematics at William and Mary College in Virginia, then inherited and succeeded where Ferdinand had failed. His naturalization bill went through and he sold the Ascog property in 1830 to Robert Thom, for £70,000.

**Thomas Campbell, poet, a cousin of Archibald McArthur Stewart of Ascog.**

Robert Thom and other later owners

Robert Thom (1775-1847) was an early industrialist and engineer. He studied at the Andersonian Institute in Glasgow and was particularly interested in hydraulics.

In 1813 Thom and a partner, William Kelly, bought up the Rothesay cotton industry. Cotton mills had come early to Bute: in 1789 the second cotton mill to be established in Scotland had been built in Rothesay, running on water power from Loch Fad and as much a pioneer in its day as New Lanark. By the 1800s the natural water courses had become inadequate and the owners switched to coal; but coal was too expensive to import into Bute and the industry soon went bankrupt. Archibald Moore, factor to the Earl of Bute, wrote to his master on 4th Nov 1812:

> *"I am sorry to acquaint yr Lordship that the Cotton Mill Co. have failed and their affairs are in so bad a situation that the present prospect is nothing short of bankruptcy. Their failure will be attended with very serious consequences for the poor people of Rothesay in their employ. It has been a heavy business for the Co. for many years past & the present situation of the Cotton Manufacturing trade has been the occasion of many failures. The Cotton Mills I dare say will not sell for one third of what they cost, indeed I do not see how they can sell at all at present unless some favourable change takes place on the Continent."*

Robert Thom saw his opportunity: he knew that the only way to make the mills viable was to revert to water power, but to an increased amount of it – "*Get water if you can and be quit of these smoky and expensive engines*," he wrote.

To this end he designed and built dams, aquaducts and sluices to increase the flow into Loch Fad and then, via the Lade, into the water wheels of the mills. (An article by John Ferrier, *Robert Thom's Water-Cuts*, see the end of this album). These water cuts can still be seen in many places on Bute – the nearest to Rothesay is the Lovers Walk cut at the Meadows. Where the cuts crossed farmland, Thom had to build bridges so carts and animals could cross. Sturdy and

pleasing in design, several of these survive especially around Scalpie and Quien. They look incongruous today, stranded in the middle of fields across channels long silted up.

There were, of course, problems in implementing such an integrated scheme. One of the trickiest was when, by diverting the Scoulag Burn, Lord Bute's water supply for Mount Stuart was cut off, and law suits ensued. But the mills flourished, eventually employing a thousand people. In 1826 Thom's partner retired and he became the sole owner of the cotton mills.

In 1827 Robert Thom went on to design the Greenock water supply, building a great dam to form a lake still called Loch Thom. By then he was an engineer of international renown. He was also, surprisingly, a great friend of Edmund Kean, the actor, and negotiated with Lord Bute for Kean to buy a cottage at Woodend, on the west side of Loch Fad, in 1824.

In 1831, he bought Ascog House and 420 acres, including 90 acres of Ascog Loch. In about 1840, he built Meikle Ascog and, it has been suggested, designed it as well, and presumably the garden in front of it. It is not certain whether the new house, known as Ascog Lodge, was for his own use, or whether it was a sort of dower house for outlying members of his family.

It became fashionable for the tobacco magnates and prosperous Glasgow merchants to take up summer residence out of the city, Ascog, Craigmore and Mountford being favourite locations. By 1840, Rothesay had become ‘the Montpellier of Scotland.’ According to Mr. Bell Barker who lived at Ascog Farm for many years and has researched the history of the estate, Thom also planned the development of substantial houses between Ascog House and the sea, selling plots of land with stringent conditions attached. There was to be no building on the shoreline itself, and businesses or trades which might cause offence were forbidden.

One of these new houses was called Ascog Hall which, with the adjoining Blair Lodge, were owned from 1856 by Alexander Bannatyne Stewart, described by A.H. Millar in *The Castles and Mansions of Renfrew and Bute* (1889) as one of the merchant princes of Glasgow. Bute at that time was very popular as a holiday resort, being known, according to Millar, as the Scottish Isle of Wight. While Rothesay attracted and catered for the boarding house trade (to cope with which the stupendous station and passage to the pier at Wemyss Bay were built), Ascog catered for a superior class of visitor, "*being situated in that portion of [Bute] which is considered the loveliest part of the Island*". Thom took advantage of this opportunity to benefit the estate.

Thom was also great friends with the great actor Edmund Kean, of whom Coleridge wrote *"seeing him act is like reading Shakespeare by flashes of lightning."* Thom interceded with Lord Bute's factor when Kean was attempting to rent a cottage called the Butt of Woodend, on the banks of Loch Fad, and claimed to have been the chief cause of Kean fixing his residence on Bute. Woodend became something of a refuge for Kean, who was of uncertain health and prone to heavy drinking. On one occasion when playing Richard III, he fled the theatre between acts and, in costume, boarded a boat for Bute.

Thom died in 1847 and his gravestone can be seen today in Rothesay churchyard, near the door of the old Session House. He left two sons and two daughters. Whether any of them lived in Ascog House, we do not know, but their trustees seem to have let Meikle Ascog, at least, to Sir William Murray of Ochtertyre who, according to Millar, lived there for many years. Sir William had twelve children, several of whom were apparently born in the house.

In 1876 Robert Thom's trustees sold the Ascog estate to Mr Daniel Macbeth who sold it on in 1877 to Thomas Russell Esq, Deputy Lieutenant of Buteshire, and in 1886 Convenor of the Buteshire County Council. He was described as "the present proprietor" in 1895 by J.K. Hewison in *Bute in the Olden Time*. By

1902, however, Ascog House and Meikle Ascog belonged to James Towers Clark, who sold it that year to Henry Evans. Whether James Clark bought the property from Thomas Russell, or inherited it, we do not know. Nor, unfortunately, since interesting changes in both house and grounds at Ascog may have occurred during one or other of their ownerships, do we know anything about James Clark himself, or his successor, Henry Evans.

One curious fact emerges from the deeds, that Ascog House and Meikle Ascog both depend on the same water supply. There were special clauses written into the sale, allowing future owners of Ascog House and Lodge to draw water from the reservoir on Ascog Farm.

It seems that the Ascog estate was next inherited by Edward S. Stewart; in any case, in August 1939 it was sold by him to the Earl of Dumfries, later the 5th Marquess of Bute. Meikle Ascog was tenanted, first of all by the Marquess's younger brother, Lord Rhidian Crichton Stuart, then by a builder called Collins and finally by a cousin of Lord Bute's, Patrick Crichton, who moved out in 1988. Meanwhile Ascog House was divided up into several dwellings for estate employees. The last occupant to live at Ascog before the Landmark's intervention was a Ms Megan McWilliam, a housekeeper who had outlived her employer, but had a lifetime tenancy. Other descendents of Margaraet McWilliams (Megan's mother) continue to live in a small cottage adjoining Ascog's grounds. In the winter of 1953 both Megan and her twin sister Shona were killed in a tragic accident whilst returning from Rothsay. The trap they were driving was overturned when their horse took fright as they turned into the tree-lined drive of the house.

The rich history of Ascog was continued during its recent (1989) sale to the Landmark Trust. Several family estates are said to have competed in an auction for possession of the property, but at the last minute pulled out, the Landmark Trust was then consulted and proceeded to buy the whole property.

Meikle Ascog needed little work beyond some redecoration, and so was ready for visitors in 1990. It was rented out as a Landmark property for many years, but in 2012-13, Landmark's Trustees undertook a careful review of all our buildings and decided that Meikle Ascog should be sold, a very rare occurrence in our portfolio. This was because Meikle Ascog had been acquired pre-emptively by our founder John Smith, to protect the setting of Ascog Castle, and not because it was itself of outstanding importance or in jeopardy. Meikle Ascog's release also put a potential family home back into the general housing stock, and all the income from its sale was used by Landmark directly for other building rescue projects.

We are sad to see any Landmark disappear from our portfolio, but we can be content in the knowledge that it all contributes to our overall charitable purpose, of saving buildings for future generations to enjoy.

