

ST REGULUS TOWER, ST ANDREWS—WHERE DID THE STONES  
WITH WHICH IT WAS BUILT COME FROM? BY ALEXANDER  
THOMS.

In view of the very marked difference as regards the enduring quality of the stones of which the Cathedral and St Regulus ("The Square Tower") in St Andrews have been built—the latter, although reputed about three hundred years older, having stood the effects of the weather so very markedly better than the former,—the question has often been asked as to the locality from where the stone for St Regulus was procured.

The late Dr Heddle, whose opinion undoubtedly carries very great weight, came to the conclusion many years ago that this was a local stone, procured most probably from a spot along the East Cliffs.

In a book published lately by Mr David Henry, F.S.A. Scot., St Andrews, entitled *The Knights of St John with other Mediæval Institutions and their Buildings in St Andrews*, it is stated, pp. 84, 85: "Bede tells us that Nechtan, King of the Picts—already alluded to—in 710 wrote to Ceolfrid, Abbot of Jarrow, to send masons to build him a Church as the Romans built (with squared stones), and there are those who think that the ancient tower of Restennet, near Forfar, was built by them. It is just as credible and quite as likely that Constantine, two hundred years later, sought for masons in the same country, where the Roman influence and Roman examples still survived, to build him a church in St Andrews, also in the Roman manner." . . . "Further,

as there is no known quarry in Fife within the historic period that could have produced so many large and durable sandstone blocks, it is a fair inference that these stones came from the Tyne valley also, and that they were dressed and squared in the quarry for water transport to St Andrews."

Nechtan is here said to have written for masons, not for stones—a very different thing, in those days especially.

Having given the subject some consideration, I had come to the conclusion that this was a local stone, but that the builders had known that round the volcanic necks, of which there are so many in this neighbourhood, the sandstone had been more or less hardened by the heat which occurred at the time of these volcanic eruptions, and had carefully selected their material from some of these localities.

On reading Mr Henry's book, I thought it would be advisable that his opinion stated therein (which I considered an unfortunate mistake) should not pass unchallenged, and thus in all probability be generally accepted by the public.

I therefore interviewed Mr Henry, and explained my view, and what I knew to have been the opinion of Dr Heddle. The result of this was that Mr Henry procured for me a piece of the stone from the Northumberland quarry from which he held that the stone had been procured. Having got this, I took pieces from the vicinity of several of our neighbouring volcanic necks, and also from the St Regulus Tower. From all of these I made microscopic slides, and examined them under the microscope with polarised light. The result was that I came to the conclusion that the stone used in the building of St Regulus Tower was not the Northumberland stone, but was from a local source.

However, I did not care to rest on my own judgment, so I wrote to Dr Flett, of the Geological Survey, the highest authority we have on such matters, and whose decision could not be questioned. He very kindly agreed to examine and report on these. I therefore sent him pieces of each of the stones, and the microscopic slides that I had

made, and his decision coincided with my own, giving his reasons for his conclusion that it was not the Northumberland stone, but was similar to two of the pieces which I had sent from our East Cliffs. The Tyne stone, besides being finer grained, contains mica (not found in the local stone), and more feldspar.

This, I believe, will finally settle this long-disputed point—a point which had not, as far as I know, been hitherto subjected to a scientific test under the polariscope.

Since the above was written, I have come upon a reference to the subject of the stone used in the building of St Regulus Tower, by Sir Archibald Geikie in p. 346 of *Geology of East Fife*, 1902. He there says: "The material is one of the more solid, close-grained, grey sandstones of the Lower Carboniferous series, with a distinct bedding, yet not divided by mica-flakes into easily separable layers, so that only exceptionally has it exfoliated or split along the lines of stratification. . . . Though the seam of sandstone has not been identified from which the materials of this building were taken, it no doubt exists close at hand, though possibly now concealed under soil or later buildings. But there must be other seams of similar quality in the district which could be detected after a careful examination of the walls of St Rule"; and he adds in a note at the foot of the page: "A point in the St Regulus masonry deserves notice. The stones, in defiance of a recognised canon of building, have been laid *on edge*." Although Sir Archibald does not refer to the probability of the stone having been got from the vicinity of one or more of the volcanic necks near this (from which I took the specimens that were microscopically analysed), he points out the curious but probably important fact of the stones being built "on edge," and fully corroborates the opinion as to the stone being a local one.