

Despite all that was done by these active workers, and by the Geological Survey in its earlier examination of the Southern Uplands, there remained much to be unravelled, and, as proved later on by Professor Lapworth, it was only by tracing out the palæontological zones that the true sequence and structure of the convoluted Moffat rocks could be determined. His masterly paper on that subject has already been referred to (p. 187). It was followed by an equally elaborate memoir on 'The Girvan Succession,' read before the Society in June 1882.¹

While Cornwall, as already mentioned, presents geological difficulties perhaps as great as in any part of Britain, yet in the Scottish Highlands the difficulties of complexity of structure are augmented by the arduous character of the work. In the North-west Highlands especially, the red sandstones, now known as Torridonian, the quartzites, the limestones, the large tracts of gneiss and crystalline schists, have formed a battle-ground on which, both as regards structure and age, the most contrary opinions have been expressed.

The Torridon Sandstone, though regarded by Macculloch as a Primary formation, was held by others to be Old Red Sandstone; and the opinion was also put forward that some areas of the Sandstone were Primary, others Old Red Sandstone.

Light began to dawn when, in the winter of 1854-55, Charles Peach, then resident at Wick, happened to be at Durness, and 'observed a weathered fossil in a dyke on the roadside; this was enough for his penetrating eye; he immediately set to work,' and soon obtained *in situ* a most important series of fossils. They were not well preserved, and were at first thought to resemble *Clymenia* and *Goniatites*. Hence arose the suggestion that the

¹ The history of research in this area, together with a full account of the geological structure and palæontology, embodying much original observation, has since been published in the Geological Survey Memoir on 'The Silurian Rocks of Britain,' vol. i. Scotland, by B. N. Peach and John Horne, with petrological notes by J. J. H. Teall, 1899.