Ascog House, however, needed rather more attention at the time, and remains a valued Landmark property.

**Fragment of the original great hall fireplace, found behind two later ones in the north wall.**

**The great hall fireplace, with a later one below it, showing that the floor level was lowered, probably in the later 17th century.**

## The House

### The original Ascog House and early alterations

Despite the date of 1678 above one of the dormer windows, the original Ascog House seems to have been earlier than that. Houses of the Ascog pattern, with a stair tower and cap-house, were being built in Scotland around 1600. In addition, an old fireplace found in the present kitchen seems to point to a date earlier than 1678.

Behind two later fireplaces, one early 18th century and one later, the remains of a much grander chimneypiece were uncovered (you can see part of it on the north wall of the kitchen). This looks early rather than late 17th century and clearly relates to a floor at a higher level than the present one. It was the fireplace of what must have been quite a high room, probably a hall, so the top floor, with its dormer windows, cannot have been at the level it is now either. In 1678, therefore, the main floor level was changed and the present top floor with its dormer windows put in, its floor at a lower level than the previous one.

Sometime in the 18th century the windows, which would have been mullion windows, smaller than the present ones, were changed to sash and casement windows. Judging by the appearance of the east front, with its plethora of blocked up windows and by the old lintels scattered round the house, the level of the floors was altered again at some point, and windows seem to have come and gone. Behind Victorian fireplaces, earlier ones were discovered with bolection moulded surrounds. These were perhaps put in at the same time as the larger windows, or just possibly in 1678.

Nineteenth century alterations

It was either Robert Thom, or more likely, one of his children after his death, who doubled the size of Ascog House by building on at the back. This alteration can be dated to before 1868, when it appears on the large scale map of the grounds, in the first edition of the Ordnance Survey 25" to 1 mile series. The present north wall was extended westwards to about one and a half times its present length, as can be seen in the plan on p7 of this album.

At the same time as this west wing was built, the level of the ground was changed. The old house, like many Scottish houses of that date, had a semi basement floor with a low ceiling used for storage and cellars. It was probably built into the slope of the hill, too, much as it is now. The Thoms wanted to make Ascog House taller as well as more extensive, so they dug away the ground at both the front and back to well below the natural level. They put big windows into the basement, which now became the ground floor, and dug out the floor itself. The original front door, which was in the stair turret (where it now is again), was then several feet in the air, so a new front door was opened to the left of the stair tower and a wooden lobby or porch was added to protect it.

The lowering of the ground may have made the basement useable, and drier too, but it also exposed the foundations and thus endangered the whole structure of the house. It seems most unlikely that a trained engineer like Robert Thom would have done such a thing; also the west wing was shoddily built, while Meikle Ascog, believed to have been built by Robert Thom about 1840, is a well built house.

Late in the last century, or very early in this one, a drawing room and grand staircase were added to the north end of the house, and the position of the front door changed again to enter the new staircase hall. These additions, of which the staircase tower remains, were of a better standard than the west wing. They might have been made by Thomas Russell who is also the most likely candidate

for the commissioning of a new garden layout east of the house. On the other hand, the additions do not seem to be there in a photograph of the house in 1895, and nor do they appear on the revised OS map of 1896 (but then neither does the west wing which was there in 1868). So they might have been built by the James Towers Clark who owned the property by 1902, or indeed by Henry Evans to whom he sold it.

**Inside the house in 1986 before restoration – the main floor looking east.**

**The main floor, looking north.**

**The east front in 1989, with the late Victorian additions on the right (above and below) and the mid-Victorian porch beside the stair tower and lowered ground level round the old house (below).**

**The 19th century west wing, now demolished, with the old house beyond it, its west well shored up. Photograph taken in 1989.**

**November 1983. The back of the house from the north-west; all now demolished except for the tower containing the Victorian stair on the far left, now free-standing.**

**View from the North in 1983.**

**The late Victorian drawing room in 1989 (now demolished).**

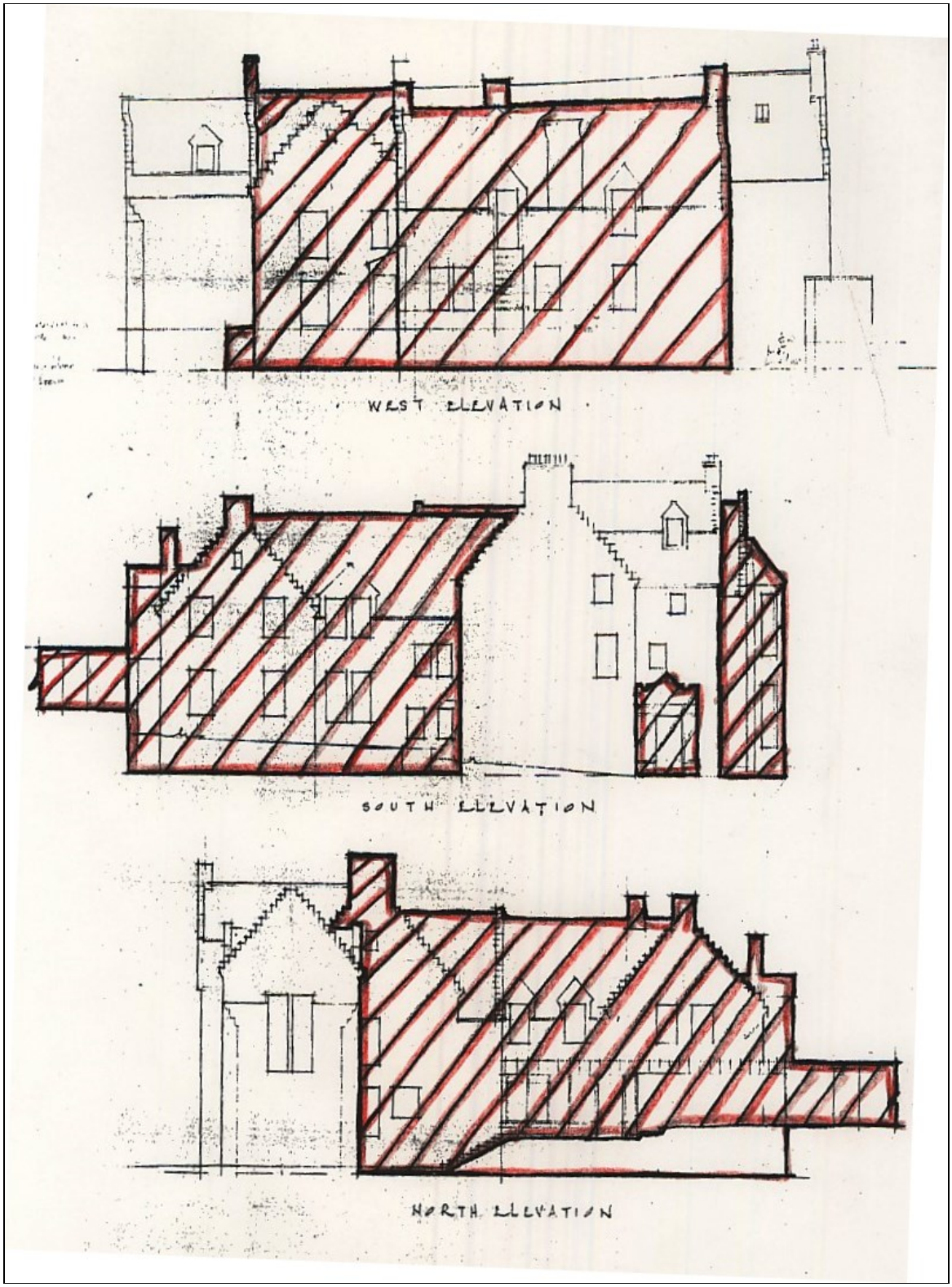
**The Victorian staircase as it was in 1983.**

**Inside the old house in 1989, looking west. The west wall was shored up inside as well as outside, and the floors had gone.**

## The Landmark's Trust restoration

The first stage of the Landmark operation consisted of demolition and levelling. Permission was obtained from Historic Scotland to pull down the west wing, the porch beside the old stair tower and the late Victorian north wing, containing the drawing room and stair. In the end only the drawing room and the room above it were demolished. The stair tower was better built than the back premises, and when the time came, it seemed a pity to pull it down, especially since it turned out to make rather a successful freestanding tower. So it was kept, and acquired the name of Tom's Tower, from the championship of it by the Landmark's buildings adviser, Tom Dulake. At the back of the old house, not only had the ground been generally lowered in the 19th century, but a trench had been dug alongside the wall to stop the water getting in, so that here in effect the ground was some 5ft below its true level. It was not surprising therefore that the whole of the back wall had had to be shored up to prevent it collapsing. This trench was filled in, using the rubble from the demolished back quarters, and then the ground was levelled gently to the building. At the front, too, the excavated ground was made up, to bring it in line with the natural slope of the hill, and level with the original main door. At the same time, the house regained its right proportions, and its dignity. Restoration was a lengthy procedure, at one point with torrential rain stopping work for several months. During this period water flooded the basement and uncovered 17$^{th}$ C human remains, thought to be a member of the Stuart family.

