

# REBUILDING THE CLOISTERS OF IONA ABBEY

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by Ian Cramb

## The holiest place in Scotland

*is a small island off the western coast called Iona. For centuries it has been the burial place of kings, Scottish, Norwegian, Irish and French, as well as chiefs of the clans and princes of the church. In 563 Saint Columba and a small community of monks established a monastery there. In the 8th and 9th centuries it was raided, plundered and destroyed by the Vikings several times. It was abandoned then, but after 350 years a monastic community returned to redeem and rebuild it. It was rebuilt again in the 13th century, only to be dismantled by the Reformers in the 16th century.*

*Early in the 20th century the Abbey church was restored by the Church of Scotland through public subscription. Restoration of the remaining Abbey buildings has been going on since 1938. In 1959 young Ian Cramb was commissioned to rebuild the 13th century cloisters.*

The coursed random rubble on the Abbey and its adjoining buildings differed in style from anything I had undertaken before. It was a hard red granite with a black slate infill; the white sand used for the mortar was from the seashore. All the corner stones for windows, doors arches, etc. were of dressed sandstone.

The Cloisters were to consist of 57 Depressed Gothic arches (a depressed arch means that the span is greater than the rise) made up in four arcades, and the layout had to follow the original foundation lines, indicated by the remaining stones that showing above ground.

A number of years back they had reconstructed two of the original arches from bits and pieces they had gathered together, and these two arches gave an idea what the original cloisters

## ...nothing is at right angles...

looked like.

I spent a few days going over the drawings and the whole area alone. On the layout drawing I checked the sizes, angles and levels against the existing structure. In old church buildings such as



Ian Cramb, Iona, 1960

this one nothing is at right angles and dimensions are inconsistent. For one thing, the span of the arches in each of the arcades was different than that in the others.

Then I worked out the procedure to be used to put it all together and a picture formed in my mind of what the finished Cloisters should look like. This is, I find, the real secret of building with stone, being able to picture the finished job. This mental picture, along with reading the drawings, gives me a general idea on how to go to put it all together.

It all sounds so easy, from the mental picture to the setting of the last stone. There would certainly be problems to face, but I knew I'd never get stuck if I tackled it with a glad heart. The power of prayer was to be my greatest help. All I had to do, I found, was to go into the little chapel and say, "Please God, I do need your help", and he would give me something to guide me along.

The area that was to be enclosed was being paved by three of my mates in heavy Caithness stone slabs, all to the lines I had set out, It's amazing what you can do with a piece of string. My levels were all done with a board ten foot long, using a small spirit level on top. The secret of the small level is to reverse its position each time you use it. All my plumbings and squarings were made using the old-fashioned yellow pine five foot plumb rule, no fancy modern leveling instruments or setting-out gadgets on this site.

After the stone slabs were all set the area looked good and I proceeded to excavate down to the original foundations to see what condition they were in. All seemed solid; they had had at least 700 years to consolidate. Once I had tested in a few areas the other men started to clear out the foundation track.

During the excavation one of the men came running to tell me they had discovered a large flat stone that had a hollow ring to it when it was struck with the pick. The men, being from the surrounding area, were very superstitious and stood back to let me get

in to see what all the fuss was about.

I cleared the top surface and removed one part of the large cut slab and came across a skeleton. It had been placed in a stone coffin. There were two coffins. The skeletons' bones were white, so they were said to be Saints. The stone coffins had been used as part of the foundation for the original cloisters. They must have been Saints to be able to carry the load of stonework that was resting on top of them.

You are supposed to get the experts in to study them with all the time-wasting procedures they have. My principle is, What God has put together let no man pull asunder. Therefore I left them in peace, surrounding their old bones with a rich lime concrete mix and replaced the old stone slabs on top. What better foundation could one get?

On top of the existing foundations I started to build the walls that would form the foundations for the four arcades. Fifteen inches higher than the slabbed area, they would be the base on which

## ...the "founding pint" ...

the large stone sills would be set.

Before starting the Cloisters, I had one traditional stonemasons' ceremony to perform, the "founding pint". You put the names of all involved in the building, also a newspaper and some other details of our way of life at that date into an empty whisky bottle, after we had consumed the contents.

