The Upper Silurian then included the Ludlow and Wenlock rocks; the Lower Silurian the Caradoc Sandstone and the Llandeilo Flags, the last named being designated the 'Base of Silurian System.'

The Cambrian as yet had only been broadly divided into two great divisions: the Lower, including the slaty groups around Snowdon that were found to underlie the Bala series of the Upper Cambrian. Murchison, in speaking of the labours of his friend, observed 'that he not only shed an entirely new light on the crystalline arrangement or slaty cleavage of the North Welsh mountains, but also overcame what to most men would have proved insurmountable difficulties, in determining the order and relations of these very ancient strata amid scenes of vast dislocation.'[1] This is eminently just. Sedgwick's great paper on the 'Structure of large Mineral Masses' was read before the Geological Society in March 1835; and no one ever worked harder than he did in the elucidation of the Cambrian System.

In the history of these older formations, the following remarks by Murchison are interesting, whether taken in a prophetic sense or otherwise:—

> But the Silurian, though ancient, are not, as before stated, *the most* ancient fossiliferous strata. They are in truth but the upper portion of a succession of early deposits which it may hereafter be found necessary to describe under one comprehensive name. For this purpose I venture to suggest the term 'Protozoic Rocks,' thereby to imply the first or lowest formations in which animals or vegetables appear.[2]

It may be observed that the term Protozoic is truly appropriate, and has in fact been adopted by Professor Lapworth, for the rocks from the base of the Cambrian to the top of the Silurian.

[1] 'Silurian System,' 1839, p. 6.

[2] 'Silurian System,' p. 11, and *Proc. Geol. Soc.* iii. p. 641. The term Protozoic had originally been suggested by Sedgwick in 1838, for use if any of the Primary rocks, older than the Cambrian, should prove to contain fossils. *Proc. Geol. Soc.* ii. p. 584; see also *Quart. Journ. Geol. Soc.* viii. pp. 154, 155.