Then, in June 1991, when work was well advanced, the restoration suffered a severe setback. The top floor caught fire - how, no one knows. The flames were first seen from the mainland during the night, but by this time the fire had taken a hold and most of the building was gutted. The only thing to be thankful for was that because so little of the original early interior existed, hardly anything of historic or architectural interest was lost. It was a serious blow nevertheless.




**Plans dated 3 February 1989 – parts of the house that has been demolished are hatched in red.**

After all the inevitable discussions with insurance people and lawyers, work restarted in May 1992, following the same plans and specifications as before.

Round the outside

The east, main, front is barely altered. The Victorian lobby has gone, as has the north wing, but the main block is as it was except that the ground is again at its pre-Victorian level. The 19th century windows and front door in what is again the basement have been partially blocked up. The old front door in the stair turret, which was blocked, has been opened up. The stone surround was fortunately still there. The drainpipes have disappeared and a gutter or, in Scottish, a rone, runs across the windows, in the traditional Scottish manner. High up on the north side of the stair turret there is a projection when the wall thickens to carry the stair going up to the room at the top, known as the cap-house.

In the first phase of repair, the Victorian roof had simply been repaired, but after the fire, the roof structure had to be completely renewed. The covering is of second hand Scottish slate.

Walking round the house clockwise, the south end has a new window on the top floor, but it uses the lintel of a window that was in the same place before. The ground level had not been lowered so much here, except at the right hand, west, end, where the foundations were exposed. It is now once again at its true gradient.

The west front, which had the west wing built onto it, has been re-formed. On the ground floor, the left and right hand windows are new, but the lintels were there; the second window on the left is original; the door had been blocked up, but was there; the window to the right of the door is new. The sills from the demolished building were used for the new windows. The plaque over the front door was moved from another position, to the right of the door. On the top floor,

the two dormer windows were removed from the demolished part of the house and re-used. A rone runs across them, as it does on the front of the house.

The north front, which was attached to the late Victorian wing, has a window on the main (or ground) floor that was there, but blocked up. On the top (first) floor, a door leading to the Victorian extension has been changed into a window. In the north west corner there are two old straight joints in the stone work that suggest that there may have been a small wing or perhaps a garderobe or privy there.

In 1993 the whole building was harled in the traditional way, with one or two coats of lime, coarse sand and small grit. The pattern of the stones shows through this first harling, but as the walls are given more coats of lime over the years, the harling thickens.

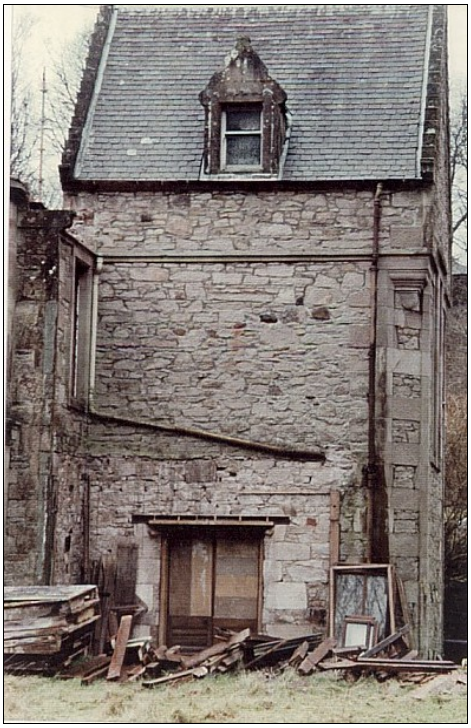
**The entrance front after the demolitions. Note the lower ground level in front of the old house.**

**The original main entrance door in the stair turret reopened, but still stranded well above ground level.**

**The west side during demolition.**

**The west side remodelled, with the "discovered" windows at each end.**

**The Victorian stair tower, still attached to the rest of the house.**



**The last of the front doors, leading into the north side of the stair tower.**

**The stair tower separated, but with its south wall unfinished.**

**Demolitions complete.  The ground is being restored to its old level.**

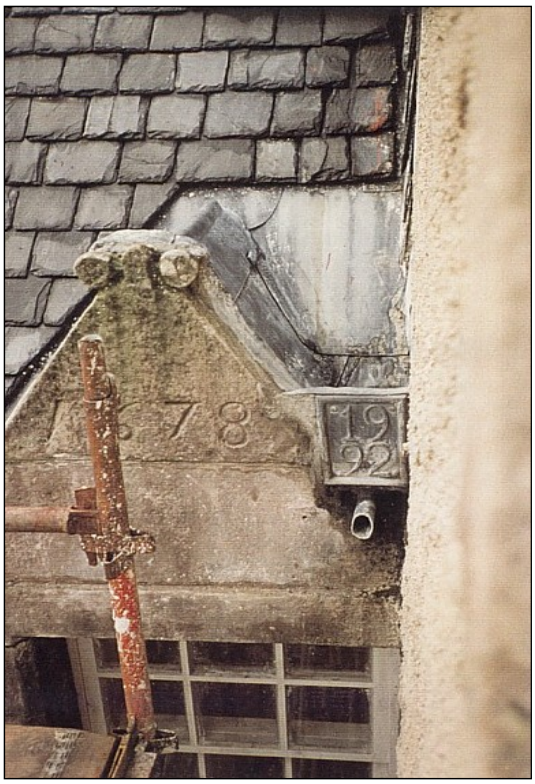
**More levelling on the east front.**

**1993. The north side harled and the ground back to the original level. The ground is left low round the stair tower, which is not to be harled.**

**The East front after the fire in June 1991.**

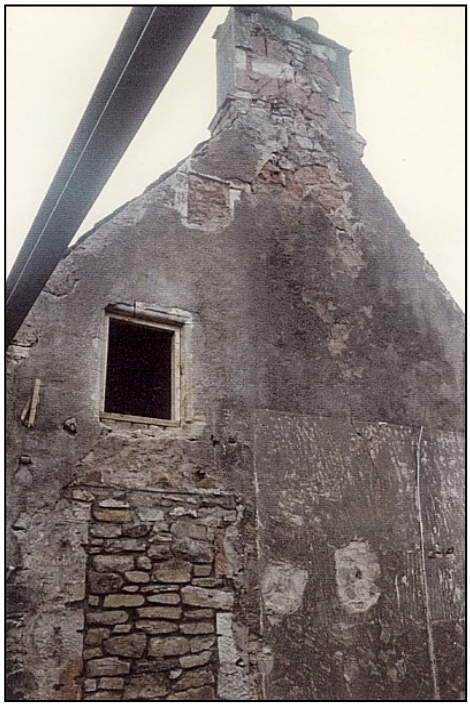
**After the fire. The stair tower was untouched.**

**The East dormers and old drainpipes. The date is just inside on the right hand dormer.**




**New rainwater spout – the old drainpipes have gone.**

**The dormer with the carved initial before clean up.**



**North gable without its crowsteps. They had been removed when that side was extended.**

**Blocked second floor window on the south end. The cracked lintel of the first floor window was repaired.**

**Crowsteps being put back on the North gable.**

**The deep trench on the west side, partly filled up. It had weakened the foundations of the west wall, but is now restored to its proper level.**

**The south wall, where the foundation stones were showing.**

Inside the house

Inside the house the first job that the Landmark had to tackle was the urgent structural work needed to keep the whole house from falling apart. The west front was falling away from the rest of the house. How this was done can best be seen in the basement. Steel joists tie the building together, as do the new brick walls. The west wall was given a reinforced concrete skin.