It was all blessed by Lord MacLeod and placed within the foundations. I knew then everything was going to be alright. A little party was given in the evening to celebrate this historic occasion. This was to be the last time I would celebrate this old custom.

I decided at this point I would bring up my dad and mum for a visit, also to see if he would be willing to give me a hand, as two heads are better than one. With his building experience, he might decide to spend some of his time with a trowel in his hand.

I arranged for them to stay in one of the island's hotels, as it would give my mother a good rest. When they arrived it was one of the most glorious Mays I ever remember. Iona was looking its best. I got them settled in, then went back to the Abbey, as I had been left to look after the building along with the cook and some visitors. The rest of the team had gone off to the Moderator's Ball in Edinburgh because my boss, Lord MacLeod had been appointed Moderator of the Church of Scotland.

Monday morning arrived and my father appeared as promised. I was all set up for his visit, with stone laid out. He talked about my doing the cloisters and praised my efforts, but informed me that the cloisters were my own challenge in life, and that he couldn't help, as he hadn't done many arches in his building career. He only introduced me to the bad habit of smoking by sticking a cigarette in my mouth with a few words of wisdom, "smoke it and allow yourself time to think on what you're doing" then walked off into the chapter house and fell asleep.

He did wake up in time to walk down to the jetty for the arrival of the steamer, where he would spend an hour in the bar of the ship, filling up with as much as his stomach would hold. He was like a camel, storing enough water to carry it through for

twenty four hours. Before the steamer left he would fill his pockets with bottles of beer and a half bottle of whisky and return. This would keep him going until the steamer arrived the next day. I remember one day while everyone was sitting in the hotel dining room waiting for father to appear and he was spotted standing on the deck of the steamer waving to everyone as it passed by on its way to the island of Staffa. Mother was not very happy with him, or the state that he was in when he arrived back,. He never ever got drunk, only happy with a little lilt in his footwork. His good jacket seemed to have stretched in length owing to the amount of liquid refreshment in bottles sticking out of his pockets. As long as he was happy and enjoying his break that was all that mattered.

Then the day came for them to leave. We went down to catch the early morning ferry. It was a glorious morning and the sea was very calm, thank goodness for my mother's sake. She was like me, the slightest wave and it upset her. My mother told me how lucky I was to be working on such a beautiful island and she was very proud of what I was doing. My father was never one to give much praise, but told me I was a great craftsman. Coming from him that was a great honor.

The next part of the cloisters to be done was the setting of the heavy stone sills. These sills could be termed the main load carriers of the arches and everything depends the accuracy with which they are set and leveled. The main point in setting any sill is to spread your mortar allowing only the six inches in from each end of the sill to be resting on the mortar. This is termed hollow bedding and allows for any settlement that will occur. If a sill is solid bedded, then when the weight it bears settles, as it will do, it could split the sill. This (hollow bedding) is the traditional and only method to use.

Next, your sill joints, and again these had to be accurate and filled solid with your lime-based mortar. I used twisted strips of paper, pushed in from the face of the stone about a quarter of an inch. This prevents any leakage when you pour in the liquid grout. After about ten minutes you can remove the paper.

Having now set the sills in the first arcade I decided I would just carry on with this arcade, which would give the carpenters a chance to do the roof while I was working on the second arcade.

I decided to do two arches as a sample just to get the feel, also to see if it all balanced out. After getting it set up I found that the arch stones looked top-heavy for the slim columns. You have to satisfy the eye for balance.

I cut down the height of each arch stone; this also reduced the weight a little, a good thing because all the arch stones had to be lifted into position by myself. It helped my overworked back muscles a little.

I started to rebuild the sample arch and found that I was the thickness of a piece of paper out from my string line and this threw the keystone on the arch out by half of an inch on twist. There was no margin for error; it had to be perfect the first time. And in each arcade the spans of the arches were different; it all had to be worked out carefully so as not to get the different arch stone sizes muddled up.

The sample arch was now complete to my satisfaction. I next started to set the stools, or base stones, for the columns to rest on. Before setting the stools I cut a hole in the top of the sill and fitted in a piece of gravel, then cut a corresponding hole in the bottom