

Society, on the Silurian Rocks of Ayr and Wigtonshire, which added yet further to our knowledge of the fossils of these ancient rocks, and in which, in its published form, the first Scottish *Maclurea* was figured and described, though somewhat doubtfully, from the imperfect state of keeping of the specimen, and under another name. At the meeting of the British Association held in this city in 1850, Professor Sedgwick read a paper on the Geological Structure and Relations of the Frontier Chain of Scotland, which derived a peculiar value from the previous labors of that great geologist in the older Silurian rocks of England, and in which he divided our *Grauwackes*, though with much hesitation, especially with respect to both the earlier and later beds, into five great divisions, — four of them belonging to the Lower, and the fifth *probably*, as he stated, to the Upper Silurian. In comparing the Scottish with the Cambrian chains, he remarked that the lowest and oldest fossils of both appear to be graptolites; and in a paper on the Graptolites of the Black Slates of Dumfriesshire, by Mr. R. Harkness, which appeared in the "Geological Journal" of last year, we find a minute description, accompanied by good figures, of these earliest inhabitants of what is now Scotland. They are judged to have been zoöphites, akin in some of their forms to our modern *Pennatuladæ*, and in others, it is supposed, to the *Sertularia*; but the relationship of these last is deemed less clear. It is, I suspect, remote in both cases. Some of my Girvan specimens of *Graptolithus foliaceus*, — one of the species deemed akin to the *Pennatuladæ*, — exhibit the central axis prolonged beyond its double row of cells, but, unlike our common sea-pen (*Pennatula phosphorea*), always at the upper end; and in specimens of *Graptolithus tenuis*, derived from the same neighborhood, and which is one of the species regarded as akin to the *Sertularia*, though some of the stems seem fringed on both sides with short, oblique, alternate cells, somewhat