Also in the basement you can see the blocked 19th century front door to the right of the stairs, and another blocked door in the north wall, that led to the north wing.

On the ground floor, the arrangement of the rooms is entirely new, but echoes what could have been the 18th century plan, of rooms leading off a central hall. The cross walls, as in the basement, are of brick and are structural. The sitting room has an early 18th century fireplace, discovered behind a later one, and an aumbrey of the same date discovered behind Victorian plasterwork. In the kitchen you can see part of the important earlier fireplace that helps us to date the house.

The stairs in the stair tower are not much worn and were probably renewed in the 19th century. At the top of the stairs is a new stone edge to the landing and a new timber balustrade. The stairs up to the cap-house were wooden, Victorian ones, but these went in the fire, disclosing the original stone stair, that you now see. In the cap-house the present fireplace was found behind the plasterwork. The small north window had been blocked up and was reopened.

The walls with arches on the top or first floor line up with those on the two floors below and, being brick rather than timber, help to hold the house together. The 18th century fireplace in the south bedroom was behind the plasterwork; it had lost its top, which has been replaced. In the north bedroom, the corbel in the cupboard is unexplained. Perhaps there was a fireplace there.

**Holding the building up while work starts.**

**The basement with the 19th century front door on the right. Stairs up to the original (and present) front door on the left. They were full of dry rot.**

**Stripping out Victorian partitions as work began.**

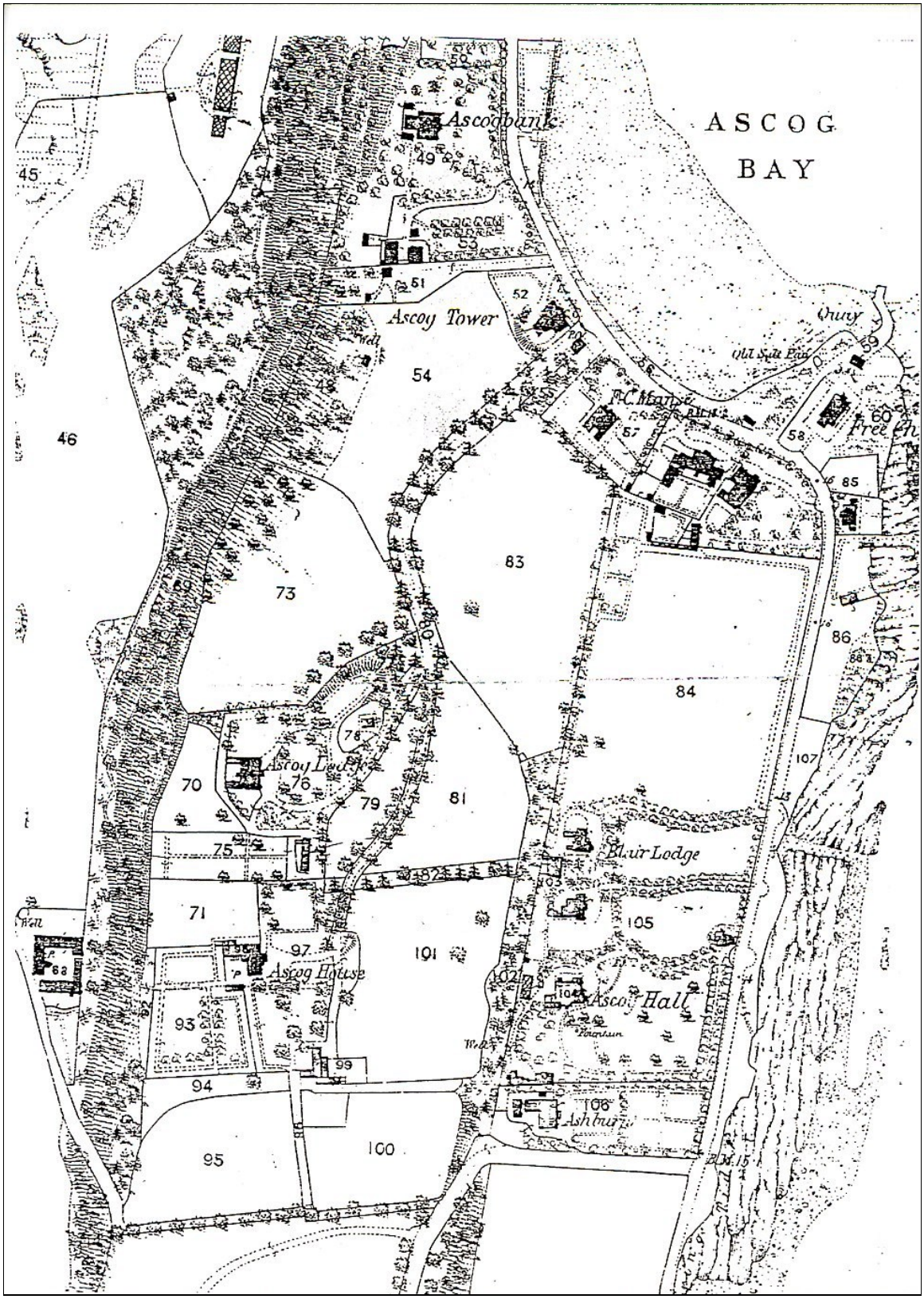
**The South end with the Victorian plaster stripped off, to reveal the earlier fireplace and aumbrey on the main floor.**

**Bedroom floor looking South, showing the new roof structure, copied from the old timbers destroyed in the fire.**

**New structural brick walls tying the front and back of the building together.**

**The Victorian fireplace which was in front of the older one in the cap-house, which has now been repaired.**

**The Victorian steps in the cap-house, now gone.**




**O.S 25": 1 mile First Edition 1868.**

## The Garden

In the map of 1868 a walled garden is shown west of the house and another larger garden area, perhaps an orchard or formally arranged kitchen garden, south of that, but only the simplest of layouts to the east, probably little more than a lawn, with gravel walks around it. Meikle Ascog has shrubberies in front of it, to the east, with a walk going round the little raised "promontory", as now. Between the two houses is another formally arranged area, but whether flower garden or kitchen garden we cannot say.

By the time of the second edition of this map, in 1896, there had been quite a few changes. The biggest of these was the creation of an extensive formal layout east of the house. In what was previously a field, there were now pleasure grounds, with a terrace and formal paths making a geometrical pattern. A photograph of this new garden appeared in *Bute in the Olden Time* by J.K. Hewison, published in 1895.

The arrangement of the drives to the two houses had also been modified, to the form in which they would remain thereafter. The long garden between Meikle Ascog and Ascog House had gone, to be replaced by a conservatory roughly in line with old Ascog House, but stepped back a little. This was probably filled with peaches and vines, as Mr. Bell Barker suggests. Behind it was a square walled garden. In the old walled garden directly behind the house, where vegetables for the household were grown, potting sheds and greenhouses had been added. In the garden to the south of it, however, the paths had apparently gone.

All this can be seen in the next, revised, edition of the 25" to 1 mile map, published in 1919. This shows Ascog in its final and most fully developed form. The drawing room and north stair have been added to Ascog House itself. South of the house there is a new cross-shaped feature, possibly a pond, possibly a sunk garden. North of the main garden, ponds have appeared, one of them with

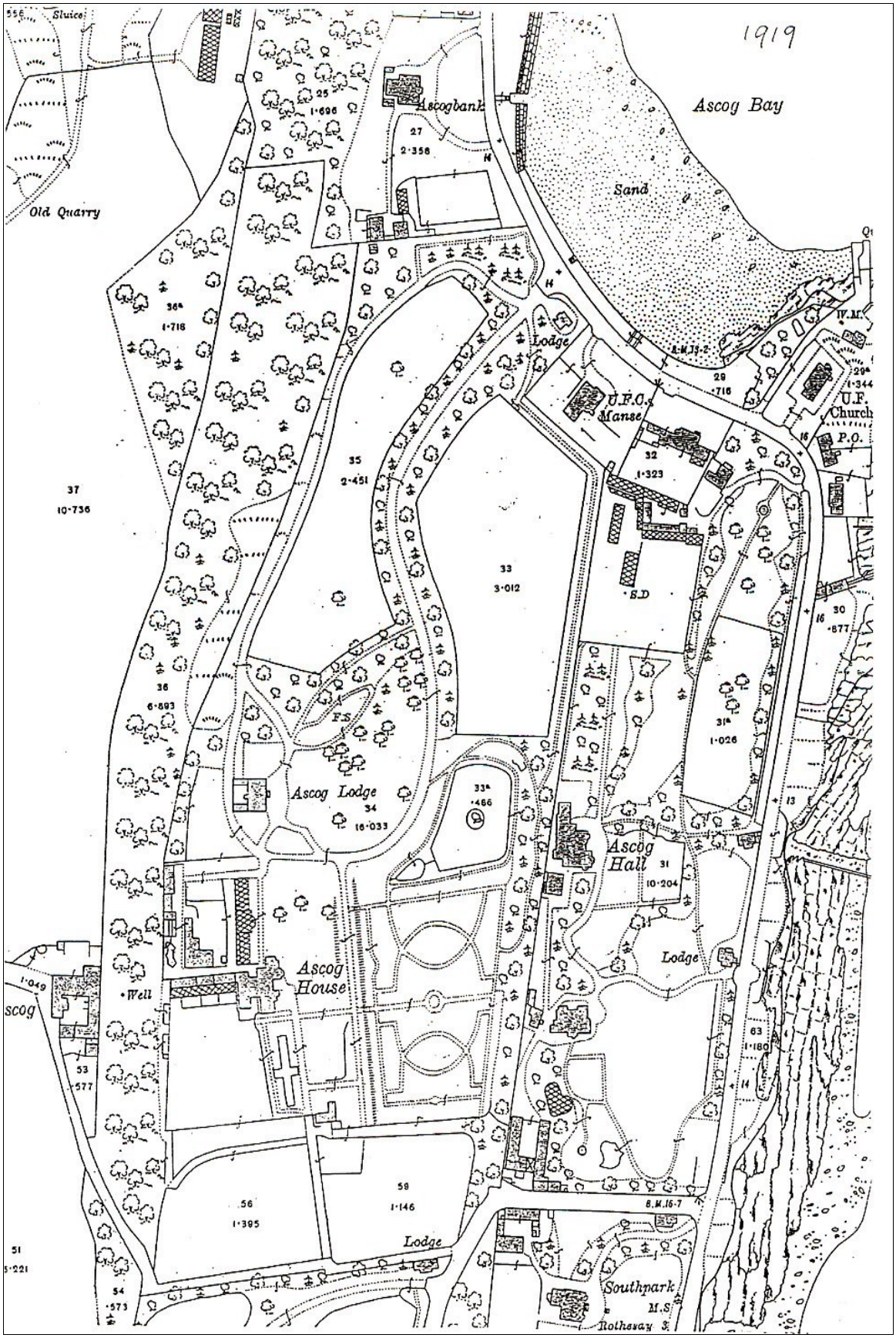
an island in the middle; and with an encircling walk. Whether these final embellishments were part of the original scheme, but had just not been made when the 1896 map was surveyed; or whether they were commissioned by a later owner, is not clear.

Indeed, nor is it known exactly when the main formal garden was laid out, although the likelihood is that it was commissioned by Thomas Russell soon after he bought the house in 1877. It certainly looks reasonably well- established in the 1895 photograph. Local tradition attributes its design, and that of a fernery at Ascog Hall, nearer the sea, to one Edward Latrobe Bateman, who was employed by Lord Bute to make alterations to the gardens at Mount Stuart from 1875. Very little else is known about him, and no records have emerged from the Mount Stuart archive to show just what he did there.

The bare facts seem to be that Bateman, who lived from 1816-1897, was an artist and friend of the pre-Raphaelites, who worked on the Great Exhibition of 1851, but who went out to Australia in 1852 to stay with his cousin, Charles Joseph Latrobe, first Superintendent of Melbourne and first Governor of Victoria, 1850-54. While he was in Australia, Bateman designed several buildings, and some in New Zealand too. He is thought to have moved back to Britain by the 1870s and came to Bute when invited by Lord Bute to help with the garden at Mount Stuart. He settled on the island, where he designed a house called the Hermitage in which he lived. This is now the Bute estate factor's house, and stands on the road south of Ascog.

When the Landmark Trust took over the property, the gardens were entirely over-grown. Since then clearing work and what amounts to garden archaeology have been carried out by Mr Chisholm, the gardener, and the original layout is becoming clear on the ground. Most exciting of all was when the old pipes for the ponds and water works were discovered by Mr. Chisholm with the help of his water-diviner's hazel twig. The water comes from Loch Ascog and drains away

into the sea. The wheels operating the 6" valves (dated 1870 but thought to have been reused from the Rothesay water supply system) had not been turned for fifty years or more and were entirely rusted up, but they were all carefully cleaned by Mr Chisholm, and in 1993 there was a dramatic moment when the fountain spouted once again.




**O.S. 25": 1 mile - Revised edition 1919.**

**Mansion-house of Ascog, from J.K. Hewison, *The Isle of Bute in the Olden Time*, 1895.**

**Views of the garden in 1989/90**

Article by John Ferrier – Robert Thom's Water-Cuts

# ROBERT THOM'S WATER-CUTS

JOHN FERRIER, M.B., CH.B., F.R.C.S.GLAS., F.S.A.SCOT.

THIS study in the new, but fertile, field of industrial archaeology began in 1957 when I found in Bute aqueducts comparable to those I already knew in the hills above Greenock.[1] A search of the local records showed that some good work had already been done,[2, 3] but there appeared to be room for a full photographic survey.

While the mean annual rainfall of Bute, about 50 inches, is less than that of adjacent mainland areas, it has long proved adequate for small water-powered industries, and most of the streams on the island, if sufficiently powerful to drive water-wheels, have been so used. The King's Mill in Rothesay ground corn from 1480 till burned during the Second World War. In the eighteenth century a small linen industry developed in Rothesay, using flax grown locally, and operating by water-power on a lade running from a dam, the Kirk Dam, at the northern end of Loch Fad; but when linen gave way to cotton the Rothesay industry changed to the new material.

The first Scottish cotton mill was established in Penicuik in 1778. The second was set up in Rothesay in 1779 by James Kenyon, who came to Scotland in order to circumvent Arkwright's patent and because he had bought the services of some of Arkwright's men : he chose Rothesay because of its available water-power. The imported raw cotton for the Rothesay industry was transshipped to smaller vessels at the new port of Greenock. In the old Lint Mill, Rothesay, workers for the new industry were trained, pending the building of the New Mill. In 1785 Kenyon sold his Rothesay enterprise " by public roup within the Tontine Coffee House, Glasgow ".[4] The new owners prospered initially and the industry expanded beyond the water-power

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[1] The Greenock scheme is open to examination but visitors to Bute should consult the Factor to the Bute Estate, Mr. R. A. Milligan, F.S.A.SCOT., particularly if they wish to see the cut in Cnocnicol Wood. It should also be noted that the Moor Road is impassable to cars near Loch Ascog. I should like to express my thanks to Mr. Milligan, to Dr. H. Fairhurst for arranging the preparation of the maps and to Miss D. N. Marshall, F.S.A., for her continuing interest in this study.

[2] Ex-Provost Sharp, " The Cotton Industry in Rothesay " ; *Trans. Buteshire Nat. Hist. Soc.*, II (1908).

[3] Arnold Earls, " Robert Thom and his work on water-power for the Rothesay Cotton-Mills " ; *Trans. Buteshire Nat. Hist. Soc.*, XIII (1945).

[4] Advertisement in the *Glasgow Mercury* of 28th July 1785.

resources of Loch Fad, so that by 1800 a steam engine of 10 h.p. was assisting the wheel at the Old Mill and one of 20 h.p. was operating at the New Mill. But coal proved to be too expensive in Bute, and in 1812 we find Lord Bute's factor reporting that the concern was bankrupt and suggesting that the Government might purchase the Mills for the incarceration of French prisoners-of-war. In 1813 the Rothesay cotton industry was purchased by William Kelly and Robert Thom. Kelly had been a manager at New Lanark for David Dale and was a considerable improver of cotton machinery. Robert Thom became the sole owner in 1826, on Kelly's retirement, and later adopted a Mr. Struthers into the firm.

Robert Thom was born at Tarbolton in 1775 and studied at the Andersonian Institution in Glasgow. He was especially interested in hydraulics, and as he set about the development of the Rothesay cotton industry he was determined to rely completely on water-power. "Get water if you can," he wrote, "and be quit of these smoky and expensive engines".[5] I find it convenient to regard his methods as based on the following interrelated principles :—

1. The main storage dam to be made as large as possible.
2. As many streams as possible to be diverted into the dam by an extensive system of aqueducts.
3. Flood damage to the aqueducts to be avoided by diverting spates into auxiliary reservoirs, and this water to be a reserve against drought.
4. Sluices on the aqueducts and dams to prevent both waste of water and flood damage. Sluices to be automatic, so requiring the minimum of human attention.
5. Where a rock outcrop is encountered, in order to avoid the difficulty of digging an aqueduct of full width, a narrow aqueduct but of steeper gradient to be used, so allowing passage of the same amount of water in unit time.
6. Aqueducts to "follow" the contours of the ground. Where an aqueduct reaches a glen carrying a stream, the aqueduct to go "up" one side of the glen, capture the stream at the top, and continue "down" the other side of the glen.
7. Wherever possible natural streams to be converted to aqueducts.

Thom's problem was to increase the flow of water into Loch Fad and as he, perforce, had to find his answer in relation to the topography, so a knowledge of the layout of the island helps us to understand his work (Fig. 1). The

[5] *Brief Account of the Shaws Water Scheme and Present State of the Works* (Columbian Press, Greenock, 1829).

lochs of Bute lie on the north-east to south-west line, the Fad-Quien valley being once a glacier as well as being on the Highland Boundary Fault. While

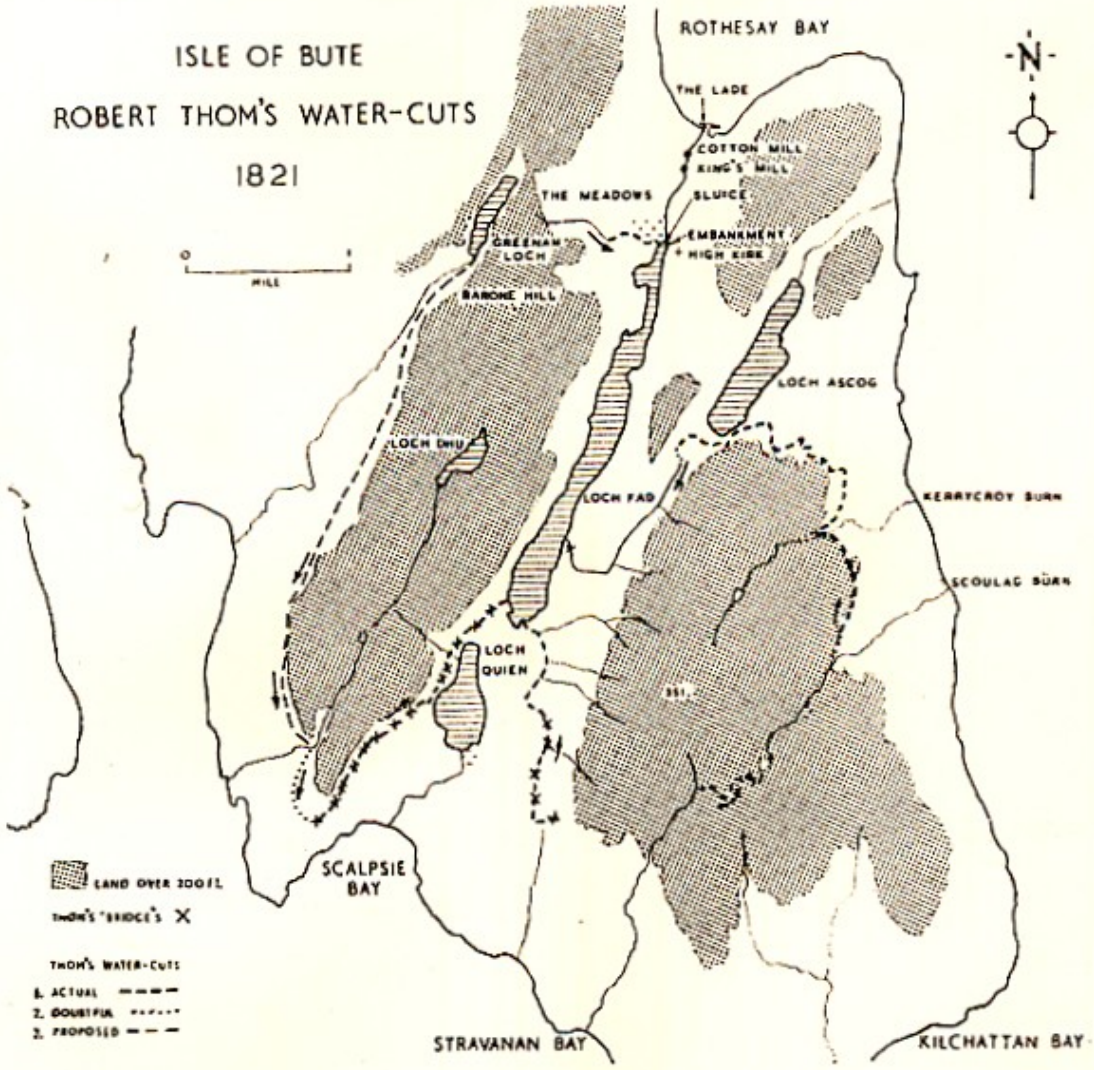


FIG. 1.

Lochs Fad and Ascog drain towards the north the remaining lochs drain to the south. There is a watershed between Lochs Fad and Quien, and an aqueduct approaching Loch Fad from the south-west must be kept at a sufficient height on the Quien Hill to clear the watershed. Likewise there

is a watershed between Lochs Fad and Ascog which must be cleared by an aqueduct approaching Loch Fad from the north-east. It should also be noted that, in contrast to the north and south drainage from the lochs, the drainage of the extensive area of moorland, rising to 300 feet and crossed by the old Moor Road from Rothesay to Kingarth, is arranged on a radial pattern.

Since the height of Loch Fad above mean sea level, on completion of the scheme, was 45 feet and since most of the aqueduct system is below the 200 feet level it is clear that the construction of the aqueducts required surveying of an unusually high standard. Much calculation of amounts of flowing and stored water was also entailed and Thom must have been grateful for the rainfall record kept by the previous mill-owners: this he continued to keep and it is kept still—the Rothesay rainfall has been continuously recorded since 1800.

The automatic sluices were of Thom's design and the details were published.[6] Mostly they were systems of floats and levers, so constructed that as the float rose (or fell) the sluice was opened (or shut), according to the need. Thus when the mills were not working the outflow was stopped, and as the level in the lade rose the outflow from the dam was automatically stopped, and little water ran to waste. The remnant of an automatic sluice can be seen in the embankment of the Kirk Dam (Fig. 2). Likewise in times of spate, when the level in the aqueducts tended to rise, water was automatically held back in the auxiliary reservoirs.

Locally, the aqueducts are called " cuts " or " water-cuts ". To increase the flow into Loch Fad four cuts were constructed, bringing water from the east, south and west of the island into the loch to flow out to the north through the cotton mills. The embankment of the Kirk Dam dates from long before Thom's time, having been used for the linen industry and for the King's Mill, but he raised and strengthened it. The water level was raised almost up to the Kirkyard wall, some 15 feet higher than the present level, as the position of the spillway shows. Calculation shows that the storage capacity of the loch was more than doubled. At the opposite, south, end of Loch Fad a considerable area of land was submerged and evidence of the raised water level is still visible at the south-west corner of the loch. The water-power available was raised to 70 h.p.

*The Lovers' Walk Cut*

The small stream running eastwards from the Barone Hill area originally ran into a marsh. The cut, a short one, diverts the stream into the Kirk

[6] *Mechanics' Magazine*, Nos. 307, 308, 309 (June-July 1829).

Dam, and remains in its original condition (Fig. 3). The marsh dried out and has become the playing-fields (Meadows), and the footpath along the cut continues to supply a social need.

*The Quien Cut*

The Dhu Loch is now part of Rothesay's water supply and little water descends the burn between Mecknoch and Ardscalpsie on the west of the island: but in Thom's time this was a large stream. At Kilmory Butts he built an auxiliary reservoir which still contains water, and just upstream of the point where the burn passes under the modern road he diverted the burn into a cut. The site of the diversion and the first few yards of the cut can be made out here and a further short length is visible on the seaward side of the road. Thereafter the cut has been ploughed out, but is found again at the sharp bend in the road at Ardscalpsie, where the bridge carrying the farm road is of Thom's design. From Ardscalpsie to above Scalpsie Farm the cut is easily traced, at first on the west of the road, then again on the hillside to the east of the road, the intervening section having been destroyed in the making of the road. The line of the cut is easily picked out, here and elsewhere, if the bracken is low, by the whin bushes which have flourished in the disturbed soil and by the ruined little stone bridges of a uniform and pleasing design which span it. From above Scalpsie Farm the cut "follows" the contours round the flank of the Quien Hill, and clearing the Fad-Quien watershed, it can be traced under still more of the bridges into Loch Fad.

*The Drumreoch-Barnauld Cut*

This is Thom's outstanding technical achievement. It is U-shaped, about 5 miles long yet ending little more than 1 mile from its starting point. At two parts of its course lengths of natural stream were incorporated. In parts the fall is as little as 1 foot in 1,200 feet—in the 3 miles of cut from the White Lodge to Kerrycrusach the fall is 12 feet. It provides good illustrations of Thom's methods—in particular the section in Cnocnicol Wood shows his method of capturing a stream in a glen. It is a remarkable piece of surveying.

It begins on the moors just north of Drumreoch by capturing drainage which naturally flowed south-eastwards to Kilchattan Bay and south-westwards to Stravanan Bay and soon made contact with the natural course of the Scoulag Burn. The water flowed down that burn to a point just south of the White Lodge where the burn turns eastwards to flow to the sea through Mountstuart policies, and here a sluice, still visible, was

installed, diverting the burn into a cut which ran into Cnocnicol Wood. This part of the cut was destroyed during the building of the modern road—the original road ran to Scoulag for the ferry to Largs and went through, not round, Mountstuart policies. In the re-entrant in Cnocnicol Wood the cut is found again and here it captured the Kerrycroy Burn. Near the source of that burn, on the moors on the west side of the Moor Road, there was a large auxiliary reservoir known as Dixon's Dam. Its embankment is still visible and it is clear that a large volume of spate water could be retained here, to be fed down the Kerrycroy Burn into the cut in Cnocnicol Wood, as required.

Beyond Cnocnicol Wood the cut has been ploughed out but it is found again near Kerrycroy Farm and can be followed on its winding course towards the south end of Loch Ascog. This part of the cut is kept in good order for there is a modern diversion into Loch Ascog for water-supply—so close did Thom bring his cut to Loch Ascog, without entering it, that the diversion required only three feet of piping under the footpath. From this modern diversion onwards the cut is now dry but it can be traced across the Moor Road and by Kerrycrusach until it made its contact with the natural bed of the Barnauld Burn, down which the water flowed, under yet another little stone bridge, into Loch Fad (Fig. 4). Examination of the Barnauld Burn after prolonged heavy rain shows that its bed is capable of carrying much more water than is nowadays required of it.

The diversion of the Scoulag Burn into the cut at the White Lodge cut off the water supply to Mountstuart and led to a prolonged legal battle between Lord Bute and Thom. Although, in the Court of Session, Thom was held not to have exceeded the terms of his contract with Lord Bute the affair was both unfortunate and unnecessary.

*The Birgidale Cut*

This cut has not previously been recorded. It begins just to the south of Birgidale Crieff Butts, taking its origin from a natural spring, and runs along the east side of the wood known as the Ambrismore Belt. Passing close to Birgidale Crieff Farm it continues into the south end of Loch Fad. The five bridges which cross it are again of the same design but several of them are much silted up.

Considering together the Birgidale cut and the Drumreoch-Barnauld cut we see how Thom captured all the radial drainage from the moor—by constructing a circle of aqueducts round the whole moorland area, the circle being made of those two semicircular aqueducts (Fig. 1).

*The Proposed Greenan-Mecknoch Cut*

The sketch-plan of the aqueduct system, dated 1827, in the Bute Museum indicates that a long cut was proposed to carry the water of the Greenan Loch to the point of origin of the Quien cut (above). Almost 20 feet of fall would have been available, ample for Robert Thom, but there is, on the ground, no sign that this cut was constructed.

*Water-cuts for Greenock*

The rainfall in Renfrewshire is appreciably higher than in Bute, yet in 1773 when the industries and port of Greenock began their expansion the town was desperately short of water. James Watt constructed above the town two small dams, from which water was led down in wooden pipes to the Wellpark—of these the upper or Berryards Dam is still in use for industrial water while the lower was removed during the construction of the railway to Princes Pier. A further small dam, the Town's Dam, was added in 1813, but the supply failed to keep pace with the growing demand and, ironically, it appeared that Greenock's development would be halted by lack of its most abundant element.

Sir Michael Shaw Stewart, fifth baronet and Superior of the burgh, wished to harness a large stream, the Shaws Water, which flows to the sea at Inverkip, for Greenock and formed the Shaws Water Joint Stock Company to that end. But James Watt dismissed the idea as impracticable, being more familiar with water as steam, and several other engineers who were consulted, including Rennie, agreed with him. However Robert Thom, now established as laird of Ascog in Bute, and with his work in Bute completed, replied that he could do it. He did it.

From the topography of the region (Fig. 5) it is seen that the Shaws Water drains an extensive area of high moorland, the ground crossed by the Old Largs Road from Greenock, particularly by the stream now called the North Rottenburn. There was ample water, and ample height, available and the only difficulty was the carrying of the water round the flank of the Dunrod Hill—and this was really no problem to one who had built the Drumreoch-Barnauld cut in Bute. The Spango Valley was so marshy at its southern end that the road from Greenock to Inverkip took a course at a higher level than the present road and in capturing the drainage from the Dunrod Hill into the aqueduct the scheme had the secondary effect of reducing the bogginess of the Spango Valley.

Since the Greenock scheme has been well documented [5, 7, 8] and is still

[7] Daniel Weir, *History of Greenock* (1829).
[8] *New Statistical Account*, VII (1845), Renfrew-Argyle, 432.

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maintained in working order a detailed description is not necessary. The same principles were applied as had succeeded in Bute, and such changes as

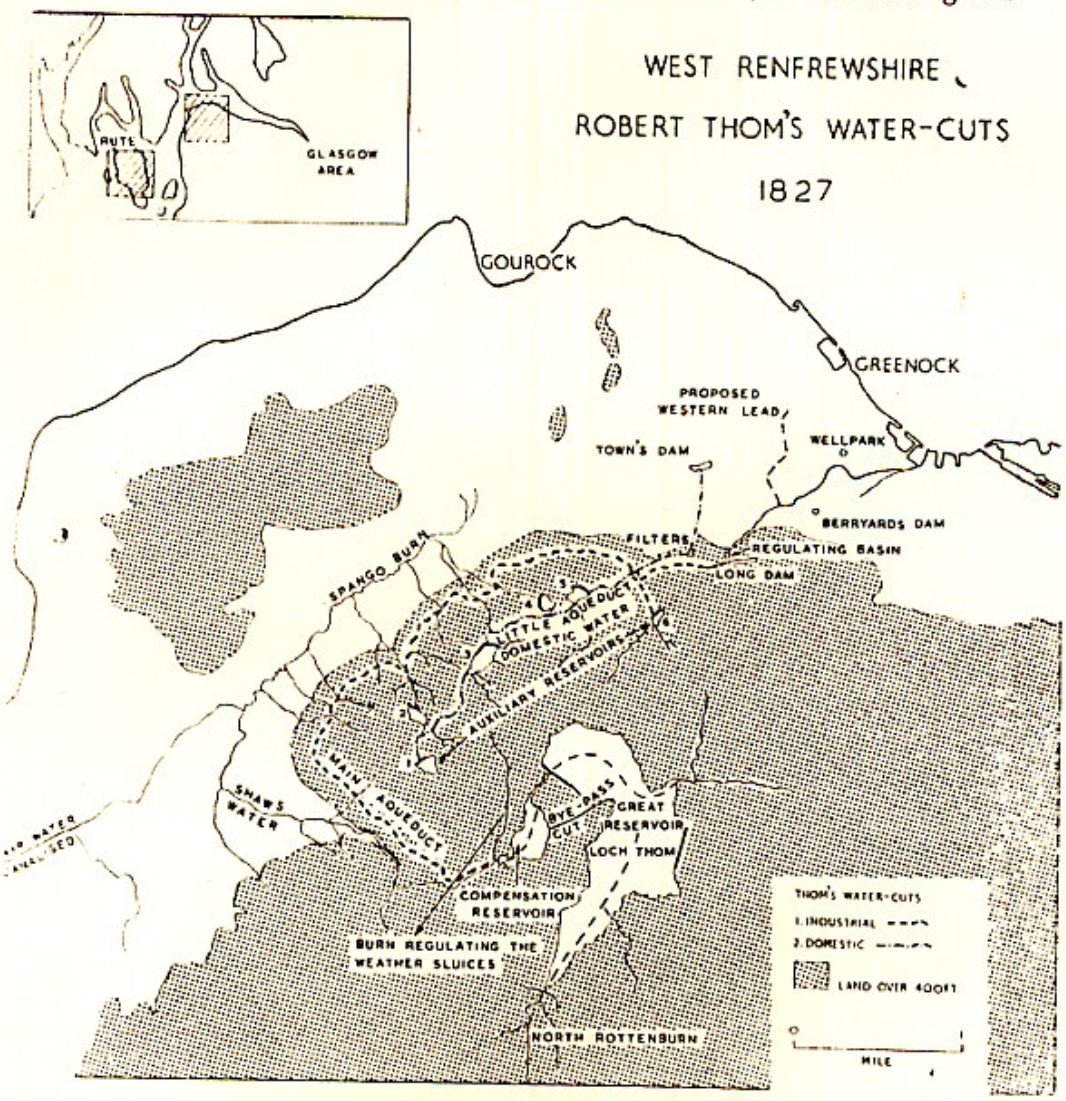


FIG. 5.

have been made since Thom's time are additions rather than alterations. The main aqueduct is not a collecting channel for the main dam but is used to carry the water from the main dam to a convenient distribution point above

the town. A Great Reservoir, now called Loch Thom, was built and connected by a by-pass cut to a Compensation Reservoir for the supply of water-driven mills near Inverkip. The main aqueduct—" The Cut " to generations of Greenockians—has a fall of only 26 feet in its course of 5½ miles—there was height and to spare but Thom did not squander it—and ends in the Long Dam, 512 feet above sea-level. Six auxiliary reservoirs were included for spate control. The flow out of the dams and along the aqueducts was controlled by automatic sluices according to the demand for water and the weather conditions, and two of these sluices are still in use. Since the disastrous flooding following the bursting of the dams of the Cartsdyke Cotton Company in 1815 Greenock had been nervous of dams and aqueducts, and clearly flooding of this aqueduct some 500 feet above the town would have been a major disaster. But public confidence in the automatic sluice system soon developed—" should the rains fall as it were their last, in silence and loneliness they would act on ".[7] And spanning the aqueduct there were built stone bridges of the same design as in Bute.

While the Bute scheme was solely a power scheme, Thom was confronted in the Greenock supply by a new problem—the supply of filtered drinking water and pure water for sugar refining—and once again he had a ready answer. The slow sand-filters then in use were rapidly choked by algal growth so Thom installed sand-filters which were self-cleansing, removing the algal scum by the simple expedient of reversing the direction of flow through the filter—a principle which is used even in modern high pressure filtration. For this pure and filtered water a Little Aqueduct was installed, connecting together the six auxiliary reservoirs by a stone-lined channel and passing under the main aqueduct to the filters (Fig. 5).

From the Long Dam the water passed through the Regulating Basin, descending into the town in a series of cascades, driving a water-wheel at each stage, until finally reaching the sea in the East India Harbour via the Dellingburn. This lade was called the Eastern Line of Lead, and Thom's plan of 1827 shows that a Western Lead was also intended [7, 8]—this was not installed, but a branch of the Eastern Lead known as the New Eastern Lead was built later, reaching the sea via the Cartsburn. In 1840 the Eastern Lead was supplying water for power and other purposes to sugar refineries, chemical and iron works, and flour, rice, flax, cotton, wool, and paper mills—a total of nineteen millsteads getting 1,292 h.p. while the later addition of the New Eastern Lead provided a further seven millsteads and raised the total horse-power to 1,575. The mills were thirled to the falls and elaborate feu contracts were drawn up to ensure equitable distribution of the water among the various millers.

The last water-wheel, a particularly large one, was removed in 1918, but the lead still provides power in the form of electricity as well as supplying water for cooling and other industrial purposes. The cut runs on and, apart from the danger of its being blocked by snow, gives little trouble.

In Bute the cotton industry expanded to employ a thousand people. From its inception it had been influenced by the experiments in labour relations carried out at New Lanark by Robert Owen—there were workers' houses, trade tokens and a mill shop, a benevolent society and a brass band. But after some fifty years of activity the industry pined and died—defeated by the fall in the cost of steam-power, the stopping of child labour and the introduction of free trade. The last Rothesay cotton-worker died in 1961 at the age of 92—" disdaining stockings, she kept the custom of the mill lassies of wearing a shawl ".[9] Robert Thom died at Ascog in 1847 at the age of 73, and is interred in the High Kirkyard of Rothesay appropriately near to his first efforts.

The first Ordnance Survey of Bute is dated 1863, when the cotton mills were still working and Robert Thom's cuts had been running for 50 years. Without good maps and with crude instruments he carried out surveying of the highest standard. Nothing comparable to his cuts had been built since the Romans brought their aqueducts into Great Chesters and Dorchester. In his writings he reveals his concern with the social aspects of industry and deals with problems which are ours today—urbanisation, rural depopulation, atmospheric pollution. He was a man of genius.

[9] Obituary, *The Buteman* (Rothesay), of 14th July 1961.

## Bibliography

William Beattie, *Life and Letters of T. Campbell,* Vols 1-111 1849

George Bell of Ascog, *Ascog,*, 1989, and unpublished typescript.

J.K. Hewison, *Bute in Olden Time,* Vol II, 1895

Kay, *Portraits of Edinburgh Society*

A.H. Millar, *The Castles and Mansions of Renfrewshire and Buteshire*, 1889

Ian Munro, *The Island of Bute*

Nigel Tranter, *The Fortified House in Scotland* Vol V, 1970

*The Complete Peerage*

Information about Ascog House and its restoration kindly provided by Vivienne Tod of Stewart Tod and Partners.